

Ghana

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Project Design Report

Main report and annexes

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Map of the Project Area



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

IFAD Map compiled by IFAD | 20-09-2021

Abbreviations and Acronyms

1D1F	One District One Factory
AAFORD	Affordable Agricultural Financing for Resilient Rural Development Project
ASWG	Agricultural Sector Working Group
AU	African Union
BAC	Business Advisory Centre
BoG	Bank of Ghana
BP	Business Plan
BRCA	Business Resource Centre
CAADP	Comprehensive Africa Agriculture Development Programme
CHRAJ	(Ghana) Commission on Human Rights and Justice
DA	District Assembly
DAES	Directorate of Agricultural Extension Services
DDA	District Department of Agriculture
DSF	District Stakeholder Forum
EFA	Economic and Financial Analysis
ESRF	Emergency Support to Rural Livelihoods and Food Systems Exposed to COVID 19
ESS	Environmental and Social Safeguards
FARA	Agribusiness Learning Alliance
FI	Financing Institution
FMA	Financial Management Assessment
FNS	Food and Nutrition Security
FSRP	West Africa Food Systems Resilience Programme
FY	Financial Year
GADP	Ghana Agricultural Development Plan
GAIP	Ghana Agricultural Investment Programme
GASIP	Ghana Agricultural Sector Investment Programme
GBV	Gender Based Violence
GCF	Green Climate Fund
GCX	Ghana Commodities Exchange
GEA	Ghana Enterprises Agency
GEWE	Gender Equality and Women's Empowerment
GFD	Ghana Federation of the Disabled
GGWUP	GCF Great Green Wall Umbrella Programme (GGWUP).
GHG	greenhouse gas
GIRSAL	Ghana Incentive Based Risk Sharing Agricultural Lending
GJSP	Ghana Jobs and Skills Project
GoG	Government of Ghana
GRM	Grievance Redress Mechanism
GSIVS	Gender, Social Inclusion and Vulnerability Specialist
HH	household
HHM	household methodologies
ICO	IFAD Country Office
IFAD	International Fund for Agricultural Development
IFR	Interim Financial Report
IGREENFIN	Inclusive Green Financing Initiative
IPRM	Integrated Project Risk Matrix
KAP	Knowledge Attitude Practice

LCU	Local Currency Unit
LEAP	Livelihood Empowerment Against Poverty
LF	Logical Framework Matrix
LULUCF	Land Use, Land-Use Change and Forestry
MDDW	Minimum Dietary Diversity for Women
MESTI	Ministry of Environment, Science, Technology and Innovation
MIYCN	maternal, infant, and young child nutrition
MLGDRD	Ministry of Local Government, Decentralisation and Rural Development
MNDPF	Medium-Term National Development Policy Framework
MOA	Memorandum of Agreement
MOAP-NW	Market Oriented Agriculture Project
MoF	Ministry of Finance
MoFA	Ministry of Food and Agriculture
MoGCSP	Ministry of Gender, Children and Social Protection
MoTI	Ministry of Trade and Industry
MOU	Memorandum of Understanding
MPI	Multidimensional Poverty Index
MSME	Micro-, Small- and Medium-Enterprise
MSP	multi-stakeholder platform
MTEF	Medium Term Expenditure Framework
NBSSI	National Board for Small Scale Industries
NCD	non-communicable disease
NCSPG	Nutrition Cross-Sectoral Planning Group
NDC	Nationally Determined Contribution
NFIDS	National Financial Inclusion and Development Strategy
NNP	National Nutrition Policy
NOTUS	No Objection Tracking and Utilities System
NRGP	Northern Rural Growth Programme
NRM	Natural Resource Management
PAP	project affected person
PERD	Planting for Export and Rural Development
PFI	Participating Financial Institutions
PFJ	Planting for Foods and Jobs
PIP	Productive Investments Project
PPA	Public Procurement Authority
PRM	Procurement Risk Matrix
PROSPER	Promoting Rural Opportunities, Sustainable Profits and Environmental Resilience
PWD	Person with Disability
RAFIP	Rural and Agricultural Finance Programme
RCB	Rural Commercial Bank
REACH	Resilience Against Climate Change
REP	Rural Enterprises Programme
RFSP	Rural Financial Services Project
RI	Rural Institution
RTIMP	Roots and Tubers Improvement & Marketing Programme
SBCC	Social Behaviour Change Communication
SCF	Standard Conversion Factor
SCGV	Safeguards, Climate, Gender and Vulnerability

SDSN	Sustainable Development Solutions Network (UN)
SFEA	Smallholder Farmer E-Commerce Access
UNSDP	UN Sustainable Development Partnership
VAC	Violence Against Children
WEF	World Economic Forum
WSMT	Water and Sanitation Management Team

In line with IFAD11 mainstreaming commitments, the project has been validated as:

Gender transformational Youth sensitive Nutrition sensitive Climate finance

IFAD Adaptation Finance	\$14,964,000
IFAD Mitigation Finance	N/A
Total IFAD Climate-focused Finance	\$14,964,000

Executive Summary

1 Strategic context

National context. Ghana is a lower-middle-income country in a relatively strong economic state despite dependence on the export of a limited number of commodities and vulnerability to commodity price shocks and climate change. As for all countries, the impact of COVID-19 has resulted in economic slowdown and socioeconomic challenges. Performance towards the achievement of the 17 SDGs, particularly SDG 1 (No poverty) and SDG 2 (Zero hunger), is still lagging although some improvement is registered; the country is rated 114th among the 165 UN Member States (SDSN Sustainable Development Report 2021). Poverty, food insecurity and nutrition insecurity rates remain high; 23% of Ghana's population are monetary poor and 8.2% live in extreme poverty. The regions of the Northern Belt (and some in the Middle Belt) have the highest prevalence of poverty, up to 62% in the rural areas. There are persistent pockets of poverty, food insecurity, undernourishment, malnutrition, and vulnerability to climate change. Ghana has a prevalence of undernourishment of 7%. Moderate or severe food insecurity stands at 49.6%. Persons with disabilities represent 3% of the total population. Most small-scale farming communities are operating low input-low output rainfed farming systems with small ruminants on a heavily depleted natural resource base, effectively cut off from the national economy. Constraints on the sector are compounded by the negative effects of climate change, such as increasing dry spells and rising temperatures. The prevailing systems are neither financially nor environmentally sustainable, leaving many communities trapped in poverty. GoG is highly supportive of agricultural development with increasing policy emphasis on private sector approaches at all levels including strategic investments in value chain structures.

IFAD mainstreaming priorities. (1) **Gender.** Women constitute 58% of the rural labour force. Ghana is ranked 117 out of 156 countries in the WEF Global Gender Gap Report. Traditional culture and entrenched gender inequality limit women's access to resources and participation in community decision-making. GoG adopted the National Gender Policy (2015) to mainstream gender, women's empowerment and social protection concerns into national development processes. A Gender and Agricultural Development Strategy was developed in 2015. (2) **Youth.** The country has a youth bulge (15-35 years of age) with 57% of the total population being below the age of 25. The rural community comprises 56% youth compared to 44% in urban contexts. Youth unemployment and underemployment reached 12% and 50% respectively by 2020, resulting in growing youth migration from rural areas to urban centres. Despite initiatives to provide jobs, capacity-building and opportunities for youth from GoG and development partners, the outreach to youth from semi-subsistence smallholder families remains limited. (3) **People with disabilities.** Statistically, people with disabilities (PWDs) make up 3% of the population. The Disability Act, 2006 (Act 715) protects and guarantees the rights of PWDs to education, healthcare, employment and movement. Despite efforts to educate the public, PWDs are still stigmatized, discriminated against and socially excluded. There is strong correlation between disability, poverty and the socioeconomic status of affected households. (4) **Nutrition.** Nationally, stunting (chronic undernutrition) affects 17.5% of children under 5-years and wasting (acute undernutrition) affects 6.8% of children under 5-years. The National Nutrition Policy aims to address persistent nutrition-related challenges of feeding practices for infants and young children, nutrition among women of reproductive age and the promotion of nutritionally adequate safe diets. Ghana joined the Scaling Up Nutrition (SUN) Movement in 2011 and has established national, regional and district level multi-sectoral nutrition coordination mechanisms. (5) **Climate and environment.** Climate change is projected to affect vital water resources, energy supplies, crop production and food security, with the Northern Belt the most vulnerable. Energy production meets demand but rural communities continue to rely on fuelwood, resulting in forest depletion estimated at 2% loss per annum. Agriculture is estimated to be the second largest contributor (10.05 MtCO₂e) to GHG emissions after the energy sector (15.02 MtCO₂e). Ghana is committed to implementing its National Climate Adaptation Policy, as highlighted in the National Climate Change Communication to the UNFCCC and its Nationally Determined Contribution (NDC) to the Paris Agreement.

Rationale for IFAD involvement. The underlying issue flagged is the persistence of intractable poverty in rural communities dependent on rainfed agriculture in the drier Northern parts of the country. The prevailing farming systems in the Northern and Middle Belts are suboptimal and, with a long history of over-exploitation, the economic carrying capacity of the heavily depleted productive NR base is declining whilst the number of dependents is increasing. The negative effects of rapid climate change are making bad conditions worse. The remedy is to uplift rural economies by transforming the bedrock of small-scale farming from predominantly subsistence to financially and environmentally sustainable systems tied into functioning markets. This rationale focuses on both supply – the scale and technical transformation of production – and a marked increase in real demand for the produce, whilst ensuring that the most vulnerable people are not left behind in poverty. The producers need to progress to climate-resilient "farming as a profitable business" linked into value chains and to transition to agricultural and land management practices that lower emissions and reverse the depletion of the NR base. The development challenge for PROSPER is to broaden, deepen and extend the reach of key commodity VCs to engage with significant numbers of primary producer groups as the resulting "demand pull" is much stronger than "supply push" in driving local economic growth. The increased volume of business is expected to create opportunities for enterprises in agro-processing and value addition at all scales, to fuel employment and incomes within local economies through a multiplier effect, and thereby raise the food security and nutrition security of whole communities in the context of the changing climate.

IFAD's comparative advantage and lessons learned. The Fund has a wealth of technical expertise in addressing rural poverty combined with the capacity to mobilise resources at a scale that can make a lasting impact on the lives of vulnerable people. IFAD has a strong record in Ghana in working with poor rural communities in the food and agriculture sector in the Northern and Middle Belts, and has learned lessons from the experience. Corporate country-specific knowledge of direct relevance to the PROSPER design concerns: capacity of rural institutions; resilience building and the sustainable use of NRS; functional capacity of extension services to support VC producers and actors; creation of market linkages; capacity of BACs/BRCs to provide business development training; affordable loans in a market segment where FIs are absent; partnerships with FIs to promote inclusive rural financial services; innovative cashless credit model; and one-time matching grants for beneficiary groups.

2 Promoting Rural Opportunities, Sustainable Profits & Environmental Resilience (PROSPER)

Objectives, geographic area, targeting. The PROSPER Project Development Objective is: *Strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority VCs in the Northern and Middle Ecological Belts taking advantage of the increased demand created by the national agro-processing strategy.* The geographic area of intervention extends to eight regions in the North of and three neighbouring regions in the Middle Belt (Bono East, Bono and Oti). The targeting strategy considers (i) high rural population, (ii) high poverty prevalence, (iii) high rate of food and nutrition insecurity, (iv) strong concentration of female and male youth, (v) presence of relevant economic opportunities, (vi) the level of degradation of the productive NR base (particularly soil, water and trees) and (vii) indicators of climate vulnerability. PROSPER's primary target groups will be the poorest households (landless or holding not more than 1 ha of cultivable land) or poor households, (holding less than 2 ha of cultivable land) and vulnerable people within the poor rural population who have little access to assets and economic opportunities due to social exclusion, marginalization and the negative impact of climate change, including women (40%), unemployed female and male youth between 18-35 years (30%) and persons with disability who are economically active (5%).

Components/Outcomes and activities. PROSPER comprises two mutually supportive components concentrated on increasing the real demand for sustainably grown produce by significant numbers of people living in poor rural communities while enhancing their capacity to meet this demand through more efficient climate-resilient agricultural practices and natural resource management to mitigate the negative impact of climate change. The intended outcomes are increased incomes, greater food and nutrition security, and improved health status.

C1 Development of rural institutions and socioeconomic infrastructure. The expected outcome is: *Improved and sustainable livelihoods in target areas supported by strengthened rural institutions and improved socioeconomic infrastructures.* These actions are concentrated on investing in "public goods" within and for the benefit of the targeted 100,000 beneficiaries in the project areas. C1.1 Capacity building of rural institutions, enterprises and households (USD 11.8 m, 8.0% of total project costs) comprises a range of institution-building and skills development activities to enable target communities to take ownership of and accountability for their own development initiatives, to promote sustainable community-based NR management, to strengthen their ability to implement modern sustainable and climate resilient farming, and to adopt healthier diets.

C1.2 Development of socioeconomic infrastructure (USD 24.3 m, 16.5%) seeks to realize some of the "public goods" investments prioritized and chosen by local communities through the Cluster Planning process. Three complementary types of climate-resilient infrastructure will be eligible: Off-farm/watershed works and hazard mitigation measures; Feeder roads and farm tracks; and Communal social infrastructure. These investments aim to improve the sustainability of NR-related livelihoods and to stimulate socioeconomic advancements in the participating clusters.

C2 Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains. The expected outcome is: *Smallholders and small businesses draw greater benefits from the increasing market outlets for agricultural produce through comprehensive financial, capacity and marketing support.* Whereas the first component will invest in the human, physical and natural resources of the target communities, the second component is concentrated on investing in the "private goods" of the population to bring about a sustained uplift in the earning capacity of agricultural producer groups and related enterprises.

C2.1 Sustainable marketing linkages and business development(USD 13.0 m, 8.8%) comprises three activities. In *Value chain analysis*, PROSPER will examine in depth the status and characteristics of each selected national value chain and map the VC actors located close to the target communities, particularly the first stage market linkages between producers and others in the chains. The developmental activity *Promotion of linkages between producers and value chain actors* is aimed at generating enduring partnerships between producers engaged in climate-resilient farming and larger-scale agribusinesses within locally appropriate forms of robust and equitable contract relationships in the private sector. This action will concentrate on those eligible RIs and MSMEs that demonstrated interest and potential in the capacity building interventions and meet membership criteria regarding the minimum proportion of specified disadvantaged groups. Under the activity *Development of business plans*, the project will generate a sound, achievable and fully costed Business Plan which is appropriate to the resources and prospects of each concerned entity, is green in design and addresses effectively climate and NR degradation risks and impacts.

C2.2 Access to rural financial services(USD 85.8 m, 58.2%). The objective is to promote a savings culture among beneficiaries, facilitate realization of the Business Plans and improve enduring access to suitable financial resources. Expected outcomes: farmers through RIs and related local MSMEs are integrated step-by-step into the formal financial system and have lasting access to adapted and affordable financial services to develop their agribusinesses, including green investments. Such access is a necessary though not sufficient condition for rapid sectoral development. PROSPER financial services are structured around three instruments appropriate to the various situations prevailing in rural areas as regard capacities and professionalization: (1) *Saving and Loan Groups* for sparking the saving habit within communities; (2) a *Matching Grants* fund for capitalizing emergent RIs along with crowding-in private capital from matching contributions to engage in commercial agriculture and smaller MSMEs around the selected VCs, and for supporting food and nutrition security promotion schemes for the most vulnerable groups; and (3) a *Blended Finance Facility* (BFF) operated as a refinancing facility by PFIs to ensure sustainable access to financial services for growing FIs and MSMEs. These three financial instruments form a global graduation process by which beneficiaries will be able to increase their access to financing solutions over time as they build their financial and management capacities and develop their business relationships with other VC actors. The BFF will develop, test and rollout green financial products to finance advanced BPs by the more developed RIs and MSMEs that have the potential to undertake commercial agriculture with climate mitigation and adaptation interventions in VC partnerships. The Facility is set up to contribute to the opening of the climate finance market in Ghana. Under the condition of being linked formally with VC actors under contract arrangements, qualified RIs and MSMEs will gain access to BFF credit at an affordable blended on-lending rate (below 10%) for financing a more sophisticated BP that has a strong focus on adaptation and mitigation in the face of climate change impacts on small-scale agriculture.

C3 Project management and Policy engagement. The expected outcome of the support component: *Efficient and timely delivery of PROSPER development results and support to evidence-based sectoral policy formulation.* C3.1 *Project management* USD 12.2 m, (8.3%). PROSPER will be facilitated by an implementation support structure embedded in the host GoG agency providing liaison, physical and financial project management, reporting and accounting, proactive knowledge management and learning activities, and monitoring and evaluation functions. C3.2 *Policy engagement* USD 0.3 m, (0.2%).

PROSPER will promote an enabling policy environment to achieve the project's goals and objectives through technical assistance, high-level round table discussions, policy dialogue fora, conferences and advocacy as appropriate, underpinned by analytical work and knowledge management products from IFAD and other development partners

Theory of Change. PROSPER investments in the technical and business capacities of small-scale producers, with a shift to climate-friendly farming systems, are intended to enable whole communities to progress from subsistence-consumption to financially and environmentally sustainable production linked into expanded national value chains. The project will work to close the present gaps between the remote producers and markets to expedite contract arrangements and introduce innovative green financing modalities to make credit affordable to the beneficiary groups and other VC actors. The rise in profitable primary production and related services is expected to result in a broad economic uplift of the rural communities, with greater inclusion of marginalised and vulnerable groups.

Alignment, ownership and partnerships. PROSPER is closely aligned with the SDGs, the UN Sustainable Development Partnership Framework for Ghana and GoG's current development policy framework. The project is congruent with IFAD's Strategic Framework 2016-25 and will contribute to the strategic objectives identified in IFAD's COSOP for Ghana. PROSPER will collaborate with development partners with substantial active or pipeline projects in the sector, including FAO, WFP, World Bank, EU and Global Affairs Canada.

Project costs, financing and returns. The total project costs of USD 147.3 m will be financed by (i) IFAD 11 USD 52.5 m (35.6%); (ii) IFAD 12 USD 22.7 m (15.4%); (iii) Green Climate Fund USD 25.4 m (17.3%) (GCF Adaptation USD 13.8 m, GCF Mitigation USD 6.9 m and GCF Grant USD 4.7 m); (iv) Participating Financial Institutions USD 2.3 m (1.6%); (v) Private Sector USD 2.5 m (1.6%); (v) Beneficiaries USD 19.3 m (13.1%); and (vi) Government of Ghana USD 22.5 m (15.3%). The Net Present Value is positive (USD 207 m). Economic Internal Rate of Return is 21.4%.

Exit strategy and sustainability. PROSPER is driven by the imperative to achieve both financial and environmental sustainability in the small-scale agriculture sector in the context of climate change. The project concentrates on investing in the skills, productive assets, structures and institutional development needed to remediate the NR base, transition to appropriate agricultural practices that reduce emissions and engage in enduring business relationships within major value chains. The exit strategy comprises a natural and sequential phasing out from supported activities to linkages with the private sector. The exit strategy comprises a natural and sequential phasing over, phasing down or phasing out from supported activities as linkages with the private sector are consolidated. A high level of participation from the host agency, beneficiaries and partner institutions is planned from the outset to ensure the effectiveness and leadership of local stakeholders to continue, scale-up and monitor activities after completion

3 Risks

Risks and mitigation. The main risks and corresponding mitigation measures for the project are presented in the Integrated Project Risk Matrix (IPRM) which touches on all aspects of the initiative to anticipate possible barriers to achieving the Project Development Objective. At inception, the PROSPER management team will be trained to refine the matrix and set up a Risk Log including tools for the identification, analysis, prevention, monitoring and management of risks. The log will be updated regularly and integrated into the AWPBs and the M&E dashboard to inform decision-making.

Environment and Social Category. The screening of proposed PROSPER activities indicates the potential environmental and social risks rating is medium/moderate to low. The main risks relate to value chain activities, predominantly rainfed agriculture primary production and value addition, and socioeconomic infrastructure including NR remediation works, feeder road rehabilitation and farm access tracks, and shared social infrastructure including human water supply systems, green energy and sanitation facilities. Most of the impacts are small in scale, very limited, site-specific and avoidable or reduced with mitigation plans, as stated in the ESMF. As a **Category B** operation, a formal Environmental and Social Impact Assessment (ESIA) is required. Further analysis of the conflict dimensions and site-specific Environmental and Social Management Plans (ESMP) will be mainstreamed throughout implementation and a Gender, Social Inclusion and Vulnerability Specialist engaged to ensure safeguards compliance and project sustainability.

Climate Risk Classification. From a Climate Change Risk Assessment standpoint, the project is classified as **High**. The target communities are dependent largely on climate-sensitive natural resources, especially rainfed agricultural plots and tree crops, and the project area is exposed increasingly to droughts and flash-flooding. GHG emissions through increased production and processing and climate variability, including unexpected dry spells, unpredictable rainfall and low/high temperatures, can affect the project risks, impacts, sustainability and returns on investments. Systematic climate risk analysis will be undertaken throughout implementation to ensure adequate and timely monitoring and management of climate change risks.

4 Implementation

Management and Coordination. MoFA is designated as the *Lead Project Agency* and will host PROSPER. A *Project Steering Committee* (PSC) will provide overall oversight of implementation. A *Project Coordination Unit* (PCU) will be responsible for the coordination of project activities and for fiduciary, climate change and environmental and social safeguards, including gender and vulnerability. Technical specialists will work with the appropriate GoG cadre. The PCU will be based in the project area to ensure effective management and coordination. A dedicated team reporting to the PCU will be anchored in APEX Bank to manage the BFF.

Financial Management, Procurement and Governance. The PCU will be responsible for the financial management (FM) aspects of PROSPER, including budgeting, accounting, preparing Withdrawal Applications, monitoring implementing partners, preparing consolidated financial reports, and arranging internal and external audits. The FM system will meet the fiduciary requirements of IFAD, GoG and other stakeholders. The PCU will be responsible for overseeing and implementing all PROSPER procurement transactions including procurement carried out by GCF. IFAD will provide technical assistance and training in procurement at early stages of the project to familiarise implementing agencies with PROSPER/IFAD Guidelines on procurement and contract management. IFAD's anticorruption policies and whistle blowing procedures will be mainstreamed in the Project Implementation Manual. IFAD applies a zero-tolerance policy towards fraudulent, corrupt, collusive or coercive actions in all projects financed through its loans and grants.

Planning, M&E, Learning, KM and Communication, Innovation and Scaling Up. Planning will follow current practices for IFAD-funded projects in Ghana. The main planning tool will be the Annual Work Plan and Budget (AWPB), prepared annually using a participatory bottom-up approach after consultation with the implementing partners of the various activities and based on the investment forecasts agreed and validated during the preparation processes. M&E is an essential function to support management decision-making, the main objective being to inform stakeholders and the PCU on the performance and effectiveness of implementation. A results-based approach will be adopted setting progress against AWPB targets. *Learning, KM and Communication:* the project will develop a KM and Communication Strategy to capture and disseminate knowledge gained on critical issues during implementation. There are multiple benefits from communicating effectively how the project is addressing target population needs. *Innovation and Scaling Up:* the web-based M&E system designed by REP and the use of digital tools such as mobile money transfers, transmission of weather and price information, and dissemination of technologies through mobile phones can be scaled up under PROSPER.

Target group engagement and feedback, grievances. PROSPER strategy relating to transparency and citizen participation will include: transparent access to information and reporting; monitoring and evaluation of service providers, implementing partners, beneficiaries and the performance of projects by third parties; active engagement of civil society; creation of a complaints and grievances mechanism and a feedback mechanism on beneficiary satisfaction; and transparent selection of service providers in procurement. The ESMF will include the IFAD complaints procedure as a *Grievance Redress Mechanism* that will guide the project through implementation and align with national and/or IFAD whistle blower protection procedures that aim to better protect project staff, community members and any other stakeholders from potential threats or reprisals they may suffer for having reported, in good faith, reprehensible conduct, abuse and abusive acts, alleged professional misconduct or acts of corruption.

Implementation readiness and reviews. The IFAD Country Office (ICO) will coordinate with the implementing agency to ensure PROSPER readiness for implementation, including: preliminary mapping and identification of target communities; Oftakers, financial institutions, RIs and BACs/BRCs with a good track record with GASIP and REP identified, oriented and prepared for partnership; existing partnership through REP with the BoG and ARB Apex Bank, will support the swift initiation of the PROSPER BFF; MoFA has experience of partnering with donor projects including IFAD; sensitize the donor community and prepare them for PROSPER partnership in relevant areas; work with authorities to fulfill conditions prior to Board approval; and ensure that the budget for year one is available by the effectiveness date and set up the team prior to the start-up. PROSPER Supervision will be carried out directly by IFAD, focusing on planning, gender, vulnerability and targeting, procurement, financial management, safeguards and climate change risks management, M&E, partnerships and the integration of activities within the governance framework. A *Mid-term Review* will be conducted at the end of Project Year 4, based on, *inter alia*, a dedicated Mid-term evaluation study, and a timely *Project Completion Review* based on an independent completion evaluation.

1. Context

A. National context and rationale for IFAD involvement

a. National Context

1. **Economic context.** Ghana is a lower-middle-income country with an estimated per capita GDP of USD 2,221 (2019). In 2019, GDP grew by 6.5%, up from 6.3% in 2018 – one of the highest rates in the world. Ghana's economy is dependent on the export of a limited number of commodities such as gold, cocoa and oil, and remains vulnerable to commodity price shocks and climate change. In 2020, the inflation rate was 9.2%, unemployment 4.53% and the national debt 78% of GDP (64% in 2019).^[11] The impact of COVID-19 has resulted in economic slowdown and exacerbated the socioeconomic challenges that detailed below.
2. Ghana's performance towards the achievement of the SDGs is still lagging although some improvement is registered. The country is rated 114 among the 165 UN Member States on the 17 SDG in the 2021 SDSN Sustainable Development Report. The achievement of SDG 1 (No poverty) and SDG 2 (Zero hunger) still faces important challenges, while performance on SDG 5 (Gender equality), SDG 6 (Clean water and sanitation) and SDG 8 (Decent work and economic growth) is slightly improving. It is worth noting, however, that significant achievements were made on SDG 12 (Responsible consumption and production) and SDG 13 (Climate Action).^[12] Further, the Ministry of Food and Agriculture (MoFA) priorities are also in line with the 2003 Maputo Declaration, ratified by Ghana in 2007. Key commitments of the declaration include increased investment finance in agriculture, reducing postharvest losses and boosting intra Africa trade.^[3]
3. **Poverty and food insecurity.** 23% of Ghana's population are monetary poor and 8.2% live in extreme poverty.^[14] The level of multidimensional poverty (across the dimensions of education, health, and living standards), is 45.6%, especially in rural areas, where it is far higher (64.6%) than urban areas (27.0%).^[15] Wealth distribution is biased towards men: 62% of female-headed households fall into the two poorest quintiles – compared to 39% of male-headed households. The regions of the Northern Belt have the highest prevalence of poverty, up to 62% in the rural areas, and are the most vulnerable to climate change. The highest concentration of extreme poor (49%) lives in the Savannah region.^[16] Poverty, in the Middle Belt and other areas is still considerable in some regions, such as in Oti (45%), Bono East (36%) and Bono (28%). While poverty in some regions are generally low, there are poverty pockets in these regions that suffer from persistent food insecurity, undernourishment, malnutrition, and are vulnerable to climate change. Ghana has a prevalence of undernourishment of 7%. Moderate or severe food insecurity stands at 49.6%. Persons with disabilities (PWD) represent 3% of the total population, with more than half concentrated in the Middle Belt and almost a quarter in the Northern Belt.^[17]
4. **Agricultural and rural development context.** Agriculture accounts for 21% of Ghana's total GDP, 71% of employment in rural areas, and over 40% of export earnings. Agricultural imports are substantial, reaching GHS 13.2 billion in 2017 mainly through the imports of wheat, rice, chicken (frozen), milk and fish. Rain fed agriculture prevails in 96% of arable land. Around 85% of farming households own less than 10 ha and more than two-thirds own less than 2 ha of cultivable land. Factors contributing to rural poverty include underdeveloped agricultural technologies that damage the environment, poor access to financial services (especially among women) including green finance for adaptation and mitigation, lack of secured market linkages, inadequate marketing infrastructure, post-harvest losses, lack of advisory services and cumulative environmental degradation. Only 37% of the rural population has access to accounts in formal financial institutions. Rural institutions are generally weak with limited capacity to support small-scale production. These challenges are compounded by the negative effects of climate change, such as increasing dry spells and rising

- temperatures, and the degradation of arable land and critical infrastructure.
5. Most of the *Northern Belt* falls within the Guinea Savannah Ecological Zone, where smallholders grow mainly soya, maize, sorghum, rice, millet and vegetables. Rice cultivation in the valley bottoms has great potential to reduce poverty levels. Dry season vegetable production is significant at irrigation sites. Productivity remains below potential due to lack of inputs, mechanization and extension outreach. Shea trees cover around 77,670 square kilometres in the Northern Belt and support the livelihood of approximately 900,000 rural women. Trade in shea butter has been rising with strong export demand.
 6. The *Middle Belt* falls within the Transition Ecological Zone, where smallholders grow mainly cassava, plantain, maize, yam and soya, with rice cultivation in valley bottoms. The cashew value chain (VC) generates income for about 350,000 smallholders. Cashews can grow on marginal lands, stabilize the soil in which it grows and serve as a carbon sink. However, production remains below 50% of potential with multiple constraints including difficulty in accessing improved planting materials and farm inputs, inadequate extension services, access to credit, lack of effective pricing and marketing mechanisms, bush fires, loss of soil nutrients and inadequate soil moisture.
 7. *Vegetables* such as tomato, pepper, okra, garden eggs and cabbage are grown mostly under rainfed conditions as backyard production for subsistence and commercial purposes in both the Northern and Middle Belts. Availability is highly seasonal, peaking from June–September. Productivity is usually less than 50% of potential due to traditional cultivation practices, the lack of irrigation systems, limited use of improved inputs and high post-harvest losses. The *Livestock* sector is an important component of Ghana's agriculture. In 2019, the sector contributed about 13.3% of agricultural GDP in direct products and had a growth rate of 5.4% (SRID, 2020). Most rural households (41.5%) keep some form of livestock as an adjunct to crop farming. Small and large ruminants are kept as a form of security and not as a source of protein, so the direct contribution to household food and nutrition security is low.
 8. The *COVID-19* pandemic resulted in GDP growth of 1.1% in 2020 down from the pre-pandemic level of 4.8% in 2020. Petroleum receipts, import duties and other tax revenues were affected negatively, reducing the fiscal space for the GoG. 77.4% of households in Ghana have experienced declines in income. Reduced remittances to rural areas contributed to food insecurity. The country's average monthly food inflation recorded an increase from 8.4% in March 2020 to 13.7% in July 2020. While food prices continued to rise in 2021, the overall economic crisis is easing.
 9. To mitigate the socioeconomic impact of COVID-19, the GoG took measures including: the Coronavirus Alleviation Programme (CAP), starting with a USD 219 million contribution from the Ministry of Finance (MoF); a reduction in the inter-bank policy rate from 15.5% to 14% by the Central Bank of Ghana; and lowering reserve requirements from 10% to 8% to increase credit availability and affordability. MoFA launched an Agricultural Response Plan increasing the supply of subsidized seeds and fertilizers to poor smallholders. IFAD's *Emergency Support to Rural Livelihoods and Food Systems Exposed to COVID 19* (ESRF) supported the GoG efforts in this area. Ghana's economy showed signs of recovery in the second half of 2020 and is projected to grow by 4.2% in 2021 and 5.2% in 2022. [8], [9] Volatile commodity prices uncertainty over the COVID-19 pandemic still present downside risks. [10]
 10. **National strategies, policies and lead institutions.** The Medium-Term National Development Policy Framework (MNDPF 2018-2021) recognizes the growth of agriculture as the driving force for rural development and transformation. The Ghana Agricultural Development Plan (GADP) focuses on the development of the agricultural sector from 2018 to 2021 through modernization and transformation. MoFA has increased support to the production of field crops through the Planting for Foods and Jobs (PFJ) initiative for farmers in the Northern and Middle Belts with 2-3 acres land to access improved seeds and fertilizers, with a 50% subsidy, extension services and marketing opportunities. GoG is implementing the PERD (2019-2023) programme for job creation and export diversification through tree-crops and established the Tree Crops Development Authority. MoFA chairs the Agricultural Sector Working Group (ASWG) comprising GoG and development partners including IFAD to ensure coordination and policy dialogue.
 11. The One District One Factory (1D1F) programme led by the Ministry of Trade and Industry (MoTI) aims at establishing at least one medium-to-large-scale industrial enterprise in every district to create quality jobs and achieve a balanced spread of industries. The programme established 104 companies so far, of which 68 were existing companies and 36 newly built, employing 150,975 people) As part of 1D1F, the IFAD-supported Rural Enterprises Programme (REP) established 58 ENABLE Youth factories as a vehicle for employment creation for tertiary level graduates. In 2020, an MSME and Entrepreneurship Policy was approved, which led to the transformation of the NBSSI into the Ghana Enterprises Agency (GEA). A network of 166 Business Advisory Centres (BACs) and 57 Business Resource Centres (BRCs) has been established across the country under an arrangement among REP, GEA and participating District Assemblies, to provide high-value business development services to the business community.

1. [1] Statista, 2021.
2. [2] SDSN Sustainable Development Report, Sustainable Development Solutions Network 2021.
3. [3] Medium Term Expenditure Framework (MTEF) For 2020-2023, Ministry of Food and Agriculture in Ghana, Programme Based Budget Estimates, 2020.
4. [4] Ghana Living Standards Survey, 2018.
5. [5] Ghana's Multidimensional Poverty Index (MPI) Report, UNDP, 2020. The indicators that contribute most to multidimensional poverty in Ghana are lack of health insurance coverage, undernutrition, school lag and households with members without any educational qualification.
6. [6] Ghana Living Standards Survey, 2018.
7. [7] 2010 Population and Household Census.
8. [8] Ghana Economic Outlook, African Development Bank, <https://www.afdb.org/en/countries/west-africa/ghana/ghana-economic-outlook>
9. [9]<https://www.focus-economics.com/countries/ghana>
10. [10] <https://www.worldbank.org/en/country/ghana/overview>.

b. Special aspects relating to IFAD's corporate mainstreaming priorities

1. **Gender.** Women constitute 58% of the rural labour force. Despite Ghana ranking second in the ECOWAS Gender Inequality Index, the country is ranked 117 out of 156 countries in the 2021 WEF Global Gender Gap Report. Traditional culture and entrenched gender inequality limit women's access to education, healthcare, good nutrition, credit, extension services, new technologies, inputs and output markets, and participation in the public sphere and community decision-making, particularly in the rural areas. Female-headed households have limited access to land for farming and are more likely to be smallholders (87% compared with 60% of male-headed households). GoG adopted the National Gender Policy (2015) to mainstream gender, women's empowerment and social protection concerns into national development processes, natural resources and agriculture. A Gender and Agricultural Development Strategy (GAD II) was developed in 2015 by the MoFA Women in Agriculture.
2. **Youth.** The country has a youth bulge (15-35 years of age) [1] with 57% of the total population being below the age of 25. The rural community comprises 56% youth compared to 44% in urban contexts. Youth contribute to family labour for agricultural production and engage in other activities such as processing, warehousing and transportation, but are unable to pursue farming independently due to limited access to land, credit, quality inputs and sustainable profitable output markets. Due to limited access to jobs, inadequate training and illiteracy, youth unemployment and underemployment in Ghana reached 12% and 50% respectively by 2020, resulting in growing youth migration from rural areas to urban centres. [2] Initiatives to provide jobs, capacity-building and opportunities for youth include: the MNDPF (2018-2021); the PFJ in agriculture and related sectors; the Initiative for Sustainability, Stability and Security (3S) under the IFAD managed Rural Resilience Trust fund (focused on the Northern Belt); the IFAD-supported REP; and the Youth Agripreneurship Development Programme, run jointly by AGRA and Nestle. Despite these initiatives from GoG and development partners, the outreach to youth from semi-subsistence smallholder families remains limited. In 2016, it was projected that, due to the country's growing youth population, 300,000 new jobs would have to be created each year to absorb the increasing number of unemployed young people. Yet the structure of the Ghanaian economy in terms of employment has not changed much from several decades ago. Most jobs are low-skilled, requiring limited cognitive or technology know-how. The quality of these jobs is reflected in low earnings and less decent work. Although Ghana has launched a number of initiatives in response to this challenge, the lack of coordination among stakeholders in the sector has led to duplication. Key stakeholders on youth employment, including those in the private sector, currently have limited interaction. Regular exchanges are important for promoting synergies and reducing duplication of programs, and for sharing knowledge. Furthermore, Ghana lacks a comprehensive database on the characteristics of various categories of youth information—a database that is essential for the design and implementation of effective programs. Without transformation of the current Ghanaian economic structure, employment opportunities will remain limited. Most existing government-led youth employment programs lack adequate systems for monitoring and evaluation and for impact measurement. Few programs include clear indicators that measure performance, and most do not carry out tracer studies to assess their effectiveness and what happens to beneficiaries once they have exited the programs. Without such systems and data, policy makers and other stakeholders find it difficult to make informed decisions on whether to fund or scale up a program or make changes for improvement.
3. **People with Disabilities.** Statistically, people with disabilities make up 3% of the population. Disability in Ghana is considered both a human rights concern and a developmental issue due to its strong links to exclusion, discrimination and poverty. In 2006, Parliament passed the Persons with Disability Act, 2006 (Act 715) protecting the rights of PWDs and guaranteeing their rights to education, healthcare, employment and movement. The Act established the National Council on Persons with Disability charged with the responsibility of proposing and evolving policies and strategies to enable PWDs to integrate and participate fully in national development. However, despite efforts being made to educate the public, PWDs are still stigmatized, discriminated against and socially excluded. There is strong correlation between disability and poverty. Poor health, limited schooling and employment opportunities impact negatively on the socioeconomic status of affected households. Households with disabled members may be vulnerable to poverty due to extra costs of living with a disability.
4. **Nutrition.** Ghana is 'on course' to meet two Global Nutrition Targets for Maternal, Infant and Young Child Nutrition (MIYCN) reducing anaemia among women of reproductive age (46.4% of women aged 15 to 49 years are still affected) and achieving the low-birth-weight target (14.2% of infants have a low weight at birth). No progress has been made towards achieving the exclusive breastfeeding target, with just 42.9% of infants aged 0-5 months exclusively breastfed. Ghana is 'on course' to meet the target for stunting (chronic undernutrition), with 17.5% of children under 5 years affected but the proportion rises to 33% in the Northern Region. Some progress has been made towards achieving the target for wasting (acute undernutrition) but 6.8% of children under 5 years are still affected. The prevalence of overweight children under 5 years is 1.4% and the country is 'on course' to prevent the figure from increasing. [3] Ghana has shown limited progress towards achieving the diet-related non-communicable diseases (NCD) targets. However, the country has shown no progress towards achieving the target for obesity, with an estimated 16.6% of adult women and 4.5% of adult men living with obesity. Diabetes is estimated to affect 6.6% of adult women and 6.4% of adult men. The diet mainly on starchy roots, fruit and cereals. Dietary diversity remains low with limited intake of protein and a general reluctance to consume fruits and vegetables, causing stunting in preschool-aged children and anaemia amongst pregnant women. A long-term Food and Nutrition Security (FNS) Strategy has been developed and used to review the National Nutrition Policy (NNP).
5. The NNP aims to address nutrition-related challenges of feeding practices for infants and young children, nutrition among women of reproductive age and the promotion of nutritionally adequate safe diets. Ghana joined the Scaling Up Nutrition (SUN) Movement in 2011 and has established national, regional and district level multi-sectoral nutrition coordination mechanisms. Ghana's multi-stakeholder platform (MSP), the Nutrition Cross-Sectoral Planning Group (NCSPG), continues to expand, bringing together ten sectors; all five Northern regions have nutrition MSPs.
6. **Climate and environment.** Climate change is projected to affect vital water resources, energy supplies, crop production and food security, with the Northern Belt the most vulnerable. Ghana is experiencing increased extreme weather conditions with higher incidences and prolonged periods of flooding and droughts. The country's dependence on the production of crops that are sensitive to climate change (cassava, cocoa, shea) and lack of agricultural diversification exacerbate the vulnerability. Energy production meets demand, but rural communities continue to rely on fuelwood, resulting in forest depletion estimated at 2% loss per annum. Rural credit is a crucial factor in building climate resilience and improving productivity and lack of access remains a key constraint for producers and MSMEs, particularly in COVID-19 recovery efforts and for rural women and youth. Agriculture is estimated to be the second largest contributor (10.05 MtCO₂e) to Ghana's greenhouse gas emissions after the energy sector (15.02 MtCO₂e). Ghana is committed to implementing its National Climate Adaptation Policy, as highlighted in the National Climate Change Communication to the United Nations Framework Convention on Climate Change (UNFCCC) and its Nationally Determined Contribution (NDC) to the Paris Agreement.

11. [1] The National Youth Policy in Ghana (2010).
12. [2] Youth Employment Programmes in Ghana: Options for Effective Policy Making and Implementation, World Bank, 2020.
13. [3] <https://globalnutritionreport.org/resources/nutrition-profiles/africa/western-africa/ghana/>.

c. Rationale for IFAD involvement

1. **The development challenge and prognosis.** The persistence of intractable poverty in many rural communities dependent on agriculture in the drier Northern parts of the country highlights the need for continued support for and investment in GoG's initiatives to address structural challenges. The prevailing low input-low output rainfed farming systems in the Northern and Middle Belts are suboptimal and, with a long history of over-exploitation, the economic carrying capacity of the heavily depleted productive NR base is declining whilst the number of dependents is increasing. The negative effects of rapid climate change are making bad conditions worse. The remedy is to uplift rural economies by transforming small-scale farming from predominantly subsistence to financially and environmentally sustainable systems tied into functioning markets. This rationale focuses on both the supply side – the scale and technical transformation of production – and a marked increase in real demand for the produce, whilst ensuring that the most vulnerable people are not left behind in poverty.
2. For the producers, individually and in groups, the imperative is the technical and organisational skills needed to progress to climate-resilient "farming as a profitable business" and to transition to agricultural and land management practices that lower emissions and reverse the depletion of the NR base (soil, water and trees), both on- and off-farm. A key mindset change for producers is to engage proactively with other private sector operators to build collaborations that are mutually beneficial and with balanced bargaining power. To this end, the critical linkage in the VC is the first, that between producers and agribusinesses.
3. On the demand side, the agricultural market prospects in the Northern and Middle Belts are promising, with strong global demand for maize, shea and cashew and rapidly increasing domestic demand and import substitution possibilities for rice, soya and poultry. GoG is investing heavily in the scale and capacity of "upstream" VC actors through 1D1F and other programmes. However, the mass of rural producers is not able to capitalise on the growth in demand, being effectively outside the mainstream economy. The development challenge for PROSPER is to broaden, deepen and extend the reach of these commodity VCs to engage with significant numbers of primary producer groups. The resulting "demand pull" is much stronger than "supply push" in driving local economic growth. The increased volume of business is expected to create opportunities for enterprises in agro-processing and value addition at all scales, fuel employment and incomes within local economies through a multiplier effect, and thereby raise the food security and nutrition security of whole communities in the context of the changing climate. PROSPER will focus on climate-sensitive and nutrition-sensitive value chains, and will include training and awareness-raising activities promoting behavioural changes. The project will also introduce matching grants activities devoted to nutrition interventions. The project will have dedicated technical support in the form of TA and will partner with nutritionists from line departments for capacity-building, training on food preparation and consumption and so forth.
4. **IFAD's comparative advantage.** The Fund has a wealth of technical expertise to offer in addressing intractable rural poverty combined with the capacity to mobilise resources at a scale that can make a lasting impact on the lives of vulnerable people. IFAD has a strong record in Ghana in working with poor rural communities in the food and agriculture sector in the Northern and Middle Belts. A portfolio of IFAD funded projects has focused on various closely related aspects relevant to the design of PROSPER. *Roots and Tubers Improvement & Marketing Programme* (RTIMP) took an integrated commodity chain approach. *Northern Rural Growth Programme* (NRGP) combined commodity chain and rural infrastructure development with access to financial services. *Rural and Agricultural Finance Programme* (RAFIP) followed by *Rural Financial Services Project* (RFSP) have built up the microfinance subsector. *Ghana Agricultural Sector Investment Programme* (GASIP) is concentrated on agribusiness linkages and VC development, with measures to promote climate change resilience. *Rural Enterprises Programme* (REP) seeks to promote rural business, many of which are based on agriculture and NRs. The *Affordable Agricultural Financing for Resilient Rural Development Project* (AAFORD) focuses on smallholder access to formal credit. *Emergency Support to Rural Livelihoods and Food Systems exposed to COVID 19* (ESRF) was a rapid response to support smallholders coping with the pandemic.
5. PROSPER will scale up and build on the broad and deep experience, lessons learned, fruitful partnerships and cumulative development achievements of these initiatives
6. Concessional resources for green finance are beneficial in supporting smallholder producers and processors to adopt climate resilient agricultural and agribusiness practices. With its first successful experience in Niger, the Inclusive Green Financing for Low Emission and Climate Resilient Agriculture (IGREENFIN) initiative is stimulating a paradigm shift within the country's financial system. IFAD is expanding this business model in thirteen countries of the Great Green Wall Initiative area, including Ghana. It will support local financial institutions, one in each country, in setting up green credit lines to finance green agricultural investments and align their portfolio towards meeting Nationally Determined Contributions (NDC) targets in the Land Use, Land-Use Change and Forestry (LULUCF) sector. PROSPER will leverage IGREENFIN to promote green investments by smallholder farmers and related enterprises.

B. Lessons learned

1. The foregoing development interventions have yielded a range of pertinent lessons for the design of PROSPER, including the following.
 - Rural institution capacity building (training and skills transfer) is a priority from the outset to support enduring agribusiness partnerships and the creation of internal capital through savings. Many of the RIs supported by RTIMP, NRGPs and GASIP were assessed as institutionally weak at completion, (lacking financial resources or bank linkages and requiring capacity support). For example, in NRGPs, only 1,625 of the 8,127 farmer-based organisations established (20%) were assessed to be functional and only 4% were considered to be a Mature Cooperative. Following this lesson, PROSPER will provide relevant training and capacity building of sufficient quality to enable beneficiaries to enter and progress within the VCs.
 - RI/MSME internal financial assets, such as the creation of internal capital from savings mobilisation and retained earnings, is a necessary condition for RIs and MSMEs to engage with VCs. Many existing groups remain chronically undercapitalised as they lack the culture, orientation or assets to retain a part of current profits to finance inputs for the following year. Ghana has had success in the establishment of member-based savings common interest groups. Variations of the Village Saving and Loan Association model have proved effective in a group setting, particularly for women and PROSPER will build on this experience.
 - *RI integration in value chains to facilitate farmers' access to markets.* PROSPER will learn from and build on the experience of previous projects with the common aim of integrating farmers into VCs and facilitating their access to markets. The District Value Chain Committees model of NRGPs will be supported as a potentially valuable discussion medium for producers and other VC actors in each district. The Cluster Driver Approach of GASIP and the Anchor Agribusiness concept piloted under the PFJ initiative are reflected in the PROSPER design with the creation and expansion of stable agribusinesses linking medium-scale entrepreneurs with multiple smallholder producer groups. PROSPER will support market linkages between these initiatives and the Ghana Commodity Exchange (GCX).^[1] This is a big step up from enhanced subsistence farming.
 - *Need to combine production, marketing and credit support to ensure maximum returns to developing producer groups.* While the cashless credit model of NRGPs was a successful innovation, the initiative was not integrated with marketing support. A total of 20,000 households benefited from credit linkages to increase production, but only half participated in marketing groups and many farmers had to revert to traditional and less profitable marketing practices after one season, affecting their creditworthiness. The District Stakeholder Fora (DSF) developed under RTIMP were organized around supply chain leaders and facilitated business linkages for smallholders, but no formal credit linkages were established. GASIP demonstrated excellent integration between production support and marketing linkages for beneficiaries but was less successful in developing credit linkages for farmers already linked to the market. Consequently, PROSPER will build up the capacities of FIs both to increase the quantity, quality and profitability of production and to link into markets, negotiate prices and bargain for better services. The project is focused on the establishment of enduring contracts between producers and agribusinesses.
 - *Need to develop functional capacity of PFIs through capacity building.* The bottlenecks in extending access to finance include the risk-averse attitude of PFIs, limited outreach, lack of liquidity in rural banks, high interest rates and inadequate capacity for monitoring. The experience from credit lines for agricultural VCs and rural MSMEs financing since 2005 shows that PFIs will not be financially stable unless credit is backed by capacity building to undertake properly due diligence on loan requests and access to offtaker markets in long-lasting agreements with producers, loan and risk management, pragmatic scheduling of loan repayments linked to borrower business cashflows and the monitoring and recovery in full of due loans so that funds revolve. The project will collaborate with AAFORD to provide such PFI capacity building with adequate TA on financial literacy, productivity enhancement and responsible borrowing by servicing loans due. Ghana Incentive Based Risk Sharing Agricultural Lending (GIRSL) has designed a special training programme for banks and PROSPER will encourage all participating PFIs to enrol in the training.
 - *Affordable financing modalities for RIs/MSMEs to ensure access to finance for smallholders.* Lack of access to finance at affordable interest rates is a constant issue for smallholders wanting to progress. In NRGPs innovative cashless credit model, financial institutions provided USD 4,861,625 worth of credit from their own funds to 21,349 smallholders, but necessarily at market interest rates which proved unsustainable for the borrowers. Concessional lines of credit have been recognised as an important tool of support to smallholder farmers in Ghana, who have difficulty accessing formal market-priced financial services. In July 2021, thirteen key lines of credits (launched since 2010) were operational for agricultural value chain and rural SMEs financing. However the supply of funds at affordable on-lending rates remains below the volume needed to build the capacity of the target group to address concerns. None of the above is factoring into consideration adaptation to climate risks. Provision of a line of credit for climate mitigation as well as adaptation will be a forward leap in Ghana's efforts to meet its Nationally Determined Contributions under the Paris Agreement. PROSPER will facilitate the development of a blended agricultural refinancing facility to provide FIs with additional resources to offer affordable credit to poor and very poor producers. The project will also contribute to mitigating the inherent financial risks associated with lending to smallholders facing escalating climate change by promoting linkages between (i) PFIs and GIRSL's partial credit guarantee scheme, and (ii) producers and the smallholder agricultural insurance scheme at GAIP. The GCF lines of credit are designed to counter such risks and invest in mitigation and adaptation actions. PROSPER will thus support interest rate flexibility to achieve sustainability for PFIs while ensuring profitability and positive livelihood changes to its beneficiaries.^[2]
 - *One-off Matching Grants.* Experience reveals that Matching Grants (MGs) for financing capital investments and (mainly) variable costs such as inputs have delivered mixed results in IFAD-supported projects in Ghana. The GASIP one-off MG support for seasonal inputs produced encouraging short-term results, particularly for maize and soybean, but revealed the need to support beneficiaries over more than a single cropping cycle to ensure mastery of the technical capacity and skills acquired, which would undermine IFAD's policy to use a MG as a one-off support. The current context and GoG practice warrants the use of matching grants for both working and investment capital. This approach is delivering excellent results in the WCA region, for example; in Nigeria with VCDP. PROSPER will implement a phased financing protocol and sequencing, starting with mobilizing savings for securing a beneficiary contribution.
 - *Climate change adaptation and mitigation measures have high levels of adoption when included in production packages linked to markets and financial instruments.* PROSPER will integrate NRM and climate resilient agricultural practices into all interventions and build explicit green criteria into business plans, in particular the larger schemes considered for the Blended Finance Facility funding.
 - *Vulnerable beneficiary targeting.* PROSPER is committed to identifying the poorest people living in very poor communities, including specific vulnerable groups: women, youth (18-35 years) and people with disabilities. The cumulative experience of projects suggests that the effectiveness of direct targeting is increased greatly by authentic participatory consultations. Special attention must be paid to the constraints on smallholder farming, particularly women and youth access financial institutions.

14. [1] <https://gcx.com.gh/>.
15. [2] The new inclusive rural finance policy (IRF) passed by IFAD's EB on 14 September 2021 underscores the need to "improve use of subsidies to foster long term sustainable outcomes of IRF activities and to attract investment capital". In lieu of market-priced on-lending interest rates, IRF 2021 stipulates, "IFAD will employ asset subsidies, matching grants, production and market access TA, value chain development, public and private infrastructure development, and other interventions to help develop sustainable climate IRF markets in developing member states".

2. Project Description

C. Project objectives, geographic area of intervention and target groups

1. The PROSPER Project Development Objective is: Strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority VCs in the Northern and

Middle Ecological Belts taking advantage of the increased demand created by the Government's efforts to strengthen agro-processing. PROSPER aims to provide a framework for the long-term engagement with and financing for private sector-led, pro-poor agricultural VC development tailored to the specific needs and potential of small-scale producers and operators in targeted regions of Ghana.

2. In line with IFAD11 mainstreaming commitments, PROSPER qualifies as:

16. **Climate finance:** PROSPER will integrate adaptation and mitigation measures in the value chain packages, supported by special financial mechanisms promoted by the project.
17. **Nutrition sensitive:** PROSPER will select nutrition sensitive VCs, increase production of highly nutritious crops and animal sourced foods, promote food conservation, post-harvest processing and value addition, and promote better dietary patterns by providing nutrition education and Social Behaviour Change Communication (SBCC).
18. **Youth sensitive:** PROSPER will target male and female youth (each group with a minimum of 50% eligible youth), adding their access to land as a precondition for community participation in the project. PROSPER will support the establishment of youth-led enterprises along the selected VCs and will provide targeted financial inclusion, skills development and capacity building.
1. **Geographical targeting.** The geographical targeting strategy of PROSPER considers (i) high rural population, (ii) high poverty prevalence, (iii) high rate of food and nutrition insecurity, (iv) strong concentration of female and male youth, (v) presence of economic opportunities relevant to the project, (vi) the level of cumulative degradation of the productive NR base (particularly soil, water and trees) and (vii) indicators of climate vulnerability including evidence on the historical and projected impact of changes in temperature and precipitation.
2. Based on these criteria, the geographic area of intervention of PROSPER extends to five regions in the Northern Belt, (Upper West, Upper East, North East, Savannah and Northern) and three neighbouring regions in the Middle Belt (Bono East, Bono and Oti). Key challenges facing the targeted regions include:
 19. - **Poverty:** All five targeted regions in the Northern Belt have high poverty head count (up to 92% in Wa, West District, Upper West. The Middle Belt regions are relatively less poverty stricken but contain pockets with a markedly high poverty head count peaking at 78% for Kintampo South District, Bono East. Poverty is progressively deeper from South to North given the drier climate and increasingly challenging setting for agriculture with the negative impact of climate change. The poverty analysis underpinning the geographical targeting of PROSPER is presented in the PIM.
 20. - **Food security and nutrition:** Food insecurity prevalence as reported is not necessarily corresponding to the poverty head count. WFP food security and nutrition monitoring updates (June 2020) show high levels of moderate and severe food insecurity in the target regions, including the worst-off districts in the nation in terms of food insecure households. Main barriers to food security are food availability and accessibility. This affects access to micronutrients, especially for women and children. There are significant regional disparities concerning nutrition security in Ghana. Northern Region is worst off when it comes to rural (extreme) poverty, rural child stunting (chronic undernutrition) and the prevalence of anaemia among women and children. The national child wasting (acute undernutrition) rate stands at 7%, with the highest prevalence reported for Northern Region (10.9%). The presence of persons with disabilities also has marked regional differences. The Ghana Micronutrient Survey (2017) reports that the proportion of women (15 to 49 years) not meeting the Minimum Dietary Diversity for Women (MDDW) score ranged from 37.9% to 42.4% in the target regions, with a high national average of 40.2%^[11].
21. - **The prevalence of PWDs:** The prevalence of PWDs by district ranges from 3.0% to 8.3% in the Northern Belt and from 7.3% to 12.4% in the Middle Belt.
 1. **Target groups.** PROSPER's primary target groups will be: (1) the poorest and poor households, identified at inception through participatory methodologies appropriate to their circumstances; and (2) vulnerable people who have little access to assets and economic opportunities due to social exclusion, marginalization and the negative impact of climate change, targeted for participation in economic groups (RIs and MSMEs) promoted by the project.^[12]
 2. The poorest households hold not more than 1 ha cultivable land or are landless whilst poor households comprise smallholders with less than 2 ha cultivable land whose livelihoods are vulnerable to NR degradation and climate change risks. Vulnerable people within the poor rural population include women (40%), unemployed female and male youth between 18-35 years (30%) and persons with disability who are economically active (5%), many being part of the poor/poorest households. Market-oriented farmers with 2-10 ha cultivable land will also benefit from project support as minority members of the eligible groups and enterprises. The combined total number is estimated at 100,000 beneficiaries. Market-oriented-farming households with more than 10 ha of arable land and larger private sector entities may participate in project activities such as capacity-building if they offer employment or business opportunities to the primary target group. In line with IFAD's targeting guidelines, PROSPER will reach the target group through a combination of geographical targeting, community targeting (PWDs), self-targeting and direct targeting mechanisms. More details on the targeting approach are provided in the PIM.
 3. The primary safeguards against elite capture will be the self-targeting plus the participatory identification of the poor and priority households and rigorous screening to ensure the inclusion of these households as beneficiaries, in the group level business plans implemented with project support. Detailed screening of business plan proposals on commercial viability, conflicts of interest and corruption will be undertaken. Compliance with pre-approved, objective selection criteria and transparent information-sharing and decision-making will be ensured.
 4. PROSPER is gender sensitive. Overall, 40% women outreach will be targeted. PROSPER will address the barriers to women's participation and empowerment prevalent in the geographical context of the project. Involvement in training, educational and income generating activities will be promoted by ensuring there is enough time to reach everybody through community meetings and that activities are arranged in a way convenient to women's lives. PROSPER will include activities expected to attract women's participation, such as shea and savings and credit groups. Gender targeting in PROSPER includes the inclusion of young women (youth) and women with disabilities (PWDs).
 5. Both male and female unemployed youth (18-35 years) will be targeted, particularly for off-farm opportunities in MSMEs related to primary production along the selected value chains, such as the provision of mechanised land preparation services, the use of by-products for animal feed, and crop aggregation. For selected interventions, MSMEs would have a 60% minimum membership requirement of eligible youth. PROSPER will concentrate on potential vulnerabilities affecting specific sections within the youth category, for example: ensuring that young women have the same opportunities as their male counterparts to participate in and benefit from the project; and inclusion of female and male youth with disabilities. The steady migration of youth from the rural areas to towns, observed in many countries, is a rational response to the lack of earning opportunities. The country cannot afford to waste the resource of unemployed young people. A key part of the remedy is supporting individual entrepreneurs in setting up businesses they choose, thereby creating authentic local employment. PROSPER is designed to be as flexible as possible in responding to the energy and aspirations of youth in setting up enterprises from the bottom up.
 6. In sensitizing communities about the project, PROSPER will create awareness about PWDs and the differing nature of impairments. The participatory identification of households with PWDs will be carried out while developing Cluster Plans. The needs assessment of the PWDs will follow tailored approaches for capacity building, economic engagement and social protection depending on the nature of impairment. PROSPER will aim to mainstream women, youth and PWDs through their inclusion in the project-supported RIs, MSMEs and other activities.
 7. **Phased approach.** Selection of the proposed PROSPER regions is based on exhaustive analysis of available poverty, food insecurity and socioeconomic data in the Northern and Middle Belts. The plan is to start with three of the poorest regions to conduct the various project-wide inception activities without over-extending Government and management resources and to align with the pattern of project financing. The original concept envisaged this cautious approach, with all project activities tried from inception and scaled up when modalities are shown to be effective. The project structure is flexible and phasing can and should be adjusted in the light of experience gained in the first years, particularly with lessons learned from piloting the innovative Blended Finance Facility (BFF):
 8. a. **Calibration phase:** The project will start implementation in three adjacent regions in the Northern Zone: Northern, Upper West and either Savannah or North East.
 9. b. **Replication and scalability phase:** The project will be scaled up to the remaining five target regions by the middle of the third year of implementation, according to four trigger conditions: (i) filling the financing gap (currently estimated at USD 22.7 million), in part or in full from IFAD-12 (IFAD); (ii) Government meeting its PROSPER cofinancing commitments during the Calibration Phase (GoG); (iii) MoUs with implementing partners established and progressing well (PROSPER management); and (iv) satisfactory arrangements in place with regard to the operation of the Matching Grants and Blended Finance Facility (PROSPER management).
 10. If one or more of the above conditions are not met, this could lead to restructuring of the project or any other possible remedies to address underlying issues through the mechanism of an early mid-term review. Examples of measures that could be taken for restructuring include reducing the size of the project, reconfiguring implementation arrangements to address performance shortfalls, reducing the scope of components facing challenges and increasing the size of those that are performing better, and /or partial cancellation.

22. [11] Minimum Dietary Diversity for Women (MDDW) is an indicator for the dietary diversity in households.

23. [12] The socially sensitive household methodologies to be employed, as recommended strongly by GASIP supervision missions, are mentioned in the *Household nutrition and healthy diet campaign* section under Subcomponent 1.1 below and in detail in the PIM.

D. Components/outcomes and activities

1. PROSPER comprises two mutually supportive components. By (1) Developing rural institutions and socioeconomic infrastructure, and (2) Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains, PROSPER aims at increasing the real demand for sustainably grown produce by significant numbers of people living in poor rural communities while enhancing their capacity to meet this demand through more efficient climate-resilient agricultural practices and natural resource management to mitigate the negative impact of climate change. The intended outcomes are increased incomes, greater food and nutrition security, and improved health status.
2. **Component 1: Development of rural institutions and socioeconomic infrastructure.** This component is concentrated on investing in the human, physical and natural resources of the target communities – the “public goods” – for the benefit of the targeted 100,000 beneficiaries in the project areas. Expected component outcome: *Improved and sustainable livelihoods in target areas supported by strengthened rural institutions and improved socioeconomic infrastructures.*
3. **Subcomponent 1.1 Capacity building of rural institutions, enterprises and households** comprises a range of institution-building and skills development activities to enable target communities to take ownership of and accountability for their own development initiatives, to promote sustainable community-based NR management, to strengthen their ability to implement modern sustainable and climate resilient farming, and to adopt healthier diets.
4. **Community mobilisation, cluster identification and planning.** The project will seek to secure community interest in PROSPER and the approaches it is promoting with a series of interactive workshops and consultations at regional and district levels, starting with three regions in the first phase. The list of districts for project engagement will be finalized in discussions with local and national authorities. In each selected district, the project will identify and form clusters of neighbouring communities through a screening of NRM and socioeconomic conditions and mobilisation meetings at village level.^[13] Where interest is strong, the community leadership decides to commit to PROSPER and opportunities exist around the target value chains, a Cluster Committee will be established to interact with the project and manage implementation.
5. **Cluster Planning.** For each participating cluster, PROSPER will facilitate the collaborative development of a bespoke community-driven Cluster Plan (CP). Each CP will set out local priorities for communal socioeconomic investments and identify potential production and related business opportunities that may be realized by RIs and MSMEs under Component 2 and/or with community resources. The CP will inform the agenda for PROSPER action in each location, concentrating on investments responding directly to climate change mitigation and adaptation, and supplementing any existing development plans of local authorities or other development partners. The CP will underpin the local PROSPER-community partnership and remain with the cluster leaders and Local Authorities as a live document to guide development planning during and after implementation.
6. **Capacitation of rural institutions and enterprises.** This action entails bolstering both the governance and management structures and the technical capacities of active rural institutions, (including farmer/producer-based organisations and other economic interest groups such as VSLAs) and MSMEs, and thereby their capacity to function as effective VC partners. It is envisaged as a purposeful major investment in human resource capital to develop a more conducive environment for the economic activities of the rural population. Within this drive to grow the rural economies by expanding business activity for groups, the poverty focus of PROSPER entails extending the group-based opportunities to substantial numbers of vulnerable and economically marginalised people.
7. The programme of training, skills development and related demonstrations will be delivered by district extension services backed up by MoFA technical departments and other line ministries as well as PROSPER technical assistance. In preparation for the work, the project will reinforce the technical skills of public service frontline field staff, reorientated to a modern business approach to farming including the adoption of climate-friendly agronomic practices and natural resource remediation. The action will be launched with an awareness-raising workshop in each district on opportunities for youth in and around the smallholder agriculture sector and the PROSPER value chains. Cluster-level surveys will identify groups and MSMEs, both pre-existing and potential, interested in and likely to

- benefit from capacity building. The group identification process will be gender sensitive with a special focus on women, youth and PWDs.
8. The District Departments of Agriculture (DDAs) will lead an extension campaign organised around group organisational skills, climate-smart demonstrations and practical training sessions on topics such as conservation agriculture, agronomical practices and "farming as a business" tailored to the local agroecological conditions and main VCs in the cluster. Financial literacy (Subcomponent 2.2), orderly record keeping and the basics of business conduct will be addressed to complement instruction on the technical aspects of sustainable production. Emphasis will be placed on the need for a marketing plan for every planting: "production with a purpose". An estimated 4,500 RIs and 800 MSMEs will be trained over the life of PROSPER. Off-farm, the training will centre on the remediation and proper management of the depicted shared NRs which are key to the livelihoods of farming communities. Best practices in soil and water conservation, tree planting and NRM, (to be supported in many target clusters with remedial works under subcomponent 1.2 below), will be shown to be beneficial to all the present and future users of the landscape. The capacity-building campaign will extend to non-producer economic interest groups who will be given training on enterprise development, particularly value addition and support services. Many will be Youth-based and start-ups stimulated by the project.
 9. **Household nutrition and healthy diet.** Alongside the measures to capacitate target groups to generate and sustain income and to manage and remediate their NRs, PROSPER will deliver an inclusive community-wide nutrition and healthy diet agenda to benefit all households, in synergy with the promotion of climate and nutrition-sensitive farming and vegetable cultivation. This initiative will promote dietary changes on the ground as a counterbalance to the drive to produce food for sale, shifting attention to the nutritional value of the food consumed. The action will start with a Participatory Needs Assessment in each target community and entail training on household methodologies (HHM) and domestic financial literacy for up to 2,400 selected households. The Gender Action Learning System (GALS) as part of HHM will be introduced to enhance Gender Equality and Women's Empowerment (GEWE) in PROSPER. GALS will create the togetherness in self-selected families to develop a vision and strategy to get themselves out of poverty. A Knowledge, Attitude and Practice (KAP) study will be conducted to understand better local issues around nutrition and diet, and to serve as a baseline for specific trainings and the Social Behaviour Change Communication (SBCC) strategy. At the centre of nutrition activities will be a household education programme delivered through care groups by peers comprising demonstration nutrition gardens for healthy diversified diets, dedicated training on post-harvest management, nutrition education and SBCC for communities.
 10. **Subcomponent 1.2 Development of socioeconomic infrastructure.** This development activity seeks to realize some of the "public goods" investments prioritized and chosen by local communities through the Cluster Planning process. Three complementary types of climate-resilient infrastructure will be eligible: i) Off-farm/watershed works and hazard mitigation measures; ii) Feeder roads and farm tracks; and iii) Communal social infrastructure. These investments aim to improve the sustainability of NR-related livelihoods and to stimulate socioeconomic advancements in the participating clusters. The NR remediation infrastructures may comprise soil and water conservation structures, such as contour bunds, reforestation and shelterbelts, bench terraces, tied ridges, water harvesting and storage ponds, as well as climate resilience measures in line with local conditions. The District Assembly will undertake all procedures as appropriate to acquire/lease any land needed for construction. PROSPER envisages expanding and rehabilitating road networks (feeder roads and farm tracks, culverts and small bridges), as well as shared domestic water supply structures (boreholes with hand or solar pumps), sanitation facilities and waste management systems, and alternative/green energy schemes (including resource and energy recovery from waste).
 11. Each capital investment plan will include appropriate management, operation, maintenance and ongoing financing arrangements, with overall responsibility resting with the community where relevant. In each case, agreement will be reached between the District Assembly and the community leadership on the post-construction asset management by various community gender-balanced committees, building on previous local norms and the organisational training delivered under Subcomponent 1.1. The off-farm/watershed works and hazard mitigation infrastructure and the Feeder roads/Farm tracks will be funded 100% by the project. For water supply, the current national practice is for communities to make a cash contribution equivalent to one-year facility maintenance costs that shall be deposited in a bank account to demonstrate commitment towards long-term sustainability of the installation. For household toilet systems, the project will pay for the core element of the facility, such as the concrete slab or digni-loo unit, while the beneficiaries excavate the pit and build the superstructure with their own resources.
 12. Off-farm/watershed works and hazard mitigation infrastructure will be community-managed. The infrastructure for NR remediation and environmental protection will be maintained by a Natural Resources and Environmental Management Committee to be established under the project at the community level. Feeder roads and farm tracks will be maintained by the Department of Feeder Roads, who will be involved in implementation to enable them to take over post-construction maintenance. Water harvesting, water supply and waste systems will be managed by a Water and Sanitation Management Team (WSMT), a statutorily recognised body operating under the auspices of the District Assembly Works Department. Water will be sold at the tap and revenue raised used to maintain the supply systems. Sanitation and waste management systems will be maintained by the concerned households. Environmental sanitation and waste disposal and recovery systems will be coordinated by the WSMT and supervised by the District Assembly Works Department. An Environmental and Social Management Framework (ESMF), which is prepared as part of the PROSPER design, will identify potential impacts of the infrastructure elements under the subcomponent and will integrate measures for addressing them.
 13. **Component 2: Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains.** The expected outcome is: *Smallholders and small businesses draw greater benefits from the increasing market outlets for agricultural produce through comprehensive financial, capacity and marketing support.^[2]*
 14. The second component is concentrated on investing in the "private goods" of the population to bring about a sustained uplift the earning capacity of agricultural producer groups and related enterprises. The aim is to expand business activity both within the target communities and in lasting agreements with other actors in the selected VCs. The project is realistic in recognising the differing prospects of the targeted beneficiary groups and the extent to which access to finance is the main constraint they face. In this context, the PROSPER emphasis on climate-friendly business development, both on- and off-farm, must be balanced with social and welfare considerations for the most-disadvantaged households.
 15. The distinction between smallholders and small operators in this analysis is important. The project's drive to modernise agriculture in and extend the reach of the key value chains to economically marginalised communities is centred on the small-scale farmers but intended to reduce the poverty of the whole population. Alongside the capacity building of smallholders, PROSPER is geared to promote real economic opportunities for the substantial numbers of underutilised people in the same population, particularly the youth, not all of whom want to be in farming anyway. PROSPER is not intended to create jobs directly, but it is capacitated to help entrepreneurs to set up enterprises and to facilitate access to appropriate finance, providing regular income for the "small operators", the growing number of rural people not directly dependent on primary production. The project will make existing smallholders better off and at the same time create new jobs and enduring earning opportunities for presently unemployed youth and other marginalised.
 16. **Subcomponent 2.1 Sustainable marketing linkages and business development.** This subcomponent comprises actions to enable poor rural people, with little or no land, to transition from inadequate subsistence livelihoods to regular earning from agriculture and related support services. The development framework is a market approach, linking increasingly proficient producers with other actors in key value chains, with due regard for the equitable sharing of benefits from the local economic uplift. It is axiomatic in sustainable VC development that all the actors make a profit or none; the producers, service providers and oftakers have a common interest in success.
 17. **Value chain analysis.** As an essential preliminary to the investment, PROSPER will build on the value chain analysis conducted during project design and assess further the potential for increasing the real demand for the produce from areas remote from the main markets. It will examine in depth the status and characteristics of selected national value chains (soya, rice maize, cashew, shea and poultry) and map the VC actors located close to the target communities, particularly the first stage market linkages between producers and others in the chains. The general presumption is that most smallholder farmers and their groups have no established marketing arrangements and interact opportunistically with buyers and middlemen only as and when they harvest a surplus. The number and location of private sector operators in the project area, including larger agribusinesses working with contracted outgrowers, is not well documented. PROSPER will commission a detailed structural examination of each VC, including an estimation of the value added at each link, to provide a sound platform for project interventions.
 18. **Promotion of linkages between producers and value chain actors.** This practical and intensive developmental activity is aimed at generating enduring partnerships between producers engaged in climate-resilient farming and larger-scale agribusinesses within locally appropriate forms of robust and equitable contract relationships in the private sector. PROSPER itself will not enter business relations with the parties at any stage. The project will concentrate on those eligible RIs and MSMEs that demonstrated interest and potential in the Component 1 capacity building interventions. Group eligibility for different windows of PROSPER support centres on meeting membership criteria regarding the minimum proportion of specified disadvantaged groups: women, female and male youth, PWDs and landless or near-landless households. These criteria allow for and, for practical reasons, encourage a minority of non-eligible members with productive land holdings of up to 10 ha in each group.^[3]
 19. With the support of the Business Advisory Centres (BACs)/Business Resource Centres (BRCs) and DDAs, the project will engage with VC actors in each participating district with an information-gathering and analysis exercise. An initial assessment will be conducted of the organisational status and maturity of the targeted groups (RIs and MSME), building on the cluster profiling at project inception, (Component 1.1), in terms of their organisational proficiency, level of capitalization, acquired skills in financial management and potential to establish business agreements with VC actors such as traders and processors.

Maturity indicators	Entry level (all groups passed this level to benefit from sub-component 2-1)	Less-mature RIs/MSMEs	More-mature RIs/MSMEs
Organisational skills	New / inexperienced group	Loose organisation, some evidence of joint activity.	Experienced and structured group.
Level of capitalization	No internal capital	Less than 500 cedis per member on average.	500-1,500 cedis per member in average. Regular saving practices.
Skills in financial management	No skill	Groups with internal small loan system, little/no experience with formal financial system	Group with a bank account, some experience in credit management.
Potential to establish business agreements	No experience	Some experience with difficulty to develop partnership	Regular and successful partnerships.

1. The groups will be categorized broadly into two streams going forward with project support: those needing more time and coaching to consolidate their organisational and financial capacity to engage in business; and those deemed ready to advance to formal business arrangements with larger VC actors and external financial services. This objective evaluation will be instrumental in proper targeting and sequencing to access further project support and appropriate financial services.
2. It is expected that 50% of the total number of beneficiaries targeted under Component 1 (50,000 people) by PROSPER will qualify for assistance under this Subcomponent. Among those, the marginalised, poorer and most vulnerable RIs (composed of more than 50% members with access to land of 1 ha or less and 50% women, 60% youth and 10% people with disability) and smaller MSMEs (fewer than 9 employees) progressing from Component 1 and meeting organisational proficiency requirements, minimum level of internal savings and acquired skills in financial management will be offered training sessions backed up by demonstrations and events at the cluster level on climate risk mitigation, resilience and integration into value. Particular attention will be paid to potential MSMEs dedicated to women, youth and PWDs. Meetings will be organized to raise awareness, share information, bring together potential partners, and seek to conclude RI and MSME agreements with VC actors. These beneficiaries will be assisted later in the preparation of a basic climate-friendly Business Plan (BP) to aid the consolidation of their income-generating activities and consideration for financing, (see below).
3. The relatively better-off RIs that: (i) have a larger proportion of well-off beneficiaries (less than 50% of the members have access to an area of 1 ha of land and no more than 10% have access to 5-10 ha of land) and a lesser proportion of vulnerable people (40% women, 30% youth and 5% PWDs); and (ii) meet the organisational and financial literacy requirements, (including a bank account with an adequate level of savings), will be offered a more advanced version of the trainings and demonstrations leading towards the establishment of business partnerships in each target district. MSMEs (with up to 29 employees) will be engaged in the same developmental processes if their business can be shown to contribute to increasing the offtake from the primary target group and extending the reach of the VCs in remote locations. These beneficiaries will be assisted later in the preparation of a more advanced version of a BP to support an application for external commercial credit. Those less-mature RIs and MSMEs that perform well in the entry level scheme are able and encouraged to progress to this advanced level activity.

4. The outcome of this activity is the establishment of formal market linkages between group of capacitated RIs and standalone MSMEs and oftakers, value adders, aggregators, etc.
5. **Development of business plans.** The centerpiece of the third activity is the generation of a sound, achievable and fully costed plan appropriate to the resources and realistic prospects of each concerned entity. For the less-mature RIs and MSMEs, which meets the poverty criteria referred to above, a simple but achievable BP will be prepared with the support of BRCs, BACs, DDAs and PFIs as available. The Cluster Committees from Component 1.1 will be strengthened and upgraded to include PFIs and other VC actors to participate in BP development and realisation. BPs can be developed by multiple RIs and standalone MSMEs with the prerequisites of potential formal market linkages (supported by the project or pre-existing), proper organisational skills and an adequate level of internal capital. Each basic BP should include inputs, simple tools and equipment, and whatever other cost items are required, set against a realistic estimate of returns. For individual MSMEs, the BP will centre on income-generating services and activities related to primary production, such as land preparation, simple value addition or crop aggregation, and may include limited working capital. All BPs should be green in design and address effectively climate and NR degradation risks and impacts. The BPs will be evaluated by an independent agent/service provider (to avoid elite capture or any risk of political interference) and, if acceptable, used to advance a request for support through a Matching Grant window, (detailed under Subcomponent 2.2). Access to the MG window will be limited to the very poor group and MSMEs with less than nine employees and meeting the targeting criteria and as referred in the PIM.
6. For stronger RIs and MSMEs, the project will provide the opportunity for professional support by technical assistance and the BACs/BRCs in close collaboration with the PFIs in preparing a fully-fledged BP and facilitating access to affordable finance, (see Subcomponent 2.2 below).^[4] The strengthened Cluster Committees will support the process. The PFIs themselves will be receiving capacity building and mentoring support from PROSPER to extend their outreach and are expected to engage fully with their potential customers early in the Business Planning stage. The first category of advanced BPs will include groups of RIs partnering with an agribusiness/value chain actor. It may include inputs and simple tools for the participating RIs as well as working capital and elements such as mills, machinery, vehicles, equipment and minor infrastructure for the agribusiness. Another category of advanced BPs will include individual MSMEs with up to 29 employees. The advanced BP for MSMEs will be larger and more sophisticated than those under the basic ones and would similarly cover working capital requirements. Each BP should be green in design and address effectively the climate change adaptation and mitigation challenges and NR degradation risks. The successful advanced BPs will be eligible for support by the Blended Finance Facility, (detailed under Subcomponent 2.2).
7. For PROSPER, the imperative is to promote and expand businesses operating an aggregator-primary producer model that is prepared to engage with the IFAD target RIs and related enterprises to become their interface with the market. This VC chain development is key to moving the sector on from the failing unsustainable smallholder farming systems.
8. **Subcomponent 2.2 Access to rural financial services.** The main objective is to promote a savings culture among PROSPER's beneficiaries, facilitate realization of the cluster-level Business Plans and improve enduring access to suitable financial resources for the beneficiaries to engage in profitable agribusiness. Through RIs and local MSMEs, farmers will be integrated step-by-step into the formal financial system and have lasting access to adapted and affordable financial services to develop their agribusinesses, including green investments, recognising that such access is a necessary though not sufficient condition for rapid sectoral development. Alongside the full-scale project support to the growth of the six key value chains, PROSPER will assist beneficiary groups concentrating on other food crops primarily for consumption, nutrition and poverty reduction purposes, such as micro-scale vegetable production.
9. PROSPER financial services are structured around three financial instruments appropriate to the various situations prevailing in rural areas as regard capacities and professionalization: (1)*Saving and Loan Groups* (VSLA model) for sparking the saving habit within communities; (2) a *Matching Grants* fund for capitalizing emerging RIs to engage in commercial agriculture and smaller MSMEs around the selected VCs and supporting food and nutrition security promotion schemes for the most vulnerable groups; and (3) a *Blended Finance Facility* operated as a refinancing facility (RF) by PFIs to ensure sustainable access to financial services for growing FIs and MSMEs, (see details in respective sections below). These instruments form a sequential process by which beneficiaries will be able to increase their access to financing solutions over time as they build their financial and management capacities and develop their business relationships with other VC actors.
10. **Savings mobilisation/Saving and Loan Groups.** Within the array of institution building activities under Component 1 concentrated on promoting income generating activities for RIs and MSMEs, the project will emphasise the need for savings mobilisation and internal capital formation by all beneficiary groups as a prerequisite for forming sustainable businesses and, as and when appropriate, accessing external financial services.
11. In that context, PROSPER will support the creation and strengthening of savings and credit groups, building on the proven VSLA model that various IFAD-funded projects have been using with success.^[5] The objectives are: to promote the saving habit and culture as a way to increase self-financing capacities for farmers and other service providers, thus reducing their dependency on external resources; and to build internal capital in order to reduce the need for and cost of credit in the longer term. Savings and credit groups will be identified through the initial profiling process, preferably with all the members of a single group engaged in the same activity, such as trading or processing.
12. As they form the group and start transactions, members will be trained in financial literacy and banking activity management. Savings deposited will constitute initial capital that will be leveraged in subsequent investment in equipment on credit with project support. Through the financial education programme, PROSPER will encourage groups to save for future needs, such as raising their counterpart contribution to access Matching Grant funding. Participating PFIs will be trained in product development to incentivise saving. The project will help all interested beneficiaries to create or strengthen 5,300 savings and loans groups in the targeted regions. MSMEs and RFIs will be assisted by the same programme. After one year in operation, Savings and loan groups will be assessed on their level of savings, member participation and commitment to developing business activities. The best rated groups will qualify to apply for and benefit from the Matching Grant (MG) fund or Blended Finance Facility (BFF).
13. **Matching Grants.** As a second stage, PROSPER will operate a MG fund to capitalize the poorer (and probably less mature) RFIs and MSMEs (less than 9 employees) toward raising their production and output as part of simple business agreements that link groups of RIs with VC actors, including nucleus farmers, oftakers, processors, traders and aggregators, and establish MSMEs in business.^[6] Eligibility for a MG will entail more demanding performance criteria. It is expected that participating groups will enhance their business proficiency and become more reliable in the eyes of potential VC partners. PROSPER will promote the adoption of innovative, green, climate smart and resilient technologies and practices to achieve financial and environmental sustainability in the context of climate change and NR depletion. The MG as a one-off support will help RIs and MSMEs to finance the investments described in their BP. Poverty and targeting criteria for the MG is listed above and in the PIM.
14. Three MG funding channels are proposed: i) for RIs, ii) for MSMEs and iii) for *nutrition and other poverty initiatives*. The level of grant/contribution required will vary according to each specific VC and the profile of the beneficiaries targeted, (details can be found in Annex 8.) A dedicated category of the matching grants activities will be devoted to nutrition related activities for women groups, youth groups and PWD eligible for the *Nutrition and other poverty initiatives* funding channel. No BP will be required for small income-generating schemes focused on promoting diversification towards nutrition and food security (for example, year-round vegetable production schemes). RIs will be assessed against the realization of their BPs and capacity to expand business with their oftaker partner. Similarly, stand-alone MSMEs will be rated on their performance against their BP. The best rated RIs and MSMEs will qualify to prepare an advanced BP with project assistance (under Subcomponent 2.1) and to access an affordable loan from PFIs through the BFF. It is expected that 30% of MG recipients will graduate to BFF financing during the project timeline. Levels of the MG per RI/MSME and beneficiary, and of the contributions from beneficiaries are listed in the PIM.^[7]
15. **Blended Finance Facility (BFF).** The BFF will develop, test and rollout green financial products to finance advanced BPs by the more developed RIs and MSMEs that have the potential to undertake commercial agriculture with climate mitigation and adaptation interventions in partnership with other VC actors.^[8] The Facility is set up to contribute to the opening up of the climate finance market in Ghana.^[9] The BFF will be made available as the third financial product for eligible groups - some of whom may not have accessed a MG. BFF will direct the financing only to qualified PROSPER RIs and MSMEs who present bankable BPs with climate mitigation and adaptation interventions. Number of qualified RIs (joined together) and linked formally to VC actors under contract arrangements and standalone MSMEs will gain access to BFF credit at a blended on-lending rate for financing a more sophisticated BP that has a strong focus on adaptation and mitigation in the face of climate change impacts on small-scale agriculture. Selected RIs within the same geographical cluster and along the same VC will be helped to come together to develop and finance an advanced BP, which could include support to the VC actor as needed, provided that the BP show clear benefits of such support to the IFAD target group taking part. Another BFF funding category will be made available to BPs developed by small enterprises, (up to 29 employees).
16. The project will provide this affordable financing solution to the best RIs and MSMEs capacitated to invest on a larger scale (equipment, working capital, inputs, TA) and to grasp other business opportunities. The BFF will continue to operate as a refinancing facility beyond PROSPER closure to provide sustainable access to affordable finance for groups to maintain and develop their business activities with focus on climate mitigation and adaptation.
17. The BFF will be developed through combining/blending at least five different loanable resources with the objective to foster the development of a climate lending market.^[10] The BFF will mix concessional funds from development institutions with commercial private resources. The five resources are: two lines of credit from the Green Climate Fund (GCF)/ Inclusive Green Finance Initiative (IGREENFIN) Phase I, with both lines at highly concessional cost of funds (0% for climate mitigation and 1% for climate adaptation activities); one line of credit from IFAD resources at a concessional cost of funds of 2%; the Association of Rural Banks (ARB) Apex Bank of Ghana and its Rural Commercial Bank (RCB) members, who will engage their own resources at a Treasury Bond rate (reference cost of funds) of 12%; and resources from other private sector investors and/or other development agencies, at a market cost of funds of at least 20%.^[11] Due diligence efforts of the APEX Bank and its network of 56 rural and community banks will continue to be made during implementation. The successful operation of the BFF is expected to incentivise the APEX Bank and its network to provide more resources and to crowd in additional resources from the private sector.
18. PROSPER will support access by the above-mentioned groups to credit lines for green agricultural investments, leveraging the IGREENFIN under the GCF Great Green Wall Umbrella Programme (GGWUP). IGREENFIN will support (i) Mitigation measures for reducing/mitigating GHG emissions and (ii) Adaptation activities to strengthen climate resilience of the Project beneficiaries. Through IGREENFIN, PROSPER will build RIs and MSMEs' capacities to understand climate threats, identify and implement adaptation and mitigation solutions, design viable/profitable business plans, improve financial education, business management and development, and access green loans from banks and MFIs.^[12] IGREENFIN will also: strengthen the commitment to green and inclusive financing by financial intermediaries, MSMEs and others; contribute to climate resilience-strengthening activities in production and processing in addition to those activities required by SECAP for climate proofing; and support adaptation and mitigation activities included in beneficiaries' BPs through IGREENFIN- adaptation Window I and IGREENFIN mitigation Window II.
19. The BFF will be established at and managed by the ARB Apex Bank. The Apex Bank, as the Investment Fund Manager, will provide wholesale liquidity on blended terms to its RCB members and other interested retail financial institutions operating with reasonable outreach in the PROSPER project area, for on-lending for smallholder agricultural production and MSMEs development.^[13] The Apex Bank relies on its due diligence processes to select its partner retail RCBs and other qualified FIs. This blended financing arrangement will leverage existing derisking tools, including GIRSAL's partial credit guarantee scheme, GAIP's smallholder insurance scheme and GCX market access and warehouse receipt systems.
20. To contribute to mitigating the risk averseness of participating RCBs and other FIs, PROSPER will contribute 50% of the premium to be paid by these FIs to the GIRSAL partial credit guarantee fund for a coverage of up to 70% loss.^[14] In addition, to encourage beneficiaries to take up high value but risky climate mitigation and adaptation interventions, PROSPER will contribute 50% of the insurance premium paid by clients to GAIP.^[15] To ensure optimal participation from the clients, the agricultural insurance product solicited (weather index insurance and/or area yield index insurance) will be bundled with the credit requested from the FIs. Among the multiple uses of the TA associated with the BFF, part will be used to address key bottlenecks, including the risk averse nature of FIs in Ghana to finance smallholder agriculture, lack of affordable liquidity in the banks and unaffordable interest rates for smallholder producers. The BFF will be developed and set up at the Apex Bank by an external expert sourced by PROSPER. At inception, BFF PROSPER will be linked with BFF AAFORD.
21. Partner RCBs and other retail FIs selected to channel BFF financing to beneficiaries will have to commit to offering the predetermined single digit on-lending interest rate negotiated between the Apex Bank and the project, while ensuring a reasonable return and sustainability to the participating RCBs and FIs. In addition to contributing to the credit guarantee fund and the agricultural insurance, a cash contribution of around 25% of the cost of the BP will be required from the RIs, including a contribution from the partner oftaker, the loan being limited to the remaining amount. IGREENFIN technical assistance to RCB staff will be deployed towards climate change capacity building and financial product development. The BFF will have a dedicated unit in the ARB Apex Bank specialized in climate finance safeguards to run the day-to-day activities of the BFF in coordination with PROSPER and utmost attention will be placed on these aspects during supervision. The BFF will be supported by the project's M&E core team, which will report on the number and amounts of loans that are verified as "green" against the GCF criteria in the GCF Logframe on a yearly basis.
22. Levels of BFF loans per RI/MSME and beneficiary and of the contributions from beneficiaries are listed in the PIM.^[16]
23. **Green loans and grants.** To ensure that the MG Fund and the BFF will provide Green loans and loans and to avoid "greenwashing" risks. The eligibility criteria in the IGREENFIN operational manual for green investments will be applied to all BFF and MG fund financing. The Operational Manual of IGREENFIN will be considered part of PROSPER PIM and its provisions will apply to GCF and IFAD investments in the BFF and MG fund. The PROSPER unit in APEX Bank and PROSPER PCU, which include climate and safeguards specialists along with PROSPER M&E team will verify adherence to the provisions of the PIM and the Operational Manual of the IGREENFIN. Additionally; the GCF Logframe includes an indicator on the number and amounts of investments that are verified as "green" against the GCF criteria, and data will be reported on a yearly basis. Supervision missions will follow up adherence of the loans and grants provided by IFAD to the same criteria and will report on the adherence in the supervision report.
24. **Component 3. Project management and Policy engagement.** Expected outcome: *Efficient and timely delivery of PROSPER development results and support to evidence-based sectoral policy formulation.*

25. **Subcomponent 3.1 Project management.** PROSPER will be facilitated by an implementation support structure embedded in the host GoG agency providing liaison, physical and financial project management, reporting and accounting, proactive knowledge management and learning activities, and monitoring and evaluation functions. Details are set out in the Project Management and Coordination section below and in the PIM.
26. **Subcomponent 3.2 Policy engagement.** The GoG policy environment for rural economic development (which is broader than agricultural sector development) advances incrementally, but still contains operational contradictions such as the simultaneous provision of both commercial agricultural credit and highly subsidised inputs. Evidence-based policy dialogue and evolution is by nature a long-term process and even the eight-year time frame of PROSPER may be regarded as too short to make much progress. However, the project is being launched in the context of a global climate emergency and environmental catastrophe; "business as usual" is not an option. PROSPER is *de facto* a full-scale trial of green/climate finance and it is expected that much will be learned about this novel instrument. It is highly likely that the knowledge gained will influence policy development during and long after implementation.
27. IFAD brings considerable knowledge to the development partnership from a long-term constructive presence in the country and region. The Fund is an active participant in the Agricultural Sector Working Group (ASWG) established between the GoG, development partners and other key stakeholders such as businesses, financial institutions, NGOs and farmers. The ASWG is chaired by MoFA, to exchange knowledge and identify issues requiring policy refinement and decision-making to improve programme implementation and sectoral development. It has proven an effective instrument for cooperation with previous developmental initiatives. The GoG organizes an annual Joint Sector Review under the auspices of the ASWG. PROSPER through this subcomponent will continue to support the GoG to drive agriculture and rural development.
28. PROSPER will promote an enabling policy environment that will help achieve the project's goals and objectives through the provision of technical assistance, high-level round-table discussions, policy dialogue fora, conferences and advocacy as appropriate, underpinned by analytical work and knowledge management products from the experience of IFAD and other development partners. The project will commission *ad hoc* studies on policy issues related to the IFAD Ghana COSOP and the scope of PROSPER. South-South Triangular Cooperation (SSTC) instruments will be used as a tool for advancing the policy agenda and for the dissemination of the results.
29. The intention is to provide GoG with a high-quality policy support facility on salient issues, starting with the policy ramifications of PROSPER's large-scale trial of the new financial sector product "climate/green finance" as a potentially important development instrument in Ghana in coping with climate change. Creating incentives for FIs and private sector to invest in green and climate resilient agricultural value chains, without which the private sector is unlikely to borrow at scale to remediate NRs at landscape level that have long been neglected, under-invested, over-exploited and regarded as "free goods" by traditional agriculturalists and pastoralists.
30. Other topics of policy engagement would include: (i) barriers to private investment in the value chains, such as domestic value addition of cashew nuts, and regulation of domestic and international trade in agricultural commodities; (ii) support ongoing efforts for public expenditure review in the rural economy and effectiveness of subsidy schemes; (iii) access to productive land for women and youth; and (iv) availability of financial services for smallholders and MSMEs.
24. [1] In this document, a "cluster" is a term for several neighbouring settlements sharing natural resources. It has no administrative significance but locates the combined population in the specific land area upon which they depend and provides the project with a convenient unit for planning and operational purposes. Each cluster will include various common economic interest groups, such as Farmer Based Organisations and VSLAs, alongside non-profit community structures. To avoid confusion and excessive use of acronyms, the term Rural Institution (RI) is used here for a production-related group and Micro-, Small- and Medium-Enterprise (MSME) for any business set up for other purposes.
25. [2] Small businesses comprise enterprises and organised groups engaged in income generating activities other than primary production. The members are drawn from the same population.
26. [3] However, for reasons of equity and to avoid any elite capture of benefits, strict rules will limit any material provision of inputs to RIs members to a standard package sufficient to cultivate 1 ha (Matching Grants) and 2 ha (BFF loans).
27. [4] The concept of supporting "flexibility to achieve sustainability" in financing rural poor people is central to IFAD's new Inclusive Rural Finance Policy, with less emphasis on commercial (market-priced) finance at the entry level.
28. [5] CARE has also had successful experience in developing the concept for women in Ghana.
29. [6] This systematic objective selection approach and self-targeting mitigate potential elite capture of the MG fund.
30. [7] The matching grants ranges for groups of RIs are based on specific assumptions with regard to total number of beneficiaries, no of Rural Institutions participating in the Business Plan, area to be cultivated. During implementation, the tables in the PIM should be used as guidance regarding the maximum amount per single beneficiary to guide the process and not as guidance regarding the limit of matching grant regardless of number of beneficiaries per Business Plan. Additionally, it is strongly recommended to limit the upper limit amount of MG per beneficiary (for group of RIs receiving MG for production) to equivalent of MG share per one hectare. The limits for MSMEs (9 employees and less) are based on examples and should be used as guidance for the process.
31. [8] Only for the six main VCs: rice, maize, soya, poultry, cashew and shea.
32. [9] Currently, there is almost no demand for climate finance in Ghana because uptake of climate mitigation and adaptation technologies is still in its very early stages. BFF will be one of the very first funds set up in Ghana to contribute to climate finance market development.
33. [10] A dedicated technical team of IFAD experts, private sector independent consultants and Apex Bank bankers and economists carried out a joint exercise to determine the blended affordable on-lending rate. Details of the adopted approach to the interest rate determination are documented in a "Technical guidance note on determining the on-lending rate from blending and structuring a mixture of highly concessional and commercially-priced loans".
34. [11] The ARB Apex Bank in collaboration with PROSPER will look for investors and other development partners. A technical guidance note (in the PIM) shows that the average cost (wholesale rate) of the blended funds will be in the single digits (less than 10%) and the average structured interest rate applied to the clients (on-lending or retail rate) will also be in single digits. This latter is compared to the current market rate of between 26% and 28% applied by Apex Bank's network of RCBs.
35. [12] To ensure that green loans are validated and to avoid greenwashing risks, the eligibility criteria of the green loans are clearly defined in the GCF's project Operational Manual, which is the equivalent of the PIM.
36. [13] For purposes of flexibility to achieve sustainability (IRF Policy 2021), the evolution and performance of the innovative blended fund will be closely monitored by a dedicated GCF/IGREENFIN TA-supported M&E Unit lodged at the Apex Bank. The dedicated M&E team will collect and analyse data that will be used to inform recommendations and/or decisions to be taken at midterm (MTR) on whether to make any adjustments to the blended fund and its operations.
37. [14] The premium is currently estimated at 1% of loan portfolio to PROSPER clients.
38. [15] Details of the premium determination will be worked out with GAIP in time for the beneficiaries to access BFF.
39. [16] The BFF loans ranges for the VC actors and groups of RIs (coming under the same BP) are based on specific assumptions with regard to total number of beneficiaries, no of Rural Institutions participating in the Business Plan, area to be cultivated. Same principles applies for other BFF windows; e.g. for MSMEs. During implementation, the tables in the PIM should be used as guidance regarding the maximum amount per single beneficiary to guide the process and not as guidance regarding the limit of BFF loans regardless of number of beneficiaries per Business Plan. Additionally, it is strongly recommended to limit the amount of BFF loan share per beneficiary (for group of RIs receiving loan for production) to an equivalent of loan share of two hectares. The limits for MSMEs (29 employees and less) are based on examples and should be used as guidance for the process.

E. Theory of Change

- Developmental challenges.** The main development challenges in the project area are high levels of rural poverty, youth and women unemployment, food insecurity, malnutrition in all forms, climate change and accelerating environmental degradation. Most poor farmers are engaged in low input-low output production in the small-scale rainfed field-crop sector, which is neither financially nor environmentally sustainable. In the absence of linkages to VCs, marketing tends to be haphazard even in good years. There are significant numbers of vulnerable people – women, youth, and people with disabilities – excluded from the rural agricultural economy.
- These challenges are compounded by accelerating NR scarcity and degradation exacerbated by climate change and a growing rural population. Traditional farming systems and diminishing access to energy in rural areas leads to soil erosion, deforestation and loss of command over water; the productive land becomes progressively less fertile and yields decrease. These factors expose rural livelihoods to external shocks, limiting the ability of households to meet their basic needs. The lack of access to healthy and diversified diets leads to compromised diets, particularly for pregnant/lactating women and children under two years.
- On the demand side, VCs are suboptimal with progressively less market offtake in remote areas. Farmers sell any surplus produce in local markets or to traders and middlemen straight after harvest when prices are low. In these circumstances, there are few opportunities for individual households and whole communities to accumulate the human, physical and financial resources needed to modernize production and progress from subsistence. Women and youth are most affected due to many factors including socio-cultural exclusion. The absence of public investment over many years has resulted in a lack of basic infrastructure, such as reliable potable water supplies, which places constraints on both livelihoods and living standards.
- Opportunities.** PROSPER will tackle these formidable challenges with a market approach. Recognizing the importance of strong Rural Institutions to support farmers' access to the VCs, on the supply side the project will invest not only in the technical capabilities of primary producers and processors but also in the organisational and business skills required to enter lasting commercial arrangements. The risk is the farmers are not able to link effectively to the market / meet market demands due to poor capacity, non-access to proper inputs and technologies, limited financial resources. PROSPER will strongly work to prevent this risk. Climate change has drawn attention to the cumulative depletion of the NR base, with much formerly productive land and forest already beyond the point of no return. Based on the assumption that the new farming technologies, training and access to finance will increase yield/production and farmers will encounter no barriers for adoption of climate resilient technologies and practices, the aim of PROSPER's work with smallholders will be to increase productivity and profitability rather than short-term production, in ways that slow and then reverse the rapid deterioration of the productive land, both on- and off-farm. Advice and demonstrations of climate-resilient farming practices such Conservation Agriculture will be supported by purposeful remediation works in the wider landscape after years of neglect. The key success factor in this regard is progress towards proactive NR management arrangements, with acceptance of community responsibility for the fragile land. Environmental sustainability is a necessary condition for successful "farming as a business". Even limited additional profit coming into a poor community can trigger growth in the local economy, including opportunities for new enterprises to provide support services to the farmers. This requires access to rural climate finance to incentivize the sector to adopt best adaptation and mitigation practices.
- The underlying risk is that farmers will not meet the market demand (quality and quantity wise) or that there will be a slowing down in market demand. The project recognises fully that stimulating field and tree crop production alone, however well the agronomy is adjusted to the environment, will not benefit the target population without a substantial increase in the real demand for the produce, in terms of volume, prices that at least cover production costs and access to the multi-step markets. The argument hinges on the efficacy of demand pull rather than supply push. PROSPER takes a VC approach for the selected commodities, in which the smallholders are linked into the existing private sector VCs. The key link for a primary producer group is a contract arrangement with agribusiness or aggregator. On the assumption that the private sector actors are interested in creating linkages with smallholders, PROSPER is oriented to facilitate such private sector arrangements by guiding and coaching the emergent RIs and MSMEs, developing business plans as appropriate for groups with differing levels of maturity, engaging with larger-scale VC actors ("drivers") and

- arranging access to affordable financial services as needed. These mainstream business interventions are complemented with measures to include marginalised and vulnerable people and to invest in shared public socioeconomic infrastructure to improve the living conditions of whole communities.
6. Success with the growth in agricultural production in the framework of rapidly expanded value chains will drive up the incomes of the whole economy in the target rural communities and stimulate local demand for increased and additional support services both in the sector and in the wider population. It is this secondary demand that will provide opportunities for youth to escape from the under- and unemployment prevalent in the project area. Major constraints regard the lack of opportunities in the rural setting and the desire to migrate to urban areas; working in agriculture is not considered attractive or remunerative enough. PROSPER is designed to help youth along an authentic pathway from poverty by providing general training on running a business, helping to set up micro-enterprises of all types (related to the six PROSPER value chains) and linking the emergent MSMEs to affordable finance. The new enterprises then contribute themselves to the recovery of the local economy.
 7. PROSPER will promote women's participation and empowerment by addressing barriers prevalent in the geographical context of the project. Major constraints are represented by low level of education among poor women, already existing workload, and lack of willingness of spouses and other family members to support full participation of women in project activities. PROSPER will mitigate these constraints by increased participation training (e.g. Financial Literacy) and promotion of educational and income generation activities; labour - saving and women-friendly technologies to address workload; community awareness on gender equality as a vehicle for prosperity and the introduction of GALS approach. PROSPER will advocate for different male role models by encouraging men to support women's participation through guarantee of land and other resources required. Gender targeting in PROSPER will include the inclusion of young women (youth) and women with disabilities (PWDs). Training and meetings with PWDs will be organized in close-by locations in the communities, in sensitive teaching and learning environments. To cater to the special needs of the PWDs with visual, hearing, physical and speech impairments, PROSPER will train them in braille, sign and audio languages.
 8. In PROSPER nutrition and health will be promoted through several pathways, including selection of value chains that are nutrition and climate sensitive or that will make a high contribution to nutrition; food conservation, post-harvest processing and value addition; promotion of vegetable gardens; and nutrition education. Specific trainings and a Social Behaviour Change Communication (SBCC) strategy will be developed to promote non-discriminatory intra-household food distribution, adequate diets for adolescent girls, consumption of diversified diets, food hygiene and safety, and improved WASH practices as well as the discrimination of negative socio-cultural habits like teenage marriages and early pregnancies resulting in low-birth weight babies as major risk factors for malnutrition.

F. Alignment, ownership and partnerships

1. **Alignment with SDGs:**^[1] PROSPER will contribute to the Sustainable Development Goals, primarily: SDG 1 (No poverty), in particular to the indicators 1.1: Eradicate extreme poverty, 1.2: Reduce poverty by at least 50%, and 1.5: Build the resilience of the poor and vulnerable to climate, economic and environmental shocks and events; SDG2 (Zero hunger), in particular to the indicators 2.3: Double the agricultural productivity and incomes of small-scale food producers and 2.4: Ensure sustainable food production systems and resilient agricultural practices that increase productivity and production; SDG 5 (Gender equality), in particular to the indicators 5.5.a: Women's equal rights to economic resources, as well as access to ownership and control over land; SDG 8 (Decent work and economic growth), SDG 10 (Reduced inequalities) and SDG 13 (Climate action). PROSPER is aligned to the UN Sustainable Development Partnership Framework (UNSDP) for Ghana, specifically Outcome 1 under Results Area 1 ("Productive agriculture drives sustainable industrialization, improves livelihoods and ensures a hunger- and malnutrition-free nation") and Outcome 6 under Results Area 3 ("Urban and rural communities have access to affordable services, knowledge and tools to increase their resilience").
2. **Country ownership and alignment with national priorities:** PROSPER is aligned with the development strategies set out in the Medium-Term National Development Policy Framework (MNDPF 2018-2021) and priorities set by MoF in the National Financial Inclusion and Development Strategy (NFIDS 2017-23). MoFA's Ghana Agriculture Investment Plan (2018-2021) – Investing for Food and Jobs, Gender and Agricultural Development Strategy (2015), is aligned with the international development framework including the UN 2030 SDGs (2015), AU Comprehensive Africa Agriculture Development Programme (CAADP)-Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods (2014) and the ECOWAS Vision 2050 (2021 in draft). PROSPER aligns with the Ministry of Gender, Children and Social Protection's National Gender Policy (2015), the Agenda for Jobs (2018-21) policy framework, National Youth Policy (2010) and Nutrition Policy (2014), while considering changes in the socioeconomic landscape of the country and recent developments at the international level.
3. **Alignment with IFAD corporate priorities and the COSOP:** PROSPER is in line with IFAD's Strategic Framework 2016-2025, as well as IFAD's mainstreaming areas (gender and social inclusion, youth, nutrition, environment and climate). PROSPER will also contribute to the strategic objectives identified in IFAD's COSOP for Ghana, specifically SO1, SO2 and SO3, by initiating new activities or building on activities of IFAD projects at a nascent stage. For example, PROSPER will support the development of tree crop VCs, poultry and small ruminants as well as including a particular focus on persons with disabilities. These areas are currently not addressed by ongoing IFAD projects except on an emergency basis due to COVID.
4. **Potential synergies and partnerships:** PROSPER will develop synergies with other initiatives that support smallholders' access to markets, inputs and affordable agricultural finance. It will collaborate with other IFAD ongoing projects such as GASIP, AAFFORD and REP and selected PFIs, particularly ARB Apex Bank. The project will collaborate with several development partners with substantial active or pipeline projects in the sector, as follow.
5. PROSPER will coordinate with upcoming FAO projects on: e-systems development for early warning, market surveillance and e-extension; smallholders' livelihoods diversification through poultry and small ruminants' production; and improved nutrition through backyard gardening and healthy nutrition education. The WFP pipeline project *Ghana Smallholder Farmer E-Commerce Access (SFEA)* overlaps with several core PROSPER activities: improving smallholder and rural actor livelihoods by participation in organized value chains and structured markets through e-commerce; promoting demand from agro-processors, commercial and institutional buyers for smallholder produce; and increasing access to agricultural finance, insurance and price risk management tools. The World Bank's pipeline *West Africa Food Systems Resilience Programme (FSRP)* entails collaboration opportunities in sustainability and adaptive capacity of food production systems, modernization of national extension services, integrated landscape management, market integration and strategic regional value chains.
6. The EU programme *Productive Investment for Agriculture in Savannah Ecological Zones* is under implementation in selected districts in Upper West, Savannah and North East Regions and comprises three elements: *Resilience Against Climate Change (REACH)* project; *Market Oriented Agriculture Project (MOAP-NW)*; and *Productive Investments Project (PIP)*. REACH activities include assisting district teams to draw up climate-smart development plans contributing to the NDCs; equipping extension services with Conservation Agriculture best practices, standardising the production of Community Action Plans that focus on climate change adaptation, and grant funding identified mitigation activities. PROSPER will collaborate with REACH in districts where both projects are active, learning lessons, leveraging on RIs that have already built their capacity in climate resilience, and orienting such clients to benefit from the BFF to develop their enterprises. PROSPER will also benefit directly from the ongoing Global Affairs Canada-funded programme *Modernizing Agriculture of Ghana*, which has been building the capacity of district and regional agricultural services with retraining, transport and other resources to deliver digital and traditional extension services – including the cadres working in the PROSPER target area.
7. IFAD and AfDB have long standing history of collaboration and partnerships through the co-financing of IFAD funded projects, such as NRGP, REP and AFFORD – the latter through the de-risking instrument Ghana Incentive Based Risk Sharing Agricultural Lending Scheme. AfDB is currently implementing the *Savannah Agricultural Productivity Improvement Project (SAPIP)* and the *Savannah Investment Project (SIP)* in the Savannah region. SAPIP began in 2018 to support the PFJ programme and aims to transform agricultural value chains for food and nutrition security, job and wealth creation. SIP began in 2019 to support the RFJ programme and aims at improving production, develop agribusiness and value chain and facilitate access to finance. PROSPER will leverage on SAPIP's work of strengthening linkages between value chain actors and productivity enhancing interventions using climate resilient technologies, as well as the introduction of nutrition sensitization activities into communities through cultivation of vegetables and dietary education. PROSPER will explore partnerships with SIP through the district stakeholder value chain meetings, to promote the development of maize, soya and poultry VCs, as well as learn from SIP's financing instruments developed during implementation. Opportunities for collaboration and co-financing with the AfDB pipeline project titled the *Savanna Agriculture Value Chain Development Project* will be pursued. The project will focus on integrating maize, soya and poultry value chain and building on the strengths of SAPIP and SIP. The project timeline will be confirmed soon.
8. PROSPER will explore synergies with government programmes with similar objectives, for examples: Ghana's Livelihood Empowerment Against Poverty (LEAP) to identify project beneficiaries in chosen geographical regions based on poverty and vulnerability; and the World Bank's supported Ghana Jobs and Skills Project (GJSP) and Ghana Federation of the Disabled (GFD) regarding targeting of PWDs. REP's BACs/BRCs will provide skill training and business development services. PROSPER will partner with the private sector for mutual benefits, leveraging on the FARA (Agribusiness Learning Alliance), Crop Research Institute (cashew) and private Agribusinesses (Yedent, Premium Foods, Vesta Soya processing and others) for business linkages with smallholders

40. [1] The Ghana SDGs Baseline Indicator Report was published in June 2018. No data yet available on progress.

G. Costs, benefits and financing

a. Project costs

1. The total project costs, for eight-years, are estimated at USD 147.3 million or GHS 1.2 billion. The base cost amount to USD 133.1 million or GHS 827.6 million, equivalent to 90.3% of total costs. Physical and price contingencies at USD 14.2 million account for about 11% of base costs or 9.7% of total costs. Investment costs of USD 135.1 million represent 91.7% of total project costs; and recurrent costs of USD 12.3 representing 8.3% (Table 1 and Annex 3).
2. PROSPER Component 1: *Development of rural institutions and socioeconomic infrastructure* totals USD 30.9 million or 23% of base costs and comprises two subcomponents: (i) *Capacity building of rural institutions, enterprises and households*; and (ii) *Development of socio-economic infrastructure*. Component 2: *Strengthening the benefits for smallholders and small operators around agricultural value chains* totals USD 90.8 million or 68% of base costs and comprises two subcomponents: (i) *Sustainable marketing linkages and business development* and (ii) *Access to rural financial services* (including the green finance through IGREENFIN I). The third support component is related to *Project Management and Policy engagement* at USD 11.4 million (9% of total base cost) and comprises two subcomponents: (i) *Project Management*; and (ii) *Policy engagement*. The total project cost is divided into USD 46.4 million in foreign currency, USD 84.7 million in local currency (excluding taxes) and USD 16.2 million of taxes.

Table 1: Components Project Cost Summary

(GHS M and US\$ '000)

Republic of Ghana									
PROSPER			(GHS Million)						(US\$ '000)
Components Project Cost Summary				%	% Total				%
				Foreign	Base			Foreign	Base
	Local	Foreign	Total	Exchange	Costs	Local	Foreign	Total	Exchange
A. Development of Rural Institutions and Socioeconomic Infrastructure									
1. Capacity Building of Rural Institutions, Enterprises and Households	61.7	1.7	63.4	3	8	9 878.6	267.8	10 146.4	3
2. Development of Socioeconomic Infrastructure	98.7	31.0	129.7	24	16	15 794.2	4 959.8	20 753.9	24
Subtotal	160.4	32.7	193.1	17	23	25 672.8	5 227.5	30 900.3	17
									23

B. Strengthening the Economic Benefits for Smallholders and Small Operators Around Selected Agricultural value Chains																
1. Sustainable Marketing Linkages and Business Development	72.8	1.9	74.7	3	9	11 649.9	306.0	11 955.9	3	9						
2. Access to Rural Financial Services	267.9	220.5	488.4	45	59	43 066.3	35 757.6	78 823.9	45	59						
Subtotal	340.7	222.4	563.1	39	68	54 716.2	36 063.6	90 779.8	40	68						
C. Project Management and Policy Engagement																
1. Project Management	60.6	8.6	69.2	12	8	9 701.3	1 377.4	11 078.7	12	8						
2. Policy Engagement	1.9	-	1.9	-	-	306.0	-	306.0	-	-						
Subtotal	62.5	8.6	71.1	12	9	10 007.3	1 377.4	11 384.7	12	9						
Total BASELINE COSTS	563.6	263.7	827.3	32	100	90 396.3	42 668.5	133 064.9	32	100						
Physical Contingencies	5.4	1.9	7.2	26	1	860.5	297.4	1 157.9	26	1						
Price Contingencies	305.0	108.1	413.2	26	50	9 690.5	3 432.7	13 123.3	26	10						
Total PROJECT COSTS	874.0	373.7	1 247.7	30	151	100 947.3	46 398.6	147 346.0	31	111						

b. Project financing/co-financing strategy and plan

- The **financiers/co-financiers** of PROSPER are Government, IFAD (IFAD 11 and potentially IFAD 12), Green Climate Fund (GCF) (Grant, Adaptation and Mitigation), participating financial institutions (PFIs), private sector and beneficiaries (RIs, MSMES and local communities). The financing plan by component is summarized in Table 2 below. PROSPER will be financed from IFAD 11 (USD 52.5 million, 35.6% of project total cost) in addition to a financing gap that will be potentially covered from IFAD 12 (USD 22.7 millions of financing gap, 4% of the total). The IFAD share of project costs will relate to: works; equipment and materials; goods, services and inputs; consultancies; training and workshops; grants and subsidies, salaries and allowances. The contribution of GCF is as follows: GCF adaptation is USD 13.8 million (9.3% of the total); GCF mitigation is USD 6.9 million (4.7%); and GCF grant is USD 4.7 million (3.2%).
- Government of Ghana's contribution is estimated at USD 22.5 million (15.3% of total costs) mainly in the form of tax exemptions and GoG staff costs. Beneficiaries' in-kind and cash contribution is estimated at USD 19.3 million (13.1% of total costs), mainly through Business Plans. PFIs and the private sector represent USD 4.9 million or 3.3 % of total costs.

41. **Table 2:PROSPER project costs by component and financier**

42. (Millions of United States dollars)

PROSPER																							
Components by Financiers																Local							
(US\$ Million)	IFAD 11	IFAD 12	GCF Adaptation	GCF Mitigation	GCF Grant	PFIs	Beneficiaries	Private Sector	The Government	Total	For.	(Excl. Duties & Taxes)	For.	(Excl. Taxes)	Taxes								
		Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %								
A. Development of Rural Institutions and Socioeconomic Infrastructure																							
1. Capacity Building of Rural Institutions, Enterprises and Households	4.8	42.6	2.5	22.0	-	-	-	0.5	4.8	-	-	-	-	3.5	30.6	11.3	7.7	0.3	10.3	0.7			
2. Development of Socioeconomic Infrastructure	17.4	71.9	3.2	13.1	-	-	-	-	-	-	-	-	-	3.6	15.0	24.3	16.5	5.8	14.8	3.6			
Subtotal	22.3	62.6	5.7	15.9	-	-	-	0.5	1.5	-	-	-	-	7.1	19.9	35.6	24.1	6.1	25.1	4.3			
B. Strengthening the Economic Benefits for Smallholders and Small Operators Around Selected Agricultural value Chains																							
1. Sustainable Marketing Linkages and Business Development	1.5	11.0	6.5	48.8	-	-	-	1.4	10.3	-	-	-	-	4.0	29.9	13.3	9.0	0.4	12.0	1.0			
2. Access to Rural Financial Services	25.7	29.9	4.3	5.0	13.8	16.1	6.9	8.1	1.1	1.3	2.3	2.7	19.3	22.5	2.5	3.0	9.8	11.4	85.8	58.2	38.4	37.6	9.8
Subtotal	27.2	27.4	10.8	10.9	13.8	13.9	6.9	7.0	2.5	2.5	2.3	2.4	19.3	19.5	2.5	2.6	13.8	13.9	99.1	67.2	38.7	49.5	10.8
C. Project Management and Policy Engagement																							
1. Project Management	3.0	24.5	6.1	49.3	-	-	-	1.6	13.3	-	-	-	-	1.6	12.8	12.4	8.4	1.5	9.8	1.0			
2. Policy Engagement	0.0	14.7	0.2	50.7	-	-	-	0.1	19.5	-	-	-	-	0.1	15.0	0.3	0.2	-	0.3	0.1			
Subtotal	3.1	24.2	6.3	49.4	-	-	-	1.7	13.5	-	-	-	-	1.6	12.9	12.7	8.6	1.5	10.1	1.1			

Total PROJECT COSTS	52.5	35.6	22.7	15.4	13.8	9.3	6.9	4.7	4.7	3.2	2.3	1.6	19.3	13.1	2.5	1.7	22.5	15.3	147.3	100.0	46.4	84.7	16.2
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1. **Expenditure categories.** The most important investment expenditure categories are Credit, Guarantee Funds (USD 62.1 million, 42.2% of total costs) and Civil Works (USD 23.4 million, 15.9 % of total costs). Grants and subsidies stand at USD 19.3 million (13.1% of total costs), Equipment and goods, including vehicles USD 3.6 million (2.5%), Consultancies USD 12.4 million (8.4%) and Training and workshops at 14.2% of the total. In terms of recurring costs, Salaries and allowances constitute USD 10.1 million (6.8% of total costs and 82.1% of recurrent costs), with a significant portion as an in-kind contribution from the GoG. Table 3 summarizes the project expenditure accounts.

Table 3: PROSPER expenditure accounts by financiers

(Millions of United States dollars)

2.

Disbursement Accounts by Financiers																				Local			
(US\$ Million)	IFAD 11	IFAD 12	GCF Adaptation	GCF Mitigation	GCF Grant	PFI	Beneficiaries	Private Sector	The Government	Total	For.	(Excl. Duties & Taxes)											
	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	Amount %	
1. Civil works	16.9	72.2	3.0	12.8	-	-	-	-	-	-	-	-	-	-	-	-	3.5	15.0	23.4	15.9	5.9	14.0	3.5
2. Equipments, Goods and Vehicles	1.0	27.9	1.5	41.9	-	-	-	-	-	-	-	-	-	-	-	-	1.1	30.2	3.6	2.5	1.1	2.0	0.5
3. Consultancies	3.1	25.1	5.5	43.9	-	-	-	2.0	16.1	0.0	0.3	-	-	-	-	-	1.8	14.6	12.4	8.4	-	10.6	1.8
4. Training and Workshops	5.6	39.6	5.8	40.9	-	-	-	2.0	14.4	-	-	-	-	-	-	-	0.7	5.0	14.2	9.6	-	13.5	0.7
5. Grants and Subsidies	11.6	60.0	1.0	5.0	-	-	-	-	-	-	-	6.7	35.0	-	-	0.0	-	19.3	13.1	13.5	5.8	-	
6. Credit, Gurantee Funds	12.2	19.7	2.5	4.0	13.8	22.2	6.9	11.1	-	-	2.3	3.7	12.6	20.2	2.5	4.1	9.3	15.0	62.1	42.2	24.9	28.0	9.3
7. Salaries and allowances	0.7	7.1	2.9	28.9	-	-	-	0.7	7.0	-	-	-	-	-	-	-	5.7	57.0	10.1	6.8	-	10.1	-
8. Operating costs	1.3	60.3	0.5	24.7	-	-	-	-	-	-	-	-	-	-	-	-	0.3	15.0	2.2	1.5	1.1	0.8	0.3
Total PROJECT COSTS	52.5	35.6	22.7	15.4	13.8	9.3	6.9	4.7	4.7	3.2	2.3	1.6	19.3	13.1	2.5	1.7	22.5	15.3	147.3	100.0	46.4	84.7	16.2

Table 4: PROSPER project costs by component and year
(Millions of United States dollars)

3.

(US\$ '000)	2000	2001	2002	2003	2004	2005	2006	2007	Total
A. Development of Rural Institutions and Socioeconomic Infrastructure									
1. Capacity Building of Rural Institutions, Enterprises and Households	786.3	1 211.1	1 615.5	2 769.0	2 162.4	1 172.9	958.4	622.0	11 297.6
2. Development of Socioeconomic Infrastructure	26.5	2 321.3	4 561.1	4 942.0	5 040.8	3 634.7	3 707.4	30.7	24 264.5
Subtotal	812.8	3 532.4	6 176.6	7 710.9	7 203.2	4 807.6	4 665.9	652.7	35 562.1
B. Strengthening the Economic Benefits for Smallholders and Small Operators Around Selected Agricultural value Chains									
1. Sustainable Marketing Linkages and Business Development	924.6	1 548.9	2 082.7	2 613.7	2 544.8	1 889.2	1 043.4	663.9	13 311.1
2. Access to Rural Financial Services	465.9	11 483.9	13 402.8	15 149.0	16 792.2	15 285.4	12 229.6	954.1	85 762.8
Subtotal	1 390.5	13 032.8	15 485.4	17 762.6	19 337.0	17 174.6	13 273.0	1 617.9	99 073.9
C. Project Management and Policy Engagement									
1. Project Management	1 814.3	1 074.6	1 779.4	1 625.5	1 759.4	1 523.4	1 392.0	1 402.8	12 371.3
2. Policy Engagement	23.6	72.7	35.9	36.6	77.5	38.1	26.9	27.4	338.7
Subtotal	1 837.9	1 147.3	1 815.2	1 662.1	1 836.9	1 561.5	1 418.9	1 430.2	12 710.0
Total PROJECT COSTS	4 041.2	17 712.5	23 477.2	27 135.7	28 377.1	23 543.7	19 357.7	3 700.8	147 346.0

c. Disbursement

- The proceeds of the financing will be used for eligible expenditures as defined in the Financing Agreement and in line with the disbursement allocations specified in the relevant section of the Financing Agreement. IFAD will make an initial deposit to the Designated Account (Authorized Allocation). The ceiling for the Authorised Allocation will be specified in the Letter to the Borrower (LTB) issued for PROSPER. The funds will be disbursed into a US Dollars Account at the Central Bank of Ghana and will be operated by the PCU.
- The proceeds from the Designated Account shall be used exclusively to finance the Project's eligible expenditures as will be stipulated in Schedule 2 of the Project Loan Agreement. The ceiling for the Authorised Allocation will be specified in the Letter to the Borrower (LTB) issued for PROSPER. The funds will be disbursed into US Dollars Account at the Central Bank of Ghana and will be operated by the PCU. Funds shall be periodically transferred from the Designated Account to the Programme Operational Account (GHS) for the purpose of financing the Programme's eligible expenditures financed by IFAD.
- Funds shall be periodically transferred from the Designated Account to the Programme Operational Account (GHS) for the purpose of financing the Programme's eligible expenditures financed by IFAD. The regular signatories to the Designated and Programme Accounts will be the Project Coordinator and the Finance Manager as Cat A and B signatories respectively. However, Chief Director of MoFA and the Director of Finance (MoFa) will be the alternate Cat A and B signatories respectively in the absence of the regular signatories. The same arrangements will be applicable to funds allocated by co-financiers. Government approved fund-flow processing would be used to accelerate cash-flow.
- Report based disbursement method will apply for the project. Other methods of disbursement will include advances, direct payments, and reimbursements. Payments made against advances would be secured against bank guarantees by a commercial bank and or bonds acceptable to IFAD. Training will be provided to account staff on IFAD procedures and all processes documented as part of the PIM and outlined in MOUs with districts and other implementing partners.

d. Summary of benefits and economic analysis

- The PROSPER target beneficiaries are producers, investors, MSMEs and households located in the project area. Farmers were expected to benefit directly from the project, including women and youth. In addition, MSMEs and RI will take advantage of positive externalities brought by the project. Indirect beneficiaries will include local institutions and the families of workers employed directly by the project. Finally, the targeted areas will benefit from a general uplift in the local economy driven by the growth in activities. It is important to note that the PROSPER targeted population lives in precarious and relatively disadvantaged conditions in areas with high levels of transaction costs and limited market access. They are highly exposed to the negative impacts of climate change.
- The main benefit stream analysed is the income and profits derived from business activity in the three principal commodity value chains: soya, rice and maize. Other significant non-financial benefits include improved access with feeder roads and farm tracks, enhanced productive potential from on- and off-farm and watershed work and natural resource remediation, secure drinking water supplies and other communal assets, increased tax revenues and enhanced nutrition security. These benefits, which are not included in the calculation of the ERR, consolidate the economic profitability of the PROSPER and contribute to the justification of the investments made.
- Economic analysis based on ten models elaborated for the principal production modes funded by PROSPER, under very moderate assumptions, yields an economic rate of return (ERR) of 21.4% (see Annex 4). Sensitivity analysis shows this ERR to be robust under different adverse scenarios. A simultaneous increase in costs of between 10% and 60% combined with a decrease in benefits of 10% yields an ERR greater than or equal to the Opportunity Cost of Capital (assumed to be 12.25%). This is an acceptable level given the analysis does not consider other direct and indirect benefits including such significant environmental benefits as improved soil fertility, reduced erosion, tree cover and better long-term management of the NR

e. Exit Strategy and Sustainability

- The design of PROSPER is driven by the imperative to achieve both environmental and financial sustainability in the smallholder agriculture sector in the context of rapid climate change. The project concentrates on investing in the skills, productive assets and institutional development needed to remediate the NR base, transition to appropriate agricultural practices that reduce emissions and

- engage in enduring business relationships within major value chains.
2. The exit strategy designed for the project comes as a natural and sequential phasing out from supported activities. A high level of participation from the host agency, beneficiaries and partner institutions is planned from the onset of implementation, to ensure effectiveness and leadership from local stakeholders who will be able to continue, scale-up, guide and monitor planned activities after project completion. The analysis of the factors for sustainability presented in Annex 10 shows the progression for each of the major activities at scale, with a phasing over, phasing down or phasing out as appropriate and well within the allotted time frame. The exit strategy as formulated is to sustain the impact of all activities after closure even if the scope of the project is curtailed in Year 3. An example of a key activities under the exit strategy, is following up with APEX Bank and its network of rural banks to incentivise them to provide more resources and to crowd in additional resources from the private sector.
 3. During project implementation, this Exit Strategy will be revisited regularly to test the underlying assumptions and continuing validity in the light of progress. If major restructuring is required, such as reduced size of the replication phase, changing implementation arrangements, reducing and/or increase of scope of components, cancellation, the Exit Strategy will be redesigned in line of the changing context.

3. Risks

H. Project risks and mitigation measures

1. The main risks and corresponding mitigation measures for the project are presented in the Integrated Project Risk Matrix (IPRM, Annex 9). The IPRM touches on all aspects of the initiative to anticipate possible barriers to achieving the Project Development Objective. At inception, the PROSPER coordination and management team will be trained to refine the matrix and set up a Risk Log. This Log will include tools for the identification, analysis, prevention, monitoring and management of risks. It will be updated regularly and integrated into the AWPBs and the M&E dashboard to help decision-making. In summary, the main project risks are as follow.
2. **Country context.** Whilst Ghana is a safe and peaceful country, the project will monitor any possible cross-border effects of conflicts and political unrest in fragile neighbouring countries. The prolongation or return of Covid would constrain implementation massively, although the pandemic's science and response management protocols are now far better understood. Macroeconomic policies relating to financial services continue to constrain the development of agricultural VCs, with poor access to affordable seasonal lending for the mass of smallholders. In mitigation, the project will encourage farmers to adopt a business approach to production, with access to financial services as appropriate at each stage.
3. **Environmental and climate change challenges.** Smallholder agriculture in Ghana is mainly rainfed, so farmers are dependent on weather conditions and vulnerable to climate change. PROSPER is resilience-oriented and designed to respond to the growing environmental challenges to the rural economy with practical mitigation and adaptation measures, both on- and off-farm, to promote technically feasible and financially affordable soil and water management practices. The NR remediation works are intended to counter and reverse the cumulative deterioration of the productive land.
4. There are risks that endemic social challenges, such as the marginalisation of women, youth and people with disabilities in rural society, suboptimal dietary patterns and persistent rural poverty will undermine project purposes. In mitigation, PROSPER will tailor interventions to involve vulnerable groups and advocate for inclusive policies through dialogue with Government.
5. The technical risks to PROSPER stem from current weaknesses, in both the public sector and the private sector, of rural technical and financial service providers. Strong institutions are essential for the efficient implementation of the innovative aspects of the project, in particular the transition to climate-smart agronomy, business planning and the linking of poor farmers and enterprises into functioning VCs. Private sector engagement on the demand side in the project areas could be insufficient to drive the expansion of contract arrangements with the primary target group if there is a weakening of the country's business environment. The project design responds with a programme of technical and institutional capacity building, including affirmative action for women, youth and PWDs. PROSPER will promote alternative financing mechanisms and interventions to improve the business setting and attract private investment into the target VCs.
6. **Procurement.** The overall risk is rated **medium** in the PROSPER Procurement Risk Matrix (PRM), reflecting ongoing issues in the regulatory framework and in the application of standard procedures for procurement methods and the evaluation process. Government and project procurement staff will receive advanced training to ensure compliance with guidelines.
7. **Debt sustainability:** The WB-IMF debt sustainability analysis index since 2015 annually to date has rated Ghana's debt sustainability as very high. The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Ghana on July 19, 2021.
8. According to the report by the IMF Executive Directors, Ghana was hit hard by the COVID-19 pandemic. The government's response helped contain the pandemic and support the economy, but at the cost of a record fiscal deficit. The economic outlook is improving, even though risks remain, including from the evolution of the pandemic and rising debt vulnerabilities. The pandemic had a severe impact on economic activity. Growth slowed to 0.4 percent in 2020 from 6.5 percent in 2019, food prices spiked, and poverty increased. The fiscal deficit including energy and financial sector costs worsened to 15.2 percent of GDP, with a further 2.1 percent of GDP in additional spending financed through the accumulation of domestic arrears. Public debt rose to 79 percent of GDP.
9. While there are encouraging signs of an economic recovery, they noted that it remains uneven across sectors. In this context, Directors stressed the importance of entrenching prudent macroeconomic policies, ensuring debt sustainability, and pressing ahead with structural reforms to deliver a sustainable, inclusive, and green economic recovery.
10. While noting that risks to Ghana's capacity to repay have increased, the Directors concurred that they are still manageable and that Ghana's capacity to repay the Fund, and by extension other IFIs, remains adequate.
43. **Financial management.** The inherent Financial Management Risk of the project at design is rated as moderate, while the residual risk is rated as The main FM risks concern project disbursement performance linked to the IFAD disbursement caps and to the project capacity to obtain timely justifications of expenditures from implementing partners and guarantee an effective cash turnover through the revolving fund mechanism. Also, the inexperience of project staff with the use country systems and especially GFMIS poses a risk to the project capacity to maintain their accounting and produce quality financial reports. All the risk and mitigating measures identified during design are captured in the project risk matrix.
44. **Agrisubness Finance.** The inherent risk for the agrisubness finance is rated as substantial, while the residual risk is rated as moderate. The main agrisubness risks are related to: (i) rural smallholder farmers' perception that loan funds are government money which they consider fungible, leading to default in repayments; (ii) untimely disbursement of credit and guarantee funds, and grants and subsidies to match the appropriate crop season; and (iii) production risks due to drought, bush fires, pests and diseases. All the risks and mitigating measures is annexed to the Chapter Six of the PIM (Financial Management).

I. Environment and Social category

1. The initial screening of proposed PROSPER activities indicates the potential environmental and social risks rating is **medium/moderate** to **low**. The main risks relate to (i) value chain activities, predominantly rainfed agriculture, cashew cultivation, shea nuts collection, harvesting and processing, rain/stormwater harvesting and income generation related poultry and (ii) socioeconomic infrastructure including NR remediation works, feeder road rehabilitation and farm access tracks, and shared social infrastructure including human water supply systems, green energy and sanitation facilities. Most of the impacts are small in scale, very limited, site-specific and avoidable or reduced with mitigation plans, as stated in the ESMF.
2. From a social safeguards standpoint, as all agricultural lands are community owned there will be no land acquisition aside from land left as fallow so the project does not foresee any negative social and environmental impacts such as the involuntary taking of lands or restrictions on access to and/or use of assets resulting in the physical and/or economic displacement of project affected persons (PAP). PROSPER is not expected to affect negatively local pastoral communities or sites of historic, religious or cultural significance, land development beyond 100 ha, feeder roads with a length of less than 10 km linking communities or farm tracks.
3. As a **Category B** operation, a formal Environmental and Social Impact Assessment (ESIA) is required. Further analysis of the conflict dimensions and site-specific Environmental and Social Management Plans (ESMP) will be mainstreamed throughout PROSPER implementation lifecycle and, to ensure safeguards compliance and project sustainability, a Gender, Social Inclusion and Vulnerability Specialist (GBV/EASH/VAC) will work from the PCU. Quarterly safeguards and climate compliance reports summarizing the level of project compliance and performance will be prepared and shared to inform IFAD and stakeholders.

J. Climate Risk classification

1. From a Climate Change Risk Assessment standpoint, the project is classified as **High**. The target communities are largely dependent on climate-sensitive natural resources, especially rainfed agricultural plots and tree crops such as shea and cashew. Large parts of the project area are increasingly exposed to droughts and flash-flooding. GHG emissions through increased production and processing and climate variability, including unexpected dry spells, unpredictable rainfall and low/high temperatures, can affect the project risks, impacts, sustainability and returns on investments. PROSPER has the potential to integrate climate resilience measures, such as improved techniques of growing and processing of tree crops (cashew and shea) and in the fight against deforestation through the systematic use of integrated agroforestry systems, solar panels and green energy alternatives. Such mitigation measure will be introduced through awareness raising campaigns and capacity building programmes in climate smart agricultural strategies, climate finance and strong collaboration with extension services, weather and climate monitoring agencies to receive timely agroclimatic information, and the adoption of appropriate unmechanized cultivation technologies, crops varieties, and climate resilient and low emissions practices. Systematic climate risk analysis will be undertaken throughout implementation to ensure adequate and timely monitoring and management of climate change risks.

4. Implementation

K. Organizational Framework

a. Project management and coordination

1. MoFA is designated as the **Lead Project Agency**. The ministry will have the overall responsibility for the implementation of PROSPER and will ensure linkages to other relevant Ministries, Departments and Agencies, such as MoF, MESTI, MoTi, MLGDRD, Environmental Protection Agency (EPA) and the Local Government Service. PROSPER implementation will involve private sector and community level technical service providers and will leverage on-going projects implemented by public sector and NGOs. Key project staff will be following on progress of meeting the triggers for the replication phase, including Government meeting co-financing commitments and timely recording of inkind contribution, filling of the financing gap. Government and beneficiary contributions are met and recorded timely, key MoUs with implementing partners established and progressing well, and satisfactory arrangements in place with regard to the operation of the Matching Grants and Blended Finance Facility. The PCU and PROSPER team at APEX Bank will be responsible for following up on the compliance with the IGREENFIN Operational Manual regarding investments to be supported by the Matching Grant Fund and the BFF. These tasks will be reflected in the ToRs of the key project staff.
2. MoFA will establish a **Project Steering Committee (PSC)** to provide overall oversight of project implementation. It will be chaired by the Chief Director of MoFA and include representatives of all relevant ministries and agencies, Bank of Ghana, ARB Apex Bank and regional coordinating councils from the project area. Members shall include private sector non-state actors (such as NGOs) and youth and women who operate along the relevant agricultural VCs as practitioners or advocates. The PSC will meet at least twice a year, and as necessary. The main responsibilities of the PSC will include: (i) providing strategic and policy guidance to the Project Coordination Unit (PCU); (ii) ensuring overall conformity with government policies and strategies; (iii) reviewing project progress and performance; (iv) approving the Annual Work Plan and Budget (AWPB); (v) resolving implementation problems or conflicts; and (vi) assisting the PCU in obtaining government assistance for the project when needed. A Project Technical Committee (PTC) will be constituted comprising members drawn from the PSC. The PTC will serve as a standing committee empowered to meet whenever needed to resolve implementation bottlenecks that require immediate attention.

3. PROSPER's Project Coordination Unit will be responsible for implementation and will be based in the project area to ensure effective management and coordination. The PCU will operate within the supervision of the Directorate of Agricultural Extension Services DAES, which will provide direct oversight. A Project Coordinator will head the PCU's day to day operations, assisted by central technical and operations support teams as defined in the PIM. The responsibilities of the PCU will include the overall coordination of Project activities and direct implementation of specific actions, and overall responsibility for fiduciary, climate change and environmental and social safeguards, including gender and vulnerability. Key activities will include consolidation of project accounts, preparation of annual financial statements, disbursements, consolidation of AWPB and procurement plans; quarterly financial and comprehensive safeguards and climate change reports; consolidation of progress reports; organization of annual audits in line with IFAD's guidelines; assistance for supervision and other missions, including mid-term review; promotion of cross-cutting themes such as gender, youth and vulnerability; and preparation and updating of the Project Implementation Manual (PIM) and other required manuals.
4. Key implementation partners will include selected MoFA departments, DDAs, Regional Departments of Agriculture (RDAs), ARB-APEX Bank, MoTI, GEA including BRCs and BACs, MESTI, GCX, GIRSAL and GAIP. PROSPER will enter MoUs with the above entities that will outline implementation modalities and the role of each of these partners. From a safeguards and climate change standpoint, the PCU will embed a Gender, Social Inclusion and Vulnerability Specialist (GSIVS) to work with EPA to ensure consistency and compliance of project implementation with national regulations and the SECAP guidelines.
5. A dedicated team will be anchored in APEX Bank to manage the BFF. The BFF team will report to the PROSPER PCU. This team will comprise a Coordinator and two field officers supported by the GSIVS funded from the IGREENFIN-I Grant.

b. Financial Management, Procurement and Governance

1. The GASIP Finance Unit will be responsible for the financial management (FM) aspects of PROSPER, including budgeting, accounting, preparing Withdrawal Applications, monitoring implementing partners, preparing consolidated financial reports, and arranging internal and external audits. The proposed FM system will ensure a proper segregation of duties and will be capable of meeting the fiduciary requirements of IFAD, GoG and other stakeholders.
2. In line with IFAD and GoG objectives to enhance the use of country systems, PROSPER will use the Government's electronic platform and enterprise resource programme (GIFMIS) for capturing financial data, in line with the IPSAS cash basis of accounting and prepare periodic financial reports in formats agreed with IFAD. To this end, GASIP will migrate onto the GIFMIS in early 2022 with support from the GIFMIS Secretariat who will provide sensitization and training to the GASIP FM team during the last quarter of 2021 for GIFMIS implementation readiness for both GASIP and PROSPER. The finance team would include a dedicated Project Accountant and an Accounts Assistant working under the supervision of the projects Financial Manager for the accounting management and reporting of GCF and IFAD funds.
3. The Finance Manager will be responsible for preparing the project's interim financial reports (IFRs) on a quarterly basis. The IFRs will be submitted to the Fund 30 days after the end of each quarter and will constitute the main supporting document for withdrawal applications submitted to IFAD. The Financial Manager and M&E Specialist will lead the preparation of AWPB and procurement plan by September of each year to ensure that the AWPB is approved by the National Steering Committee and IFAD for incorporation into the national budget for approval by the Parliament of Ghana. The PCU's financial management manual, the provisions of the Public Financial Management Regulations (2019) and the Public Financial Management Law (Act 921 of 2016) will govern the project's internal controls. The Internal Auditors of the lead implementing agency shall conduct ex-post review of PROSPER at least twice a year, and each expenditure will be validated by the internal audit system of GIFMIS. The project's financial statements will be audited annually by the Ghana Audit Service (GAS), in line with international standards (ISA) and IFAD Guidelines and based on the agreed TORs that will receive IFAD non-objection. As per IFAD rules and regulations, local VAT and import taxes will be considered as a contribution to project costs by the Government of Ghana. Thus, IFAD funds will not be used to pay VAT, duties or other taxes imposed on the project.
4. The closing date of the IFAD-funded GASIP has been extended to 31 December 2023, offering potential FM assistance and economies in the start-up and first two years of PROSPER. Serviceable GASIP assets will be transferred to PROSPER upon completion and closure and financial staff reconducted based on their performance and recruitment arrangements.
1. **Procurement:** The PCU will be responsible for overseeing and implementing all PROSPER procurement transactions including procurement carried out by GCF (located in ARB Apex Bank). To lead the management and execution of procurement activities under PROSPER, a Procurement Officer will be recruited competitively in the PCU at start-up, (detailed Terms of Reference in the PIM). IFAD will provide technical assistance and training in procurement at early stages of the project to familiarise implementing agencies with PROSPER/IFAD Guidelines on procurement and contract management.
2. **PRM Assessment.** As part of the PROSPER design process, a Project Procurement Risk Matrix (PRM) was developed for MoFA, the designated Lead Project Agency. Ghana ranks 75 out of 180 countries in the 2020 Corruption Perception Index according to Transparency International. It scored 43 out of 100. The findings indicate that integrity and ethical values still require strengthening. Risks related to Accountability and Transparency include slow decision making with potential implementation delays and increased risk of Fraud and Corruption, (abuse of simplified procurement procedures). The overall PRM rating is rated **Medium**. The detailed schedule of risks identified and mitigation measures to address procurement capacity gaps, including recommended procurement thresholds in line with the results of the procurement risks matrix rating, are presented in detail in the procurement section of the PIM.
3. **Procurement regulations applicable to PROSPER.** Procurement under the Project will be done in compliance with IFAD Procurement Guidelines and IFAD Procurement Handbook. It is recommended that IFAD Procurement Guidelines will be followed both at the PCU and by all implementing entities (GCF). The PIM will detail procurement procedures, processes and management arrangements.
4. All procurement requiring IFAD prior review will be uploaded in IFAD No Objection Tracking and Utilities System (NOTUS) portal. The prior review thresholds for different categories will be included in the Letter to the Borrower. All procurements with costs above the threshold for National Competitive Bidding (NCB) will be undertaken according to the IFAD Procurement Guidelines. All contracts below the threshold for ICB, such as NCB, Restricted Bidding and Shopping (Request for Quotations), will follow the Ghana Public Procurement Act, 2003 as Amended Act 2016 (Act 914) and its attendant regulations to the extent that they are in conformity with the IFAD Project Procurement Guidelines. These procedures have been reviewed by IFAD and found to be satisfactory, except for the following provisions, which will not be applicable under this project: (a) domestic preferences shall not apply under NCB; (b) the charging of fees for dealing with bidder complaints at procuring entity level shall not be permitted; and (c) foreign Bidders shall have the opportunity to bid for NCB procurement.
5. **Governance.** The project's procurements will follow IFAD's Procurement Guidelines under the responsibility of MoFA as Lead Implementing Agency and the oversight of the PROSPER Steering Committee. IFAD's anticorruption policies and whistle blowing procedures will be mainstreamed in the Project Implementation Manual.
6. IFAD applies a zero-tolerance policy towards fraudulent, corrupt, collusive or coercive actions in all projects financed through its loans and grants. The project will be subjected to the revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations, dated December 2018; the IFAD Policy on Preventing and Responding to Sexual Harassment, Sexual Exploitation and Abuse; and Environmental, Social, Health and Safety and Anti-money laundering provisions. All bidding documents shall include clauses referring to these regulations.
7. In addition to IFAD policies on anti-corruption and best practice in financial management, the project shall also be subject to the policies, guidelines and operational procedures required by the use country systems to support implementation which are consistent with the Government of Ghana's financial processes governed by Public Financial Management Regulations 2019 (L.I. 2378), Public Financial Management Act 2016 (Act 921), the Public Procurement (Amendment) Act 2016 (Act 914), Public Procurement (Amendment) Act 2016 (Act 914), and Public Procurement Act 2003 (663), Public Financial Management (Public Investment Management) Regulations, 2020 (L.I. 2411), and Public Private Partnership Act, 2020 (Act 1039).

L. Planning, M&E, Learning, KM and Communication

a. Planning, M&E, Learning, Knowledge Management and Communication

1. **Planning.** Planning will follow current practices for the IFAD-funded projects in Ghana. The main tool for PROSPER will be the Annual Work Plan and Budget (AWPB), prepared annually using a participatory bottom-up approach which include a consultation with the implementing partners of the various activities and based on the investment forecasts agreed and validated during the preparation processes.
2. The AWPB will include, among other things, a detailed description of the planned activities and required budget, specifying implementation responsibilities, required inputs, expected outputs, performance indicators and corresponding targets. It will also entail a procurement plan and a narrative explaining the implementation of project activities against predefined targets (refer to the PIM for specific content of the AWPB). The AWPB will be in line with the Logical Framework (LF).
3. The PCU will ensure overall coordination and efficiency of the planning process. Once the priorities have been set at the regional level and activities defined, the AWPB will be compiled and submitted to the PSC for review and approval. The PSC will ensure the inclusion of PROSPER under the national budget. It will be sent to IFAD for review and no-objection 60 days prior to the start of each implementation year.
4. **Monitoring and evaluation (M&E).** M&E is an essential function to support project management's decision-making, the main objective being to inform stakeholders and the PCU on the performance and effectiveness of project implementation. A results-based approach will be adopted by accounting for progress against AWPB targets.
5. The key responsibilities of the M&E system will rely on the M&E Unit at the PCU, composed of a KM/M&E Manager, Officers and Assistant. All other implementation agencies at regional level will play important roles in collecting and analysing data to assess the outputs, outcomes and impact of project activities. Local talent will be trained in M&E activities yearly to ensure that the project remains on track and achieves its strategic objectives. MOFA participated to the Advancing Knowledge for Agricultural Impact (AVANTI) initiative to analyse Ghana's agricultural and rural development sectors' capacities for Results -Based Management (RBM) and to measure the sectors' achievements against the SDGs. Moreover, the M&E staff in MoFA participated to the Program in Rural Monitoring and Evaluation (PRIME) training, organised by IFAD and the Centres for Learning on Evaluation and Results (CLEAR). Lastly, IFAD has supported the establishment of a Programme Delivery Unit at MoFA to build capacity for M&E, improve learning and sharing, coordination and reporting among all sector programmes in the Ministry, strengthen the oversight responsibility of its on-going development Programmes for impacts, including PFJ. Capacities built by the AVANTI and PRIME initiatives, as well as through the Delivery Unit, will benefit PROSPER and the overall quality of M&E. The KM/M&E manager and officer will be supporting the Project coordinator in following up on progress toward meeting the triggers for the replication phase. They will also follow up the compliance by the MG Funds and BFF with the IGREENFIN Operational Manual guidelines regarding green investments.
6. The M&E Unit will set up an M&E manual and a computerized M&E data system to provide periodic, complete and reliable data. Several M&E tools and guidelines will be incorporated in the M&E system along with the Core Outcome Indicators (COI) Survey, which would permit effective monitoring of the project situation at baseline, mid-term and completion. The project completion survey will repeat the questionnaires used for the baseline survey, to allow the comparability of results and analysis (by beneficiary status, region and household head's gender) of project impact. The baseline, mid-term and completion surveys will be conducted by a specialized consulting firm through quantitative and qualitative assessment of beneficiaries. Specific thematic surveys/studies will be conducted as needed to measure performance on different project outcomes.
7. The outputs, outcomes and impacts to be achieved by the Project will be defined in the LF; review and internalisation by the various actors will be included in the start-up workshop to be organised at Project commencement. The PCU will also monitor the efficiency of targeting, and the poverty, gender and youth focuses.
8. M&E activities will consider the following: (i) the M&E Unit will prepare a beneficiaries database, including detailed information on sex, age, region, targeting group and project activity in which they have participated. The database will serve different purposes, including sampling for surveys, tracking outreach as well as selection of beneficiaries to visit during missions; (ii) the PCU will send IFAD semi-annual and annual progress reports on physical and financial progress against the AWPB and LF targets; (iii) the M&E Unit will conduct regular field visits to collect data and validate data collected; (iv) the M&E Unit will document stories from the field on beneficiaries per project component and report on lessons learned, best practices and scaling-up works; (v) the PCU will conduct monthly meetings with field M&E focal points to discuss implementation progress versus targets; and (vi) Georeferencing will support implementation and M&E processes.
9. **Learning, Knowledge Management (KM) and Communication.** The project will develop a KM and Communication Strategy to capture and disseminate knowledge gained on critical issues during implementation. There are multiple benefits from communicating effectively how the project is addressing target population needs. Strategic communication to stakeholders will promote dialogue, participation and a regular two-way flow of information, thereby enhancing project transparency, recognition and effectiveness.
10. PROSPER KM strategy aims at capturing and disseminating lessons obtained from implementation progress for the purposes of programme maturation, sustainability and creating awareness on project activities and services. Targeted audiences will include potential beneficiaries in selected districts, collaborating institutions, the wider donor community in Ghana, the Private Sector Working Group and political dialogue platforms such as the ASWG. Government staff, the private sector, FIs and civil society will be target audiences for knowledge-sharing events and products.
11. Areas of knowledge defined as priority for this project include good practices on climate adaptation and mitigation, farming as a business, green sustainable infrastructure interventions and natural resource remediation, practical/achievable green business plans, green/climate finance, access of producers and MSMEs to rural financial services, and effective M&E tools for project staff. Knowledge products from earlier stages of implementation will support the transition to the upscaled later stages of PROSPER.

12. These products will include, for example, brochures, reports, seminars and other knowledge sharing events. Mechanisms include: the use of surveys and green/climate reporting defined as part of the M&E system with information collected from the field; and the identification and selection of project "champions"/most successful cases to share their experience "in first person" with others. After the MTR/towards project completion, PROSPER will promote beneficiary knowledge and experience sharing events with other groups in similar value chains and focus on identifying potential activities for scaling-up.
13. In addition to refining and carrying out the KM strategy, the project managers will ensure: (i) PROSPER's visibility; (ii) the inclusion of KM indicators in the M&E system; (iii) inclusion of KM-related activities in the AWPB; (iv) integrated information management systems set-up, for example, electronic archives; (v) clarity of KM-related roles and responsibilities in the PCU and related GoG structures; (vi) facilitation of internal project learning; and (vii) exchanges with other projects and agencies operating in Ghana, organizing workshops, producing a website, publications, videos and other activities to disseminate results, attract interest of other partners, and replicate/scale up tested and documented innovations.
14. PROSPER will participate in, contribute to and benefit from SSTC activities under IGREENFIN regional activities concentrated on the generation and dissemination of practical and technical knowledge in the context of the escalating climate emergency. Ghana (with Burkina Faso, Côte d'Ivoire, Mali and Senegal) is part of the first phase of the IGREENFIN programme, to be extended subsequently to six more countries in West and Eastern Africa, all under the GCF Great Green Wall Umbrella Programme. The ambitious IGREENFIN agenda mirrors most of the key KM purposes of PROSPER – climate-related know-how/knowledge creation and dissemination in the region, with a strong focus on responding to climate change in semi-arid areas and the promotion of synergies between countries tackling similar developmental challenges independently.
15. PROSPER will engage in IGREENFIN regional SSTC activities through, inter alia, experience-sharing and fact-finding visits and support for and entries in the annual Sahel and Great Green Wall Award event rewarding the best green business plans produced by women and youth entrepreneurs. PROSPER will collaborate with these interrelated structured and participatory learning programmes in the region which will provide opportunities for knowledge exchanges, the sharing of experiences and awareness raising about successful practices and pilots that can be scaled up, for instances, in agricultural adaptation, value chain development, and the needs of private sector investors and access to productive land. PROSPER will also play a part in the IGREENFIN establishment and maintenance of an integrated regional M&E systems.
16. Other possible areas for SSTC cooperation will include policy agendas that are best tackled through regional collaboration such as developing a common conducive commercial environment for cashew production, processing and trade, and regulation of domestic and international trade in agricultural commodities.

b. Innovation and scaling up

1. BACs and the recently developed BRCs are institutional structures created under the Rural Enterprise Programme to train MSMEs and provide business advisory services. These structures have become institutionalised and made an integral part of the district Assemblies and the newly created Ghana Enterprise Agency. They need to be consolidated and scaled up to help build the capacities of smallholder businesses to take advantage of opportunities under PROSPER. REP designed a web-based M&E system to improve timely report on critical indicators for decision making and to show project results at any time during implementation. This can be replicated under PROSPER and implementation districts supported to adopt it in their reporting.
2. Innovations involving the use of digital tools such as mobile money transfers, transmission of weather and price information, and dissemination of technologies through mobile phones can be scaled up during implementation of PROSPER. Ghanaians will soon be using the Ghana card with biometric features as the sole means of identification. This will help in farmer data compilation and help in targeting.

M. Project Target Group Engagement and Feedback, and Grievance Redress

a. Project Target Group Engagement and Feedback.

1. The strategy relating to transparency and citizen participation will be applied according to the following: (i) transparent access to information and reporting on project activities and results; (ii) monitoring and evaluation of service providers, implementing partners, beneficiaries and the performance of projects by third parties; (iii) active engagement of civil society through a participatory evaluation of the Country Programme and its actors; (iv) creation of a complaints and grievances mechanism as well as a feedback mechanism on beneficiary satisfaction; and (v) transparent selection of service providers in procurement by ensuring freedom of access to public procurement, equal treatment of candidates and transparency of procedures.

b. Grievance redress.

1. PROSPER activities will have a differentiated level of risks and impacts on its beneficiaries that could upset or put them in a discomfort situation despite mitigation measures embedded in the ESMF. Consequently, to ensure consistency with IFAD's SECAP core requirement, the ESMF will include the IFAD complaints procedure as a Grievance Redress Mechanism (GRM) that will guide the project through implementation. The above procedure arranges for receiving and facilitating the resolution of concerns and complaints with respect to alleged non-compliance with environmental and social policies and the mandatory aspects of SECAP. The GRM will be aligned with applicable EPA regulations and international standards and be considerate of local approaches to grievance resolution.
2. PROSPER will align with national and/or IFAD^[1] whistle blower protection procedures that aim to better protect project staff, community members and any other stakeholders from potential threats or reprisals they may suffer for having reported, in good faith, reprehensible conduct, abuse and abusive acts, alleged professional misconduct or acts of corruption. PROSPER will establish a digital platform to collect comments, complaints and claims from beneficiaries, using social media (WhatsApp, Facebook and Twitter, Toll Free Numbers). All contracts with project staff, implementing partners and service providers will include provisions that: (i) prohibit any act of sexual harassment, exploitation and abuse; (ii) establish an obligation to report immediately to IFAD, the Government or the project any incidents of corruption, fraud, sexual harassment and exploitation, child labour and any unethical behaviour of staff and partners of the project; (iii) provide for the immediate termination of the contract on the basis of proven acts of sexual harassment, exploitation or abuse in connection with an activity or operation financed or managed by IFAD; (iv) prohibit the use of child labour in the project; (v) recommend setting up a grievance mechanism; and (vi) recommend inclusion of people with disabilities in project activities.

45. [1] <https://www.ifad.org/en/-/document/whistleblower-protection-procedures>.

N. Implementation plans

a. Supervision, Mid-term Review and Completion plans.

1. **Implementation readiness and start-up plans.** The IFAD country office (ICO) will take the following steps to ensure PROSPER readiness for implementation: (i) Preliminary mapping and identification of the clusters of communities will be carried out with the support of GASIP and REP; (ii) Oftakers, financial institutions, RIs and BACs/BRCs (operating in the PROSPER project area) with a good track record of partnership with GASIP and REP will be identified, oriented and prepared for partnership; (iii) REP, through existing partnership arrangements with the BoG and ARB Apex Bank, will support the swift initiation of the PROSPER BFF; (iv) MoFA has experience of partnering with donor projects including IFAD; (v) sensitize the donor community and prepare them for PROSPER partnership in relevant areas; (vi) work continuously with authorities to fulfil conditions prior to Board approval; and (vii) ensure that the budget for year one and procurement plan is available by the effectiveness date and set up the team prior to the start-up.
2. **Supervision.** PROSPER supervision will be carried out directly by IFAD. One Supervision Mission and one follow-up mission will be undertaken each year. Implementation Support will focus on planning, gender, vulnerability and targeting, procurement, financial management, safeguards and climate change risks management, M&E, partnerships and the integration of activities within the governance framework. Such support will be a continuous process with frequent communication and engagement with MoFA, the PCU and other relevant stakeholders. The first Implementation Support mission will occur soon after start-up. The frequency and composition of Supervision and Implementation Support Missions will be based on implementation requirements and MoFA requests. During the initial two years of implementation, one full supervision mission and one partial supervision mission will be carried out to ensure close follow-up on meeting the triggers for the replication phase. The supervision report will contain a dedicated section on progress for meeting the triggers, such as meeting in-kind financing and timely reporting and satisfactory progress of implementation. Portfolio stocktakes will be used to address cross cutting issues that are affecting satisfying conditions for starting the replication phase. The supervision missions follow up on the compliance with the IGREENFIN Operational Manual regarding green investments by the MG Fund and BFF.
3. **Mid-term Review.** MoFA, as the lead project agency, IFAD and implementing partners will prepare and carry out jointly the Mid-term Review (MTR) at the end of Project Year 4. The MTR will be based on, inter alia, a dedicated Mid-term evaluation study (with terms of reference agreed at least one year ahead), the PDR, SECAP, Procurement Plans, Reports of Supervision and Follow Up Missions, AWPBs, Progress Reports, Financing Agreements, evolving government policies and strategies, and additional data from various commissioned studies. The MTR findings will be communicated promptly to the implementing agencies and, in consultation with the GoG and partners, and the project design and financing agreements adjusted as needed to remove constraints and achieve the PROSPER objectives. The GoG will ensure that the MTR recommendations are implemented within the specified time and to the satisfaction of IFAD.
4. In case conditions for start-up of the replication phase are not met, an early MTR would be held to address the underlying issues and take necessary actions to restructure the project; such as reducing the outreach to match available funding, reconfiguring implementation arrangements to address performance shortfalls, reducing the scope of components facing challenges and increasing the size of those that are performing better, and/or partial cancellation.
5. **Project Completion Review.** The MoFA will be responsible for organizing the preparation of a Project Completion Review (PCR) to be submitted to the Fund after the Project Completion Date but in any event no later than the Financing Closing Date. A completion evaluation would be conducted as an input into the PCR through a formal survey undertaken by a neutral agency with no previous involvement in project implementation. The PCR will focus on PROSPER costs and benefits, the achievement of development objectives, risks, impact on beneficiaries and communities, partner performance and lessons learned.

Footnotes

Context

National Context

[1] Statista, 2021.

[2] SDSN Sustainable Development Report, Sustainable Development Solutions Network 2021.

[3] Medium Term Expenditure Framework (MTEF) For 2020-2023, Ministry of Food and Agriculture in Ghana, Programme Based Budget Estimates, 2020.

[4] Ghana Living Standards Survey, 2018.

[5] Ghana's Multidimensional Poverty Index (MPI) Report, UNDP, 2020. The indicators that contribute most to multidimensional poverty in Ghana are lack of health insurance coverage, undernutrition, school lag and households with members without any educational qualification.

[6] Ghana Living Standards Survey, 2018.

[7] 2010 Population and Household Census.

[8] Ghana Economic Outlook, African Development Bank, <https://www.afdb.org/en/countries/west-africa/ghana/ghana-economic-outlook>

[9]<https://www.focus-economics.com/countries/ghana>

[10] <https://www.worldbank.org/en/country/ghana/overview>.

Special aspects relating to IFAD's corporate mainstreaming priorities

[1] The National Youth Policy in Ghana (2010).

[2] Youth Employment Programmes in Ghana: Options for Effective Policy Making and Implementation, World Bank, 2020.

[3] <https://globalnutritionreport.org/resources/nutrition-profiles/africa/western-africa/ghana/>.

Lessons Learned

[1] <https://gcx.com.gh/>.

[2] The new inclusive rural finance policy (IRF) passed by IFAD's EB on 14 September 2021 underscores the need to "improve use of subsidies to foster long term sustainable outcomes of IRF activities and to attract investment capital". In lieu of market-priced on-lending interest rates, IRF 2021 stipulates, "IFAD will employ asset subsidies, matching grants, production and market access TA, value chain development, public and private infrastructure development, and other interventions to help develop sustainable climate IRF markets in developing member states".

Project Description

Project objectives, geographic area of intervention and target groups

[1] Minimum Dietary Diversity for Women (MDDW) is an indicator for the dietary diversity in households.

[2] The socially sensitive household methodologies to be employed, as recommended strongly by GASIP supervision missions, are mentioned in the *Household nutrition and healthy diet campaign* section under Subcomponent 1.1 below and in detail in the PIM.

Components/outcomes and activities

[1] In this document, a "cluster" is a term for several neighbouring settlements sharing natural resources. It has no administrative significance but locates the combined population in the specific land area upon which they depend and provides the project with a convenient unit for planning and operational purposes. Each cluster will include various common economic interest groups, such as Farmer Based Organisations and VSLAs, alongside non-profit community structures. To avoid confusion and excessive use of acronyms, the term Rural Institution (RI) is used here for a production-related group and Micro-, Small- and Medium-Enterprise (MSME) for any business set up for other purposes.

[2] Small businesses comprise enterprises and organised groups engaged in income generating activities other than primary production. The members are drawn from the same population.

[3] However, for reasons of equity and to avoid any elite capture of benefits, strict rules will limit any material provision of inputs to RIs members to a standard package sufficient to cultivate 1 ha (Matching Grants) and 2 ha (BFF loans).

[4] The concept of supporting "flexibility to achieve sustainability" in financing rural poor people is central to IFAD's new Inclusive Rural Finance Policy, with less emphasis on commercial (market-priced) finance at the entry level.

[5] CARE has also had successful experience in developing the concept for women in Ghana.

[6] This systematic objective selection approach and self-targeting mitigate potential elite capture of the MG fund.

[7] The matching grants ranges for groups of RIs are based on specific assumptions with regard to total number of beneficiaries, no of Rural Institutions participating in the Business Plan, area to be cultivated. During implementation, the tables in the PIM should be used as guidance regarding the maximum amount per single beneficiary to guide the process and not as guidance regarding the limit of matching grant regardless of number of beneficiaries per Business Plan. Additionally, it is strongly recommended to limit the upper limit amount of MG per beneficiary (for group of RIs receiving MG for production) to equivalent of MG share per one hectare. The limits for MSMEs (9 employees and less) are based on examples and should be used as guidance for the process.

[8] Only for the six main VCs: rice, maize, soya, poultry, cashew and shea.

[9] Currently, there is almost no demand for climate finance in Ghana because uptake of climate mitigation and adaptation technologies is still in its very early stages. BFF will be one of the very first funds set up in Ghana to contribute to climate finance market development.

[10] A dedicated technical team of IFAD experts, private sector independent consultants and Apex Bank bankers and economists carried out a joint exercise to determine the blended affordable on-lending rate. Details of the adopted approach to the interest rate determination are documented in a "Technical guidance note on determining the on-lending rate from blending and structuring a mixture of highly concessional and commercially-priced loans".

[11] The ARB Apex Bank in collaboration with PROSPER will look for investors and other development partners. A technical guidance note (in the PIM) shows that the average cost (wholesale rate) of the blended funds will be in the single digits (less than 10%) and the average structured interest rate applied to the clients (on-lending or retail rate) will also be in single digits. This latter is compared to the current market rate of between 26% and 28% applied by Apex Bank's network of RCBs.

[12] To ensure that green loans are validated and to avoid greenwashing risks, the eligibility criteria of the green loans are clearly defined in the GCF's project Operational Manual, which is the equivalent of the PIM.

[13] For purposes of flexibility to achieve sustainability (IRF Policy 2021), the evolution and performance of the innovative blended fund will be closely monitored by a dedicated GCF/IGREENFIN TA-supported M&E Unit lodged at the Apex Bank. The dedicated M&E team will collect and analyse data that will be used to inform recommendations and/or decisions to be taken at midterm (MTR) on whether to make any adjustments to the blended fund and its operations.

[14] The premium is currently estimated at 1% of loan portfolio to PROSPER clients.

[15] Details of the premium determination will be worked out with GAIP in time for the beneficiaries to access BFF.

[16] The BFF loans ranges for the VC actors and groups of RIs (coming under the same BP) are based on specific assumptions with regard to total number of beneficiaries, no of Rural Institutions participating in the Business Plan, area to be cultivated. Same principles applies for other BFF windows; e.g. for MSMEs. During implementation, the tables in the PIM should be used as guidance regarding the maximum amount per single beneficiary to guide the process and not as guidance regarding the limit of BFF loans regardless of number of beneficiaries per Business Plan. Additionally, it is strongly recommended to limit the amount of BFF loan share per beneficiary (for group of RIs receiving loan for production) to an equivalent of loan share of two hectares. The limits for MSMEs (29 employees and less) are based on examples and should be used as guidance for the process.

Alignment, ownership and partnerships

[1] The Ghana SDGs Baseline Indicator Report was published in June 2018. No data yet available on progress.

Implementation

Project Target Group Engagement and Feedback, and Grievance Redress

Grievance redress

[1] <https://www.ifad.org/en/-/document/whistleblower-protection-procedures>.

Ghana

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Project Design Report

Annex 1: Logframe

Mission Dates: 02/08/2021 to 20/09/2021

Document Date: 22/11/2021

Project No. 2000002673

Report No. 5864-GH

West and Central Africa Division
Programme Management Department

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Logical Framework

Results Hierarchy	Indicators				Means of Verification			Assumptions	
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility		
Outreach Total number of persons receiving services promoted or supported by PROSPER	1.b Estimated corresponding total number of households members				Project reports	Semi-annual	PCU	Effective stakeholder identification, needs assessment and gender/youth targeting is carried out at the community level	
	Household members	0	210000	420000					
	1.a Corresponding number of households reached				Project reports	Semi-annual	PCU		
	Households	0	35000	70000					
	1 Persons receiving services promoted or supported by the project				Project reports	Semi-annual	PCU		
	Males	0	30000	60000					
	Females	0	20000	40000					
	Young	0	15000	30000					
	Not Young	0	42000	60000					
	Non-Indigenous people								
	Total number of persons receiving services	0	50000	100000					
	Persons with disabilities receiving services promoted or supported by the project				Ghana Statistical Services/ PROSPER surveys	Mid-term Review and completion	PCU		
	Females	0	1000	2000					
	Males	0	1500	3000					
	Young	0	750	1500					
	Total number of PwD receiving services	0	2500	5000					

Results Hierarchy	Indicators				Source	Means of Verification		Assumptions	
	Name	Baseline	Mid-Term	End Target		Frequency	Responsibility		
Project Goal Contribute to reduced poverty, improved natural resources management and healthy, sustainable and climate resilient rural livelihoods.	HH living below the poverty line in the districts targeted				Ghana Statistical Services/ PROSPER surveys	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region	
	Households	0		8					
	Households reporting reduction in production losses due to adverse climate events				Ghana Statistical Services/ PROSPER surveys using COI methodology	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU		
	Households	0		70					
Development Objective Strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority VCs in the Northern and Middle Ecological Belts taking advantage of the increased demand created by the national agro-processing strategy.	Percentage of target households in the project supported communities reporting an increase in income contributed to by the services provided by the Project				Baseline survey, Project reports	Baseline, Mid-term Review and completion	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.	
	Targeted households	0		60					
	2.2.1 Persons with new jobs/employment opportunities				Baseline survey, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU		
	Males	0	2628	5256					
	Females	0	1752	3504					
	Young	0	3942	7884					
	Total number of persons with new jobs/employment opportunities	0	4380	8760					
	SF.2.2 Households reporting they can influence decision-making of local authorities and project-supported service providers				Baseline survey, Project reports	Baseline, Mid-term Review and completion	Mid-term Review and completion		
	Household members	0		315000					
	Households (%)	0		75					
	Households (number)	0		52500					

Results Hierarchy	Indicators				Source	Means of Verification		Assumptions				
	Name	Baseline	Mid-Term	End Target		Frequency	Responsibility					
Outcome Outcome 1. Financially and environmentally sustainable livelihoods developed and nutrition security enhanced in project areas	SF.2.1 Households satisfied with project-supported services				Baseline survey, Project reports	Baseline, Mid-term Review and completion	Mid-term Review and completion	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.				
	Household members	0		315000								
	Households (%)	0		75								
	Households (number)	0		52500								
	Rural Institutions with improved capacity				Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey	PROSPER PCU					
	Rural Institutions	0	1687	3375								
	3.2.2 Households reporting adoption of environmentally sustainable and climate-resilient technologies and practices											
	Total number of household members	0		252000								
	Households	0		60								
	Households	0		42000								
	3.2.1 Tons of Greenhouse gas emissions (tCO2e) avoided and/or sequestered											
	Hectares of land	0		39217								
	tCO2e/20 years	0		-1945462								
	tCO2e/ha	0		-49.6								
	tCO2e/ha/year	0		-2.5								
	1.2.9 Households with improved nutrition Knowledge Attitudes and Practices (KAP)				Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU					
	Women-headed households	0		672								
	Households (number)	0		8400								
	Households (%)	0		70								
	Household members	0		50400								

Results Hierarchy	Indicators				Source	Means of Verification		Assumptions				
	Name	Baseline	Mid-Term	End Target		Frequency	Responsibility					
Output Output 1.1 Strengthening of rural institutions and enterprises	Persons in rural areas accessing public socio-economic infrastructures to build environmental resilience				Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.				
	Persons	0		40								
	2.2.6 Households reporting improved physical access to markets, processing and storage facilities				Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU					
	Households reporting improved physical access to markets	0		10								
Output Output 1.2 Climate proofing smallholder production technologies	Rural Institutions and MSMEs trained				M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.				
	Rural Institutions	0	2250	4500								
	MSMEs	0	400	800								
	Climate smart demonstrations installed											
Output Output 1.2 Climate proofing smallholder production technologies	Demonstrations	0	100	320	M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.				
	3.1.1 Groups supported to sustainably manage natural resources and climate-related risks											
	Total size of groups	0	50000	100000								
	Groups supported	0	2560	5300								
	Males	0	30000	60000								
	Females	0	20000	40000								
	Young	0	15000	30000								
	3.1.2 Persons provided with climate information services				M&E Data/ Component reports	Annually	PROSPER PCU					
	Males	0	9000	18000								
	Females	0	6000	12000								
	Young	0	4500	9000								

Results Hierarchy	Indicators				Source	Means of Verification		Assumptions					
	Name	Baseline	Mid-Term	End Target		Frequency	Responsibility						
	Persons provided with climate information services	0	15000	30000									
Output Output 1.3 Promotion of nutrition-sensitive farming and healthy-diets	1.1.8 Households provided with targeted support to improve their nutrition				M&E Data/ Component reports	Annually	PROSPER PCU and RCU/ZCUs	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.					
	Total persons participating	0	15000	72000									
	Males	0	7500	36000									
	Females	0	7500	36000									
	Households	0	2500	12000									
	Young	0	7500	7500	M&E Data/ Component reports	Annually	PROSPER PCU						
	1.1.7 Persons in rural areas trained in financial literacy and/or use of financial products and services												
	Males	0	30000	60000									
	Females	0	20000	40000									
	Young	0	15000	30000									
Output Output 1.4 Development of socioeconomic infrastructures	Persons in rural areas trained in FL and/or use of FProd and Services (total)				M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.					
	Clusters	0	60	320									
	2.1.5 Roads constructed, rehabilitated or upgraded				M&E Data/ Component reports	Annually	PROSPER PCU						
	Length of roads	0	90	90									
	2.2.3 Rural producers' organizations engaged in formal partnerships/agreements or contracts with public or private entities				Baseline survey using COI methodology, Project reports	Baseline survey using COI methodology, Project reports	Baseline survey using COI methodology, Project reports	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.					
Outcome Outcome 2. Smallholders and small businesses are empowered to take advantage of the increasing market demand for agricultural produce	Number of POs	0	1013	2025									

Results Hierarchy	Indicators				Source	Means of Verification	Assumptions				
	Name	Baseline	Mid-Term	End Target							
Output Output 2.1 Creation of sustainable marketing linkages and business development	1.2.4 Households reporting an increase in production				Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	Baseline survey using COI methodology, Project reports				
	Total number of household members	0	175000	350000							
	Households	0	25	50							
	Households	0	25000	50000							
	1.2.5 Households reporting using rural financial services				Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU				
	Total number of household members	0	175000	350000							
	Households	0	25	50							
	Households	0	25000	50000							
Output Output 2.2 Access to rural financial services	2.1.3 Rural producers' organizations supported				M&E Data/ Component reports	Annually	PROSPER PCU				
	Total size of POs	0	45000	90000							
	Rural POs supported	0	2250	4500							
	Males	0	27000	54000							
	Females	0	18000	36000							
	Young	0	13500	27000							
1.1.5 Persons in rural areas accessing financial services				M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.				
Total number of accesses to financial services											
Women in rural areas accessing financial services - savings											
Young people in rural areas accessing financial services - savings											
Men in rural areas accessing financial services - savings											

Results Hierarchy	Indicators				Source	Means of Verification		Assumptions
	Name	Baseline	Mid-Term	End Target		Frequency	Responsibility	
Outcome Outcome 3. Development of an enabling policy environment that will help achieve the project's goals and objectives	Men in rural areas accessing financial services - credit	0	7200	14400	Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.
	Women in rural areas accessing financial services - credit	0	4800	9600				
	Young people in rural areas accessing financial services - credit	0	3600	7200				
	Total persons accessing financial services - savings	0	30000	30000				
	Total persons accessing financial services - credit	0	12000	24000				
Output Output 3.1. Financial policies to enhance smallholders' access to financial services and formalize MSMEs	Policy 3 Existing/new laws, regulations, policies or strategies proposed to policy makers for approval, ratification or amendment				M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.
	Number	0	0	2				
	Policy 1 Policy-relevant knowledge products completed							
	Number	0	5	10				

Ghana

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Project Design Report

Annex 2: Theory of change

Mission Dates: 02/08/2021 to 20/09/2021

Document Date: 22/11/2021

Project No. 2000002673

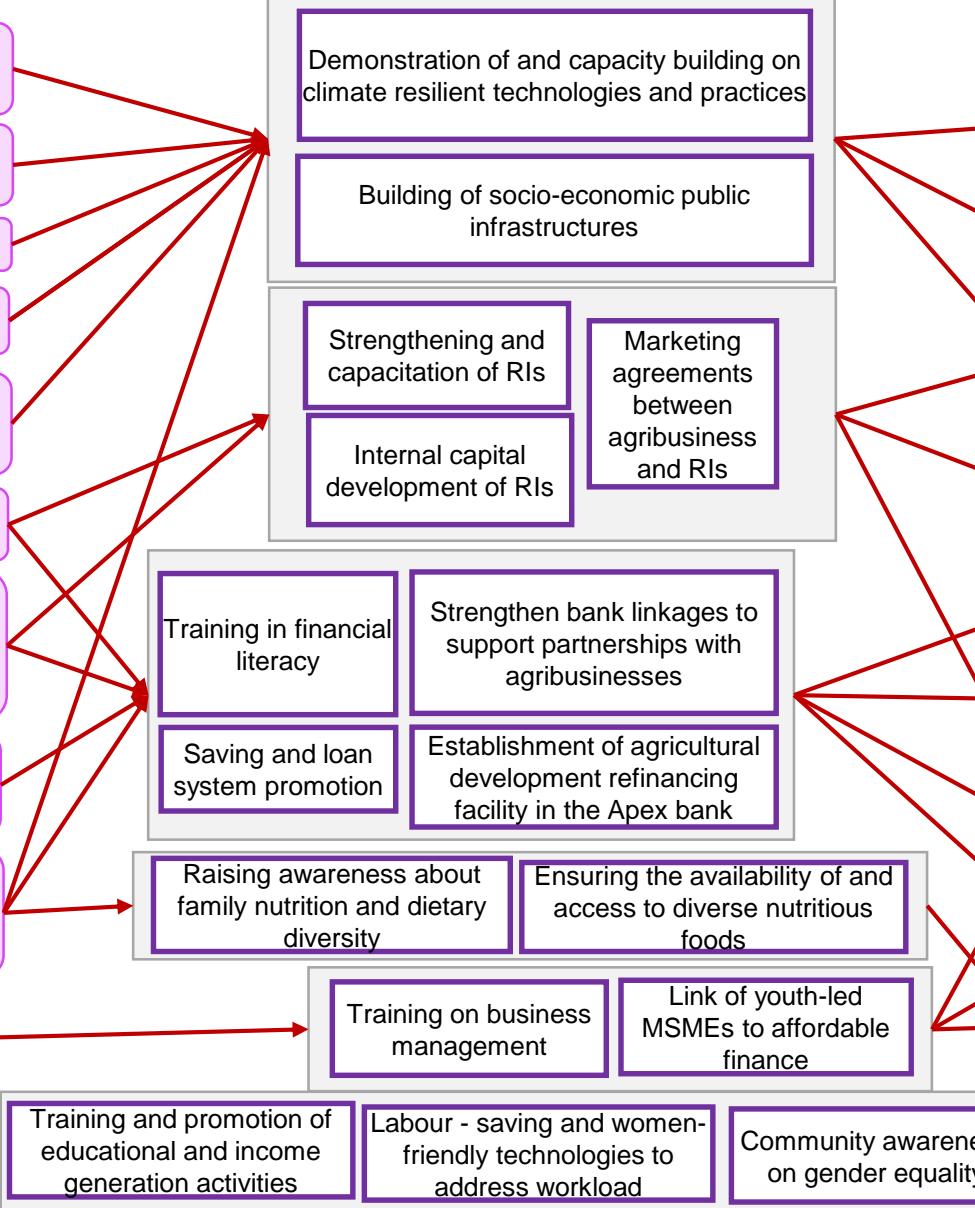
Report No. 5864-GH

West and Central Africa Division
Programme Management Department

CONSTRAINTS

- Low crop productivity and quality
- Natural resources degradation
- Water shortage
- Limited agricultural skills
- Little marketable surplus sold at a low price
- Poor commercial linkages
- Shortage of commercial and enabling public infrastructures (e.g. FBOs)
- Limited access to financial services
- Food insecurity and no healthy and diversified diet
- No profitable opportunities for youth
- Low women's social and economic participation and empowerment

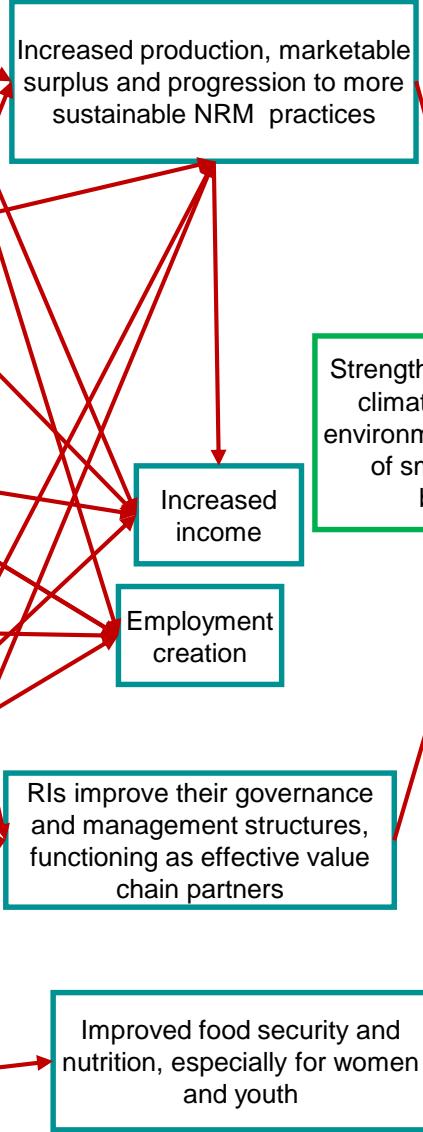
OUTPUTS



OUTCOMES



IMPACT



DEVELOPMENT OBJECTIVE

Strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses

ASSUMPTIONS

- Smallholders attend trainings and trainings are relevant
- No barriers for adoption of climate resilient technologies and practices
- New technologies increase yield/production
- Effective stakeholder identification, needs assessment and gender/youth targeting is carried out at the community level
- Private sector actors are interested in creating linkages with smallholders
- FIs are interested in borrowing to smallholders
- Political and economic stability

Ghana

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Project Design Report

Annex 3: Project cost and financing: Detailed costs tables

Mission Dates: 02/08/2021 to 20/09/2021

Document Date: 22/11/2021

Project No. 2000002673

Report No. 5864-GH

West and Central Africa Division
Programme Management Department

Annex 3: Project cost and financing: Detailed costs tables

1. **Assumptions.** The PROSPER Project aims to increase agricultural production, rural employment and income levels through individual and group activities, based on a participatory and integrated approach for crop and animal production, post-harvest handling and enabling market access for the sale of agricultural products, especially for landless, and vulnerable households. The project implementation period is estimated at eight years over the period 2022 to 2029.

2. **Unit costs and contingencies.** Costs have been estimated based on prices prevailing in Ghana in June 2021. The detailed estimate of quantities and unit costs must be seen as indicative. Only the total amount is to be considered; some of these amounts are to be adjusted, especially after the final government of Ghana's (GOG) contribution. The amount of IFAD 11 and the GCF (Green Climate Fund) financing is fixed because it is set with the signing of the financing Agreement. Only the use of this allocation among disbursement categories as set in the Financing Agreement may be amended if necessary. Costs have been estimated in USD by applying a fixed exchange GHS 6.03/USD, assumed to remain stable through the remaining period. Physical contingencies represent 5 % for different costs. Financial contingencies are related to inflation and variation in exchange rates between the Ghanaian currency (GHS) and USD. Local inflation rates have been assumed to vary between 10% (years 1 and 2), to 7% (years 7 and 8) per year, while international inflation rate is estimated at 2% to 3% per year.

Table 1: Inflation and exchange rates

Inflation and Exchange Rates	Up to Negotiation	Up to Project									
		Start	2022	2023	2024	2025	2026	2027	2028	2029	
Inflation (in %'s)											
<i>/a</i>											
Inflation											
Annual rates											
Local	9,9	9,9	10,0	10,0	9,0	9,0	7,5	7,5	7,0	7,0	
Foreign	2,0	2,0	2,0	3,0	2,0	2,0	2,0	2,0	2,0	2,0	
Compounded rates											
Local	9,9	9,9	15,4	26,9	39,0	51,5	63,9	76,2	89,0	102,2	
Foreign	2,0	2,0	3,0	5,6	8,2	10,4	12,6	14,9	17,2	19,5	
Exchange rates (Local/Foreign)											
<i>/b</i>											
Inflation											
Rates actually used	5,8	6,2	7,0	7,5	8,0	8,6	9,1	9,6	10,1	10,6	
Constant purchasing parity rates	5,8	6,2	7,0	7,5	8,0	8,6	9,1	9,6	10,1	10,6	
% deviation	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
<i>\a Yearly values are within Each Project Year</i>											
<i>\b Yearly values are at Project Year Midpoints</i>											

3. **Taxes and Foreign exchange.** The levels of taxes in the unit costs were estimated to quantify the financial counterpart of the Government for duties and taxes. Costs items include taxes, which account for 15%. Salaries are inclusive of income tax. The estimated level of currency in unit costs was made based on information collected, and similar projects in Ghana. The foreign exchange part is needed because financial contingencies apply differently to the part of foreign exchange costs and the local currency, and thus it affects the computation of project economic costs.

The total **project costs**, for eight-years, are estimated at USD 147.3 million or GHS 1.2 billion. The base cost amount to USD 133.1 million or GHS 827.6 million, equivalent to 90,3% of total costs. Physical and price contingencies at USD 14.2 million account for about 11% of base costs or 9.7% of total costs. Investment costs of USD 135.1 million represent 91.7% of total project costs; and recurrent costs of USD12.3 representing 8.3%. Project costs by component are presented in the table below (annexes).

Table 2: Components Project Cost Summary (USD Million)

Republic of Ghana PROSPER Components Project Cost Summary	(GHS Million)						(US\$ '000)					
				% Foreign Exchange		% Total Base Costs				% Foreign Exchange		% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total	Local	Foreign	Total	Local	Foreign	
A. Development of Rural Institutions and Socioeconomic Infrastructure												
1. Capacity Building of Rural Institutions, Enterprises and Households	61.7	1.7	63.4	3	8	9,878.6	267.8	10,146.4	3	8		
2. Development of Socioeconomic Infrastructure	98.7	31.0	129.7	24	16	15,794.2	4,959.8	20,753.9	24	16		
Subtotal	160.4	32.7	193.1	17	23	25,672.8	5,227.5	30,900.3	17	23		
B. Strengthening the Economic Benefits for Smallholders and Small Operators Around Selected Agricultural value Chains												
1. Sustainable Marketing Linkages and Business Development	72.8	1.9	74.7	3	9	11,649.9	306.0	11,955.9	3	9		
2. Access to Rural Financial Services	267.9	220.5	488.4	45	59	43,066.3	35,757.6	78,823.9	45	59		
Subtotal	340.7	222.4	563.1	39	68	54,716.2	36,063.6	90,779.8	40	68		
C. Project Management and Policy Engagement												
1. Project Management	60.6	8.6	69.2	12	8	9,701.3	1,377.4	11,078.7	12	8		
2. Policy Engagement	1.9	-	1.9	-	-	306.0	-	306.0	-	-		
Subtotal	62.5	8.6	71.1	12	9	10,007.3	1,377.4	11,384.7	12	9		
Total BASELINE COSTS	563.6	263.7	827.3	32	100	90,396.3	42,668.5	133,064.9	32	100		
Physical Contingencies	5.4	1.9	7.2	26	1	860.5	297.4	1,157.9	26	1		
Price Contingencies	305.0	108.1	413.2	26	50	9,690.5	3,432.7	13,123.3	26	10		
Total PROJECT COSTS	874.0	373.7	1,247.7	30	151	100,947.3	46,398.6	147,346.0	31	111		

The main component of the project cost is that related to “Development of Rural Institutions and Socioeconomic Infrastructure” with USD 30.9 million or 23 % of base costs. This component includes two subcomponents: (i) Capacity building of rural institutions, enterprises and households, and (ii) Development of socio-economic infrastructure. The second component relates to “Strengthening the benefits for smallholders and small operators around agricultural value chains” with USD 90.8 million or 68% of base costs. This component includes two subcomponents: (i) Sustainable marketing linkages and business development, and (ii) Access to rural financial services. The third component is related to “Project Management and Policy engagement”, with USD 133 thousands or 9% of total cost and has two subcomponents: i) Project Management, and ii) Policy engagement. The total project cost is divided into USD 46.4 million in foreign currency, USD 84.7 million in local currency (excluding taxes) and USD 16.2 million of taxes.

4. Project Financiers. Different financiers have been identified in the PROSPER project: Government, IFAD (IFAD 11 and a financing gap potentially financed by IFAD 12), Green Climate Fund (GCF) (grant, adaptation, and mitigation), Project financial institutions (PFIs) and private sector and beneficiaries (farmers, cooperatives and local communities). The financing plan by components is summarized in the table 4 below. The PROSPER project will be financed for the first three years (2022, 2024) by IFAD 11, while the remaining five years will be potentially financed by IFAD 12. For some activities such as the development of socio-economic infrastructure (Component 2.2), year 4 is shared between IFAD 11 and, possibly, IFAD 12.

5. Contribution of IFAD 11 will be of USD 52.5 million (35.6 % of project total cost) , while the potential contribution of IFAD 12 will be of USD 22.7 million or 15.4 % of total costs. IFAD share of the project costs will be related to works; equipment and materials, goods, Services and Inputs; consultancies; training and workshops, Grants and subsidies, Salaries & Allowances. The Government of Ghana’s contribution is estimated at USD 22.5 million or 15.3 % of total costs. This contribution would take mainly the form or waiving the cost of all taxes on goods and services procured under the PROSPER. Beneficiaries’ contribution is estimated at USD 19.3 million or 13% of total costs, and is related to mainly to works, goods, services and inputs. PFIs and the private sector represents USD 4.9 million or 3.3% of total costs (table 3).

Table 3: Disbursement Accounts by Financiers (USD Million)

Republic of Ghana PROSPER Disbursement Accounts by Financiers (US\$ Million)	GCF						Private Sector						Local										
	IFAD 11 Amount	IFAD 12 Amount	Adaptation %	Mitigation %	GCF Grant Amount	GCF Grant %	PFIs Amount	PFIs %	Beneficiaries Amount	Beneficiaries %	Government Amount	Government %	Total Amount	Total %	For. Exch.	(Excl. Taxes)	Duties & Taxes						
1. Civil works	16.9	72.2	3.0	12.8	-	-	-	-	-	-	-	-	3.5	15.0	23.4	15.9	5.9	14.0	3.5				
2. Equipments, Goods and Vehicles	1.0	27.9	1.5	41.9	-	-	-	-	-	-	-	-	1.1	30.2	3.6	2.5	1.1	2.0	0.5				
3. Consultancies	3.1	25.1	5.5	43.9	-	-	-	-	2.0	16.1	0.0	0.3	-	-	1.8	14.6	12.4	8.4	-	10.6	1.8		
4. Training and Workshops	5.6	39.6	5.8	40.9	-	-	-	-	2.0	14.4	-	-	-	-	0.7	5.0	14.2	9.6	-	13.5	0.7		
5. Grants and Subsidies	11.6	60.0	1.0	5.0	-	-	-	-	-	-	6.7	35.0	-	-	0.0	-	19.3	13.1	13.5	5.8	-		
6. Credit/Guarantee Funds	12.2	19.7	2.5	4.0	13.8	22.2	6.9	11.1	-	-	2.3	3.7	12.6	20.2	2.5	4.1	9.3	15.0	62.1	42.2	24.9	28.0	9.3
7. Salaries and allowances	0.7	7.1	2.9	28.9	-	-	-	-	0.7	7.0	-	-	-	-	5.7	57.0	10.1	6.8	-	10.1	-		
8. Operating costs	1.3	60.3	0.5	24.7	-	-	-	-	-	-	-	-	0.3	15.0	2.2	1.5	1.1	0.8	0.3	0.3			
Total PROJECT COSTS	52.5	35.6	22.7	15.4	13.8	9.3	6.9	4.7	4.7	3.2	2.3	1.6	19.3	13.1	2.5	1.7	22.5	15.3	147.3	100.0	46.4	84.7	16.2

6. Expenditure Categories. The most important investment expenditure categories are “Credit, Guarantee Funds” (USD 62.1 million and 42.2% of total costs), “Civil Works” category (USD 23.4 million, 15.9% of total costs). Grants and subsidies stand for USD 19.3 million (13.1% of total costs). Training and workshops represent USD 14.2 million and 9.6% of total costs. In terms of recurring costs, salaries and allowances stands for about USD 10.1, or 6.8% of total costs and 85% of recurrent costs. Table 4 summarizes the expenditure accounts project cost summary.

Table 4: PROSPER project costs by component and year
(Thousands of United States dollars)

Republic of Ghana
PROSPER

Project Components by Year -- Totals Including Contingencies
(US\$ '000)

	Totals Including Contingencies								
	2022	2023	2024	2025	2026	2027	2028	2029	Total
A. Development of Rural Institutions and Socioeconomic Infrastructure									
1. Capacity Building of Rural Institutions, Enterprises and Households									
1. Capacity Building of Rural Institutions, Enterprises and Households	786.3	1,211.1	1,615.5	2,769.0	2,162.4	1,172.9	958.4	622.0	11,297.6
2. Development of Socioeconomic Infrastructure	26.5	2,321.3	4,561.1	4,942.0	5,040.8	3,634.7	3,707.4	30.7	24,264.5
Subtotal	812.8	3,532.4	6,176.6	7,710.9	7,203.2	4,807.6	4,665.9	652.7	35,562.1
B. Strengthening the Economic Benefits for Smallholders and Small Operators Around Selected Agricultural value Chains									
1. Sustainable Marketing Linkages and Business Development	924.6	1,548.9	2,082.7	2,613.7	2,544.8	1,889.2	1,043.4	663.9	13,311.1
2. Access to Rural Financial Services	465.9	11,483.9	13,402.8	15,149.0	16,792.2	15,285.4	12,229.6	954.1	85,762.8
Subtotal	1,390.5	13,032.8	15,485.4	17,762.6	19,337.0	17,174.6	13,273.0	1,617.9	99,073.9
C. Project Management and Policy Engagement									
1. Project Management	1,814.3	1,074.6	1,779.4	1,625.5	1,759.4	1,523.4	1,392.0	1,402.8	12,371.3
2. Policy Engagement	23.6	72.7	35.9	36.6	77.5	38.1	26.9	27.4	338.7
Subtotal	1,837.9	1,147.3	1,815.2	1,662.1	1,836.9	1,561.5	1,418.9	1,430.2	12,710.0
Total PROJECT COSTS	4,041.2	17,712.5	23,477.2	27,135.7	28,377.1	23,543.7	19,357.7	3,700.8	147,346.0

Table 5. Expenditure Accounts by Components

Republic of Ghana
PROSPER

Expenditure Accounts by Components - Totals Including Contingencies
(US\$ '000)

	Development of Rural Institutions and Socioeconomic Infrastructure		Strengthening the Economic Benefits for Smallholders and Small Operators Around Selected Agricultural value			Project Management and Policy Engagement			Total	
	Capacity Building of Rural Institutions, Enterprises and Households	Development of Socioeconomic Infrastructure	Sustainable Marketing Linkages and Business Development		Access to Rural Financial Services	Project Management	Policy Engagement			
			Linkages and Business Development	Development						
I. Investment Costs										
A. Civil Works	-	23,244.5	-	-	-	167.6	-	-	23,412.1	
B. Equipments, Goods and Vehicles	1,033.6	-	1,194.0	-	70.1	1,329.3	-	-	3,627.1	
D. National Consultancies	1,626.9	998.0	3,659.3	-	2,683.9	3,119.5	338.7	-	12,426.2	
E. Training & Workshops	5,874.6	22.0	5,486.2	-	1,579.5	1,225.7	-	-	14,187.9	
F. Grants and subsidies	-	-	-	-	19,283.0	-	-	-	19,283.0	
G. Credit, Guarantee Funds_EA	-	-	-	-	62,146.3	-	-	-	62,146.3	
Total Investment Costs	8,535.1	24,264.5	10,339.4	85,762.8	5,842.1	338.7	135,082.7			
II. Recurrent Costs										
A. Salaries and allowances	2,762.5	-	2,971.6	-	-	4,327.4	-	-	10,061.5	
B. Operating costs	-	-	-	-	-	2,201.7	-	-	2,201.7	
Total Recurrent Costs	2,762.5	-	2,971.6	-	-	6,529.1	-	-	12,263.2	
Total PROJECT COSTS	11,297.6	24,264.5	13,311.1	85,762.8	12,371.3	338.7	147,346.0			
Taxes	692.8	3,637.5	1,002.3	-	9,814.0	1,030.8	-	50.8	16,228.2	
Foreign Exchange	310.1	5,811.1	358.2	-	38,377.7	1,541.6	-	-	46,398.6	

Table 6. Summary Tables: Procurement Account by years (USD Million)

Republic of Ghana
PROSPER

Procurement Accounts by Years

	Totals Including Contingencies									Total
	2022	2023	2024	2025	2026	2027	2028	2029		
1. Civil Works	124,126	2,171,486	4,448,328	4,782,634	4,878,286	3,468,950	3,538,329	-	23,412,139	
2. Equipments, Goods and Services	1,020,042	294,055	270,667	652,661	593,354	420,702	353,833	21,757	3,627,071	
3. Consultancies	1,066,514	1,467,434	2,010,371	1,998,791	1,864,758	1,646,070	1,437,988	934,318	12,426,244	
4. Training and Workshops	1,146,585	1,843,663	2,937,069	3,513,796	3,042,978	1,007,354	467,356	229,149	14,187,950	
5. Grants & Subsidies	-	2,313,524	3,598,078	4,098,078	4,242,453	3,733,353	914,375	383,125	19,282,986	
6. Credit, Guarantee Funds	-	8,546,645	9,016,868	10,262,492	11,715,844	11,187,082	10,982,027	435,383	62,146,341	
7. Salaries and Allowances	492,134	879,122	930,909	1,557,014	1,729,314	1,763,900	1,341,151	1,367,974	10,061,519	
8. Operating Costs	191,772	196,576	264,954	270,253	310,115	316,318	322,644	329,097	2,201,728	
Total	4,041,172	17,712,504	23,477,244	27,135,718	28,377,103	23,543,731	19,357,703	3,700,803	147,345,978	

Table 7. Summary Tables: Component by Financiers

Republic of Ghana
PROSPER

Components by Financiers

(US\$ Million)	Local											
	GCF				The				Local			
IFAD 11	IFAD 12	Adaptation	Mitigation	GCF Grant	PfIs	Beneficiaries	Private Sector	Government	Total	For. Exch.	(Excl. Taxes)	Duties & Taxes
Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
A. Development of Rural Institutions and Socioeconomic Infrastructure												
1. Capacity Building of Rural Institutions, Enterprises and Households	4.8	42.6	2.5	22.0	-	-	-	0.5	4.8	-	-	-
2. Development of Socioeconomic Infrastructure	17.4	71.9	3.2	13.1	-	-	-	-	-	-	-	3.6
Subtotal	22.3	62.6	5.7	15.9	-	-	-	0.5	1.5	-	-	7.1
B. Strengthening the Economic Benefits for Smallholders and Small Operators Around Selected Agricultural value Chains												
1. Sustainable Marketing Linkages and Business Development	1.5	11.0	6.5	48.8	-	-	-	1.4	10.3	-	-	-
2. Access to Rural Financial Services	25.7	29.9	4.3	5.0	13.8	16.1	6.9	8.1	1.1	1.3	2.3	9.8
Subtotal	27.2	27.4	10.8	10.9	13.8	13.9	6.9	7.0	2.5	2.5	2.3	11.3
C. Project Management and Policy Engagement												
1. Project Management	3.0	24.5	6.1	49.3	-	-	-	1.6	13.3	-	-	-
2. Policy Engagement	0.0	14.7	0.2	50.7	-	-	-	0.1	19.5	-	-	-
Subtotal	3.1	24.2	6.3	49.4	-	-	-	1.7	13.5	-	-	-
Total PROJECT COSTS	52.5	35.6	22.7	15.4	13.8	9.3	6.9	4.7	4.7	3.2	2.3	1.0

Table 8. Summary Tables: Expenditure Accounts by Financiers

Republic of Ghana
PROSPER

Expenditure Accounts by Financiers

(US\$ Million)	Local											
	GCF				The				Local			
IFAD 11	IFAD 12	Adaptation	Mitigation	GCF Grant	PfIs	Beneficiaries	Private Sector	Government	Total	For. Exch.	(Excl. Taxes)	Duties & Taxes
Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
I. Investment Costs												
A. Civil Works	16.9	72.2	3.0	12.8	-	-	-	-	-	-	-	3.5
B. Equipments, Goods and Vehicles	1.0	27.9	1.5	41.9	-	-	-	-	-	-	-	1.1
D. National Consultancies	3.1	25.1	5.5	43.9	-	-	-	2.0	16.1	0.0	0.3	-
E. Training & Workshops	5.6	39.6	5.8	40.9	-	-	-	2.0	14.4	-	-	0.7
F. Grants and subsidies	11.6	60.0	1.0	5.0	-	-	-	-	-	-	-	0.0
G. Credit,Guarantee Funds	12.2	19.7	2.5	4.0	13.8	22.2	6.9	11.1	-	6.7	35.0	-
Total Investment Costs	50.4	37.3	19.2	14.2	13.8	10.2	6.9	5.1	4.0	3.0	2.3	16.5
II. Recurrent Costs												
A. Salaries and allowances	0.7	7.1	2.9	28.9	-	-	-	0.7	7.0	-	-	5.7
B. Operating costs	1.3	60.3	0.5	24.7	-	-	-	-	-	-	-	0.3
Total Recurrent Costs	2.0	16.7	3.5	28.2	-	-	-	0.7	5.7	-	-	6.1
Total PROJECT COSTS	52.5	35.6	22.7	15.4	13.8	9.3	6.9	4.7	4.7	3.2	2.3	1.0

Table 9. Summary Tables: Local/Foreign/Taxes by Financiers

Republic of Ghana

PROSPER

Local/Foreign/Taxes by Financiers

(US\$ Million)	Local											
	GCF				The				Local			
IFAD 11	IFAD 12	Adaptation	Mitigation	GCF Grant	PfIs	Beneficiaries	Private Sector	Government	Total	For. Exch.	(Excl. Taxes)	Duties & Taxes
Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
I. Foreign												
	20.0	43.0	3.6	7.7	6.5	14.0	3.3	7.0	-	1.1	2.3	10.6
II. Local (Excl. Taxes)												
	32.5	38.4	19.1	22.6	7.3	8.6	3.7	4.3	4.7	1.3	1.5	8.7
III. Taxes									-	-	-	-
Total Project	52.5	35.6	22.7	15.4	13.8	9.3	6.9	4.7	4.7	3.2	2.3	1.6

Table 10. Summary Tables: Disbursements by Semesters

Republic of Ghana

PROSPER

Disbursements by Semesters and Governance Available

(US\$ Million)									Costs to be Financed			The Government	
	GCF		GCF		GCF		Private Sector		Project Costs	Cash Flow	Cumulative Cash Flow		
	IFAD 11 Amount	IFAD 12 Amount	Adaptation Amount	Mitigation Amount	Grant Amount	PFI Amount	Beneficiaries Amount	Sector Amount					
1	1.3	-	-	-	0.2	0.0	-	-	1.5	2.0	-0.5	-0.5	
2	1.3	-	-	-	0.2	0.0	-	-	1.5	2.0	-0.5	-1.0	
3	4.3	-	0.9	0.6	0.4	0.2	1.2	0.1	7.7	8.9	-1.2	-2.2	
4	4.3	-	0.9	0.6	0.4	0.2	1.2	0.1	7.7	8.9	-1.2	-3.4	
5	5.3	1.2	0.9	0.6	0.4	0.2	1.5	0.1	10.2	11.7	-1.5	-4.9	
6	5.3	1.2	0.9	0.6	0.4	0.2	1.5	0.1	10.2	11.7	-1.5	-6.3	
7	6.1	1.3	1.0	0.7	0.4	0.2	1.7	0.2	11.6	13.6	-1.9	-8.3	
8	6.1	1.3	1.0	0.7	0.4	0.2	1.7	0.2	11.6	13.6	-1.9	-10.2	
9	5.1	2.2	1.2	0.8	0.4	0.2	1.9	0.2	12.1	14.2	-2.1	-12.3	
10	5.1	2.2	1.2	0.8	0.4	0.2	1.9	0.2	12.1	14.2	-2.1	-14.4	
11	4.2	1.2	1.4	0.4	0.3	0.2	1.9	0.3	9.9	11.8	-1.9	-16.3	
12	4.2	1.2	1.4	0.4	0.3	0.2	1.9	0.3	9.9	11.8	-1.9	-18.2	
13	0.0	4.3	1.4	0.4	0.1	0.2	1.4	0.3	8.0	9.7	-1.6	-19.9	
14	0.0	4.3	1.4	0.4	0.1	0.2	1.4	0.3	8.0	9.7	-1.6	-21.5	
15	0.0	1.2	0.1	0.0	0.0	0.0	0.1	-	1.3	1.9	-0.5	-22.0	
16	0.0	1.2	0.1	0.0	0.0	0.0	0.1	-	1.3	1.9	-0.5	-22.5	
Total	52.5	22.7	13.8	6.9	4.7	2.3	19.3	2.5	124.8	147.3	-22.5	-22.5	

Table 11. Summary Tables: Financing Plan

Republic of Ghana PROSPER Financing Plan (US\$ Million)				
	Foreign	Local	Total	Percent
IFAD 11	20.0	32.5	52.5	35.6
IFAD 12 (financing gap)	3.6	19.1	22.7	15.4
GCF Adaptation	6.5	7.3	13.8	9.3
GCF Mitigation	3.3	3.7	6.9	4.7
GCF Grant	-	4.7	4.7	3.2
PFI	1.1	1.3	2.3	1.6
Beneficiaries	10.6	8.7	19.3	13.1
Private Sector	1.2	1.3	2.5	1.7
The Government	0.2	22.3	22.5	15.3
Total	46.4	100.9	147.3	100.0

Table 12. Summary Tables: Components Project Cost Summary

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Components Project Cost Summary

	(GHS Million)						(US\$ '000)					
				% Total					% Total			
	Local	Foreign	Total	Foreign Exchange	Base Costs	Local	Foreign	Total	Foreign Exchange	Base Costs		
A. Development of Rural Institutions and Socioeconomic Infrastructure												
1. Capacity Building of Rural Institutions, Enterprises and Households	61.7	1.7	63.4	3	8	9,878.6	267.8	10,146.4	3	8		
2. Development of Socioeconomic Infrastructure	98.7	31.0	129.7	24	16	15,794.2	4,959.8	20,753.9	24	16		
Subtotal	160.4	32.7	193.1	17	23	25,672.8	5,227.5	30,900.3	17	23		
B. Strengthening the Economic Benefits for Smallholders and Small Operators Around Selected Agricultural value Chains												
1. Sustainable Marketing Linkages and Business Development	72.8	1.9	74.7	3	9	11,649.9	306.0	11,955.9	3	9		
2. Access to Rural Financial Services	267.9	220.5	488.4	45	59	43,066.3	35,757.6	78,823.9	45	59		
Subtotal	340.7	222.4	563.1	39	68	54,716.2	36,063.6	90,779.8	40	68		
C. Project Management and Policy Engagement												
1. Project Management	60.6	8.6	69.2	12	8	9,701.3	1,377.4	11,078.7	12	8		
2. Policy Engagement	1.9	-	1.9	-	-	306.0	-	306.0	-	-		
Subtotal	62.5	8.6	71.1	12	9	10,007.3	1,377.4	11,384.7	12	9		
Total BASELINE COSTS	563.6	263.7	827.3	32	100	90,396.3	42,668.5	133,064.9	32	100		
Physical Contingencies	5.4	1.9	7.2	26	1	860.5	297.4	1,157.9	26	1		
Price Contingencies	305.0	108.1	413.2	26	50	9,690.5	3,432.7	13,123.3	26	10		
Total PROJECT COSTS	874.0	373.7	1,247.7	30	151	100,947.3	46,398.6	147,346.0	31	111		

Table 13. Summary Tables: Project Components by Year - Totals Including Contingencies

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Project Components by Year -- Totals Including Contingencies

(US\$ '000)

	Totals Including Contingencies								Total
	2022	2023	2024	2025	2026	2027	2028	2029	
A. Development of Rural Institutions and Socioeconomic Infrastructure									
1. Capacity Building of Rural Institutions, Enterprises and Households	786.3	1,211.1	1,615.5	2,769.0	2,162.4	1,172.9	958.4	622.0	11,297.6
2. Development of Socioeconomic Infrastructure	26.5	2,321.3	4,561.1	4,942.0	5,040.8	3,634.7	3,707.4	30.7	24,264.5
Subtotal	812.8	3,532.4	6,176.6	7,710.9	7,203.2	4,807.6	4,665.9	652.7	35,562.1
B. Strengthening the Economic Benefits for Smallholders and Small Operators Around Selected Agricultural value Chains									
1. Sustainable Marketing Linkages and Business Development	924.6	1,548.9	2,082.7	2,613.7	2,544.8	1,889.2	1,043.4	663.9	13,311.1
2. Access to Rural Financial Services	465.9	11,483.9	13,402.8	15,149.0	16,792.2	15,285.4	12,229.6	954.1	85,762.8
Subtotal	1,390.5	13,032.8	15,485.4	17,762.6	19,337.0	17,174.6	13,273.0	1,617.9	99,073.9
C. Project Management and Policy Engagement									
1. Project Management	1,814.3	1,074.6	1,779.4	1,625.5	1,759.4	1,523.4	1,392.0	1,402.8	12,371.3
2. Policy Engagement	23.6	72.7	35.9	36.6	77.5	38.1	26.9	27.4	338.7
Subtotal	1,837.9	1,147.3	1,815.2	1,662.1	1,836.9	1,561.5	1,418.9	1,430.2	12,710.0
Total PROJECT COSTS	4,041.2	17,712.5	23,477.2	27,135.7	28,377.1	23,543.7	19,357.7	3,700.8	147,346.0

Component 1. Development of rural institutions and socioeconomic infrastructure

Base costs

Table 14. Subcomponent 1.1 Capacity Building of Rural Institutions, Enterprises and Households

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Table 1.1. Capacity Building of Rural Institutions Enterprises [1.1]

Detailed Costs

	Unit	Quantities									Total		
		2022	2023	2024	2025	2026	2027	2028	2029				
I. Investment Costs													
A. CapaCity Building of Rural Institutions, Enterprises and Households													
1. Community mobilisation, cluster identification and planning													
a. Community mobilisation													
Workshop/consultation w ith stakeholders at regional level	workshop	2	2	2	2	-	-	-	-	8			
Workshop/consultation w ith stakeholders at district level	workshop	10	20	20	20	10	-	-	-	80			
Subtotal													
b. Cluster identification													
Meetings at community level for identification of clusters	meetings	50	100	100	100	100	-	-	-	450			
Training of trainers for extension staff /a	training	20	20	50	50	20	-	-	-	160			
Subtotal													
c. Cluster planning													
Cluster consultation and synthesisation meetings	cluster	80	150	205	205	-	-	-	-	640			
d. Support by RDAs/DDAs to Field Activities													
Regional/national depts of MoFA and other line ministries	days	300	500	500	500	450	-	-	-	2,250			
DDA support for community mobilization and cluster planning	days	1,200	1,800	2,600	3,300	2,300	-	-	-	11,200			
Subtotal													
Subtotal													
2. Community nutrition and healthy diet campaign													
a. Nutrition													
Participatory Needs Assessment	LS	3	-	-	5	-	-	-	-	8			
Nutrition Know ledge, attitude, and practice study (KAP)	LS	-	1	-	-	-	-	-	-	1			
Training on HH nutrition and household methodology	HH	-	50	150	150	250	250	250	100	1,200			
Nutrition education for communities /b	HH	-	50	150	150	250	250	250	100	1,200			
Training on Financial literacy - HH economics	cluster	-	50	150	150	250	250	250	100	1,200			
Climate smart HH nutrition gardens; demos and training /c	HH	-	50	150	150	250	250	250	100	1,200			
Dedicated training on post-harvest management	cluster	-	50	150	150	250	250	250	100	1,200			
DDA Extension Field Support /d	days	200	200	200	200	200	200	200	200	1,600			
Regional / National of MOFA and Other Line Ministries for nutrition	days	100	100	100	100	100	100	100	100	800			
Subtotal													
b. capacitation of rural institutions													
Awareness raising for Youth Farmership Development	Workshop	10	10	20	20	20	-	-	-	80			
Training on organisational capacity	group	30	60	130	210	210	-	-	-	640			
Training on NRM Sustainability training	Training	30	90	150	250	120	-	-	-	640			
Training on Sustainable Use of Pesticides and Fertilizers (ESMP)	Training	15	45	60	100	100	-	-	-	320			
Climate adaptation and mitigation demonstrations (ESMP) /e	demo	15	45	60	100	100	-	-	-	320			
Training on farming as a business including climate/NRM	cluster	15	45	60	100	100	-	-	-	320			
Training on enterprise Dev't including climate/NRM aspects	cluster	15	45	60	100	100	-	-	-	320			
Training of trainers for extension staff including climate/NRM	district	10	10	20	40	-	-	-	-	80			
Training of trainers for extension staff on IFAD SECAP and EPA Procedures	district	0.2	-	0.2	0.2	-	0.2	-	0.2	1			
DDA Extension Field Support for nutrition	days	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	9,600			
Support by Regional/national depts of MoFA and other line ministries /f	days	120	120	120	120	120	120	120	120	960			
Subtotal													

Table 1.1. Capacity Building of Rural Institutions Enterprises [1.1]

Detailed Costs

	Unit	Quantities								
		2022	2023	2024	2025	2026	2027	2028	2029	Total
I. Investment Costs										
3. TA (national)	months	8	15	33	42	33	-	-	-	131
4. Gender, Vulnerability & Social Inclusion Specialist	person/year	0.5	1	1	1	1	1	1	0.5	7
5. Climate and Safeguard Specialist /g	person/year	0.5	1	1	1	1	1	1	0.5	7
6. Institutional support to Extension Services										
motorcycles for AEAs at district level	motorcycle	50	-	-	50	-	-	50	-	150
Laptops	unit	50	-	-	50	-	-	50	-	150
Assessment, categorization and creation of database of FBOs (including performance) /h	unit	1	-	-	-	-	-	-	-	1
Protective gear	lumpsum	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	1
Subtotal										
7. Mini-Weather Stations (ESMP) /i	lumpsum	-	0.3	-	0.4	-	0.3	-	-	1
Total Investment Costs										
II. Recurrent Costs										
A. GoG staff pro rata time on PROSPER activities										
1. Chief Director	person/year	1	1	1	1	1	1	1	1	8
2. Director Project Planning M&E	person/year	1	1	1	1	1	1	1	1	8
3. Director of MOFA Extension Services	person/year	1	1	1	1	1	1	1	1	8
4. Regional Director of Agriculture	person/year	3	3	5	8	8	8	8	8	51
5. Senior Agric Officer (Regional Rep for PROSPER)	person/year	3	3	5	8	8	8	8	8	51
6. District Director of Agriculture	person/year	8	24	24	60	80	80	50	50	376
7. District Planning Officer	person/year	8	24	24	60	80	80	50	50	376
8. District Works Engineer	person/year	8	24	24	60	80	80	50	50	376
9. Management Information Officers (MISOs)	person/year	8	24	24	60	80	80	50	50	376
10. Accountants	person/year	8	24	24	60	80	80	50	50	376
11. Crop Officers	person/year	8	24	24	60	80	80	50	50	376
12. WIAD Officers	person/year	8	24	24	60	80	80	50	50	376
13. Agriculture Extension Officers	person/year	24	72	72	180	240	240	150	150	1,128
Total Recurrent Costs										
Total										

\a 2 trainings per visit; this includes procedures for cluster identification and other procedural aspects, including IFAD SECAP and EPA procedures

\b Promotion of healthy diets

\c Promotion of healthy diets

\d Promotion of healthy diets

\e Including water harvesting for dry season farming

\f DSA_USD50, 3 days per cluster.

\g GCF Funding on national consultant

\h in project target areas

\i Support to Agrinet to Install Mini-Weather Stations and Disseminate Data (ESMP)

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Table 1.1. Capacity Building of Rural Institutions Enterprises [1.1]

Detailed Costs	Unit Cost (US\$)	Totals Including Contingencies (US\$)									
		2022	2023	2024	2025	2026	2027	2028	2029	Total	
I. Investment Costs											
A. CapaCity Building of Rural Institutions, Enterprises and Households											
1. Community mobilisation, cluster identification and planning											
a. Community mobilisation											
Workshop/consultation w ith stakeholders at regional level	10,000	21,016.1	21,542.5	22,079.5	22,521.1	-	-	-	-	87,159.2	
Workshop/consultation w ith stakeholders at district level	2,000	21,016.1	43,085.0	44,159.0	45,042.2	22,971.5	-	-	-	176,273.8	
Subtotal		42,032.2	64,627.6	66,238.5	67,563.3	22,971.5	-	-	-	263,433.0	
b. Cluster identification											
Meetings at community level for identification of clusters	200	10,508.0	21,542.5	22,079.5	22,521.1	22,971.5	-	-	-	99,622.6	
Training of trainers for extension staff /a	1,500	31,524.1	32,313.8	82,798.1	84,454.1	34,457.3	-	-	-	265,547.3	
Subtotal		42,032.2	53,856.3	104,877.6	106,975.1	57,428.8	-	-	-	365,170.0	
c. Cluster planning											
Cluster consultation and synthesisation meetings	500	42,032.2	80,784.5	113,157.4	115,420.6	-	-	-	-	351,394.6	
d. Support by RDAs/DDAs to Field Activities											
Regional/national depts of MoFA and other line ministries	50	15,762.1	26,928.2	27,599.4	28,151.4	25,842.9	-	-	-	124,283.9	
DDA support for community mobilization and cluster planning	10	12,609.6	19,388.3	28,703.3	37,159.8	26,417.2	-	-	-	124,278.3	
Subtotal		28,371.7	46,316.4	56,302.7	65,311.1	52,260.2	-	-	-	248,562.2	
Subtotal		154,468.2	245,584.8	340,576.2	355,270.1	132,660.4	-	-	-	1,228,559.7	
2. Community nutrition and healthy diet campaign											
a. Nutrition											
Participatory Needs Assessment	5,000	15,762.1	-	-	28,151.4	-	-	-	-	43,913.4	
Nutrition Know ledge, attitude, and practice study (KAP)	7,500	-	8,078.4	-	-	-	-	-	-	8,078.4	
Training on HH nutrition and household methodology	200	-	10,771.3	33,119.2	33,781.6	57,428.8	58,577.3	59,748.9	24,377.5	277,804.7	
Nutrition education for communities /b	100	-	5,385.6	16,559.6	16,890.8	28,714.4	29,288.7	29,874.4	12,188.8	138,902.3	
Training on Financial literacy - HH economics	100	-	5,385.6	16,559.6	16,890.8	28,714.4	29,288.7	29,874.4	12,188.8	138,902.3	
Climate smart HH nutrition gardens; demos and training /c	250	-	13,464.1	41,399.1	42,227.0	71,786.0	73,221.7	74,686.1	30,471.9	347,255.8	
Dedicated training on post-harvest management	250	-	13,464.1	41,399.1	42,227.0	71,786.0	73,221.7	74,686.1	30,471.9	347,255.8	
DDA Extension Field Support /d	10	2,101.6	2,154.3	2,207.9	2,252.1	2,297.2	2,343.1	2,390.0	2,437.8	18,183.9	
Regional / National of MOFA and Other Line Ministries for nutrition	50	5,254.0	5,385.6	5,519.9	5,630.3	5,742.9	5,857.7	5,974.9	6,094.4	45,459.7	
Subtotal		23,117.7	64,089.0	156,764.4	188,051.0	266,469.5	271,798.8	277,234.8	118,231.1	1,365,756.4	
b. capacitation of rural institutions											
Aw areness raising for Youth Farmership Development	600	6,304.8	6,462.8	13,247.7	13,512.7	13,782.9	-	-	-	53,310.8	
Training on organisational capacity	800	25,219.3	51,702.1	114,813.4	189,177.1	192,960.6	-	-	-	573,872.5	
Training on NRM Sustainability training	800	25,219.3	77,553.1	132,477.0	225,210.8	110,263.2	-	-	-	570,723.4	
Training on Sustainable Use of Pesticides and Fertilizers (ESMP)	800	12,609.6	38,776.5	52,990.8	90,084.3	91,886.0	-	-	-	286,347.3	
Climate adaptation and mitigation demonstrations (ESMP) /e	2,000	31,524.1	96,941.4	132,477.0	225,210.8	229,715.1	-	-	-	715,868.3	
Training on farming as a business including climate/NRM	1,500	23,643.1	72,706.0	99,357.7	168,908.1	172,286.3	-	-	-	536,901.2	
Training on enterprise Dev't including climate/NRM aspects	800	12,609.6	38,776.5	52,990.8	90,084.3	91,886.0	-	-	-	286,347.3	
Training of trainers for extension staff including climate/NRM	3,000	31,524.1	32,313.8	66,238.5	135,126.5	-	-	-	-	265,202.9	
Training of trainers for extension staff on IFAD SECAP and EPA	100,000	21,016.1	-	22,079.5	22,521.1	-	23,430.9	-	24,377.5	113,425.1	
Procedures	10	12,609.6	12,925.5	13,247.7	13,512.7	13,782.9	14,058.6	14,339.7	14,626.5	109,103.2	
DDA Extension Field Support for nutrition											
Support by Regional/national depts of MoFA and other line ministries /f	50	6,304.8	6,462.8	6,623.8	6,756.3	6,891.5	7,029.3	7,169.9	7,313.3	54,551.6	
Subtotal		208,584.6	434,620.4	706,543.8	1,180,104.8	923,454.5	44,518.8	21,509.6	46,317.3	3,565,653.8	
Subtotal		231,702.3	498,709.4	863,308.2	1,368,155.8	1,189,924.0	316,317.6	298,744.4	164,548.4	4,931,410.2	

Table 1.1. Capacity Building of Rural Institutions Enterprises [1.1]

Detailed Costs	Unit Cost (US\$)	Totals Including Contingencies (US\$)								
		2022	2023	2024	2025	2026	2027	2028	2029	Total
I. Investment Costs										
3. TA (national)	3.500	29,422.5	56,549.1	127,509.1	165,530.0	132,660.4	-	-	-	511,671.1
4. Gender, Vulnerability & Social Inclusion Specialist	40.680	21,373.4	43,817.5	44,909.7	45,807.9	46,724.0	47,658.5	48,611.7	24,792.0	323,694.6
5. Climate and Safeguard Specialist /g	50.400	26,480.3	54,287.2	55,640.3	56,753.1	57,888.2	59,046.0	60,226.9	30,715.7	401,037.6
6. Institutional support to Extension Services										
motorcycles for AEAs at district level	2.000	110,334.4	-	-	118,235.7	-	-	125,472.7	-	354,042.8
Laptops	500	27,583.6	-	-	29,558.9	-	-	31,368.2	-	88,510.7
Assessment, categorization and creation of database of FBOs (including performance) /h	100.000	105,080.4	-	-	-	-	-	-	-	105,080.4
Protective gear	100.000	22,066.9	11,309.8	11,591.7	11,823.6	24,120.1	12,301.2	12,547.3	12,798.2	118,558.8
Subtotal		265,065.3	11,309.8	11,591.7	159,618.2	24,120.1	12,301.2	169,388.1	12,798.2	666,192.7
7. Mini-Weather Stations (ESMP) /i	400.000	-	135,717.9	-	189,177.1	-	147,614.9	-	-	472,509.9
Total Investment Costs		728,511.9	1,045,975.6	1,443,535.2	2,340,312.2	1,583,977.2	582,938.2	576,971.1	232,854.3	8,535,075.7
II. Recurrent Costs										
A. GoG staff pro rata time on PROSPER activities										
1. Chief Director	600	630.5	646.3	662.4	675.6	689.1	702.9	717.0	731.3	5,455.2
2. Director Project Planning M&E	580	609.5	624.7	640.3	653.1	666.2	679.5	693.1	706.9	5,273.3
3. Director of MOFA Extension Services	960	1,008.8	1,034.0	1,059.8	1,081.0	1,102.6	1,124.7	1,147.2	1,170.1	8,728.3
4. Regional Director of Agriculture	960	3,026.3	3,102.1	5,299.1	8,648.1	8,821.1	8,997.5	9,177.4	9,361.0	56,432.6
5. Senior Agric Officer (Regional Rep for PROSPER)	270	851.2	872.5	1,490.4	2,432.3	2,480.9	2,530.5	2,581.2	2,632.8	15,871.7
6. District Director of Agriculture	770	6,473.0	19,905.3	20,401.5	52,023.7	70,752.2	72,167.3	46,006.6	46,926.8	334,656.3
7. District Planning Officer	340	2,858.2	8,789.3	9,008.4	22,971.5	31,241.2	31,866.1	20,314.6	20,720.9	147,770.3
8. District Works Engineer	685	5,758.4	17,708.0	18,149.3	46,280.8	62,941.9	64,200.8	40,928.0	41,746.5	297,713.7
9. Management Information Officers (MISOs)	340	2,858.2	8,789.3	9,008.4	22,971.5	31,241.2	31,866.1	20,314.6	20,720.9	147,770.3
10. Accountants	210	1,765.4	5,428.7	5,564.0	14,188.3	19,296.1	19,682.0	12,547.3	12,798.2	91,269.9
11. Crop Officers	760	6,388.9	19,646.8	20,136.5	51,348.1	69,833.4	71,230.0	45,409.2	46,317.3	330,310.1
12. WIAD Officers	760	6,388.9	19,646.8	20,136.5	51,348.1	69,833.4	71,230.0	45,409.2	46,317.3	330,310.1
13. Agriculture Extension Officers	760	19,166.7	58,940.3	60,409.5	154,044.2	209,500.1	213,690.1	136,227.5	138,952.0	990,930.4
Total Recurrent Costs		57,783.7	165,134.2	171,966.1	428,666.3	578,399.5	589,967.5	381,472.7	389,102.2	2,762,492.3
Total		786,295.6	1,211,109.8	1,615,501.4	2,768,978.5	2,162,376.7	1,172,905.8	958,443.8	621,956.5	11,297,568.1

\a 2 trainings per visit; this includes procedures for cluster identification and other procedural aspects, including IFAD SECAP and EPA procedures

\b Promotion of healthy diets

\c Promotion of healthy diets

\d Promotion of healthy diets

\e Including water harvesting for dry season farming

\f DSA_USD50, 3 days per cluster.

\g GCF Funding on national consultant

\h in project target areas

\i Support to Agrinet to Install Mini-Weather Stations and Disseminate Data (ESMP)

Table 15. Subcomponent 1.2. Development of Socioeconomic Infrastructure

Republic of Ghana

PROSPER

Table 1.2. Development of Socioeconomic Infrastructure [1.2]

Detailed Costs

	Unit	Quantities									Total		
		2022	2023	2024	2025	2026	2027	2028	2029				
I. Investment Costs													
A. Development of socio-economic infrastructure													
1. Off-farm/watershed works	cluster	-	20	60	60	60	60	60	-	320			
2. Feeder roads and farm tracks	km	-	20	20	25	25	-	-	-	90			
3. Communal social infrastructure	cluster	-	20	60	60	60	60	60	-	320			
4. Site Monitoring of Environmental, Climate and Social Conditions [ESMP]	lumpsum	-	1	1	1	1	1	1	-	6			
5. Infrastructure Engineer	person/year	0.5	1	1	1	1	1	1	0.5	7			
6. District Staff Field Support	days	-	120	360	360	360	360	360	-	1,920			
Total													

	Unit Cost (US\$)	Totals Including Contingencies (US\$)									Total		
		2022	2023	2024	2025	2026	2027	2028	2029				
I. Investment Costs													
A. Development of socio-economic infrastructure													
1. Off-farm/watershed works	24.500	-	554,181.4	1,703,984.9	1,738,064.6	1,772,825.9	1,808,282.4	1,844,448.1	-	9,421,787.4			
2. Feeder roads and farm tracks	49.000	-	1,108,362.8	1,135,989.9	1,448,387.2	1,477,354.9	-	-	-	5,170,094.8			
3. Communal social infrastructure	22.500	-	508,942.1	1,564,884.1	1,596,181.8	1,628,105.4	1,660,667.5	1,693,880.9	-	8,652,661.9			
4. Site Monitoring of Environmental, Climate and Social Conditions [ESMP]	87.500	-	94,248.5	96,597.8	98,529.7	100,500.3	102,510.3	104,560.5	-	596,947.3			
5. Infrastructure Engineer	50.400	26,480.3	54,287.2	55,640.3	56,753.1	57,888.2	59,046.0	60,226.9	30,715.7	401,037.6			
6. District Staff Field Support	10	-	1,292.6	3,974.3	4,053.8	4,134.9	4,217.6	4,301.9	-	21,975.0			
Total			26,480.3	2,321,314.5	4,561,071.4	4,941,970.3	5,040,809.7	3,634,723.8	3,707,418.3	30,715.7	24,264,504.0		

Component 2. Strengthening the benefits for smallholders and small operators around agricultural value chains.

Table 16. Subcomponent 2.1 Sustainable marketing linkages and business development

Republic of Ghana

PROSPER

Table 2.1. Sustainable marketing linkages and business development [2.1]

Detailed Costs

	Unit	Quantities									Total		
		2022	2023	2024	2025	2026	2027	2028	2029				
I. Investment Costs													
A. Sustainable marketing linkages and business development.													
1. Value chain analysis													
a. Value chain studies and integration of climate risks /a	lumpsum	0.3	0.7	-	-	-	-	-	-	1			
b. Scoping and mapping of operational VC actors in target areas /b	lumpsum	0.3	-	0.7	-	-	-	-	-	1			
Subtotal													
2. Establish and maintain value chain bodies	Lumpsum	1	1	1	1	1	1	1	1	8			
3. Promotion of linkages between producers and VC actors													
a. Engagement with VC actors													
Support by DDAs to collect information /c	field days	200	200	200	200	200	200	-	-	1,200			
District-level meetings	meeting	10	15	20	20	15	-	-	-	80			
Discussions w ith interested VC actors	lumpsum	0.1	0.2	0.1	0.2	0.2	0.1	0.1	-	1			
Subtotal													
b. Creation of and support for partnerships													
DDA support for the trainings and demonstrations /d	field days	500	750	1,000	1,000	1,000	1,000	750	-	6,000			
Training of RIs and MSMEs on climate risks and integration into BPs /e	cluster	40	50	70	70	70	20	-	-	320			
Training of RIs and MSMEs on VC linkages and green bankable BPs	cluster	40	50	70	70	70	20	-	-	320			
Demonstrations on climate risks and green BPs	cluster	40	50	70	70	70	20	-	-	320			
BRCs/BACs support for Partnerships creation betw een RIs, MSMEs and VC actors /f	cluster	40	50	70	70	70	20	-	-	320			
Demonstrations dedicated for women and youth on climate risks/green BPs	cluster	40	50	70	70	70	20	-	-	320			
Partnerships creation betw een RIs, MSMEs and VC actors /g	cluster	40	50	70	70	70	20	-	-	320			
Subtotal													
Subtotal													
4. Development of Business Plans.													
a. Preparation of business plans for RIs & MSMEs - MG window													
Call for preparation BPs at cluster level	cluster	40	50	70	70	70	20	-	-	320			
BRCs/BACs for Preparation of BPs under Matching Grant Window	cluster	40	50	70	70	70	20	-	-	320			
DDAs Support for BPs Preparation	days	300	400	500	500	500	200	-	-	2,400			
MoFA regional and central departments	days	80	120	150	150	150	50	-	-	700			
Subtotal													
b. Evaluation of business plans at RIs/MSMEs level - MG window	LS	0.1	0.2	0.2	0.2	0.2	0.1	-	-	1			
c. Preparation of business plans for RIs linked to VC Actors (BFF) /h													
Call for preparation of ABPs for RIs	cluster	-	30	80	80	50	50	30	-	320			
BRCs/BACs for Preparation of ABPs for RIs (BFF)	cluster	-	30	80	80	50	50	20	10	320			
Subtotal													

Table 2.1. Sustainable marketing linkages and business development [2.1]

Detailed Costs	Unit	Quantities									Total		
		2022	2023	2024	2025	2026	2027	2028	2029				
I. Investment Costs													
d. Preparation of business plans for SMEs (standalone) - (BFF)													
Call for preparation of ABPs for MSMEs	cluster	-	30	80	80	50	50	30	-	320			
BRCS/BACs for Preparation of ABPs for MSMEs (BFF)	cluster	-	30	80	80	50	50	20	10	320			
Subtotal													
Subtotal													
5. Technical Assistance to Support to the BRCS/ BACs													
Design of assessment process	Nat consultant month	-	1	-	-	-	-	-	-	1			
TA for support for partnership creation and preparation of BPs	Nat consultant month	24	36	36	96	96	96	60	24	468			
Subtotal													
6. Value Chain Specialists													
a. Senior Value Chain Development Specialist	person/year	-	1	1	1	1	1	1	1	7			
b. Value Chain Development Specialist	person/year	-	2	2	2	2	2	1	1	12			
Subtotal													
7. Institutional support to Value Chains													
Support to veterinary services in MoFA and at districts	Lumpsum	0.08	0.08	0.1	0.2	0.2	0.2	0.14	-	1			
Support for shea tree domestication program	Lumpsum	0.08	0.08	0.1	0.2	0.2	0.2	0.14	-	1			
Support to Tree Crop Development	Lumpsum	0.08	0.08	0.1	0.2	0.2	0.2	0.14	-	1			
Subtotal													
Total Investment Costs													
II. Recurrent Costs													
A. GoG staff pro rata time on PROSPER activities													
1. District Director of Agriculture	person/year	10	30	30	80	80	80	50	50	410			
2. District Planning Officer	person/year	10	30	30	80	80	80	50	50	410			
3. Crop Officers	person/year	10	30	30	80	80	80	50	50	410			
4. WIAD Officers	person/year	10	30	30	80	80	80	50	50	410			
5. Agriculture Extension Officers	person/year	30	90	90	240	240	240	150	150	1,230			
Total Recurrent Costs													
Total													

la TA supported by BRCS / BACs. Budget lines for BRCS / BACs are provided separately

lb TA supported by BRCS / BACs. Budget lines for BRCS / BACs are provided separately

lc The role of the DDA is to support BRCS / BACs. Provision for BRCS / BACs are provided for separately.

ld BRCs and BACs play the leading role with support from DDAs

le The cost covers the cost of trainers as well.

lf Cost covers trainers as well.

lg This item supports collection of information above.

lh BFF window

Table 2.1. Sustainable marketing linkages and business development [2.1]

Detailed Costs

	Unit Cost (US\$)	Totals Including Contingencies (US\$)								Total		
		2022	2023	2024	2025	2026	2027	2028	2029			
I. Investment Costs												
A. Sustainable marketing linkages and business development.												
1. Value chain analysis												
a. Value chain studies and integration of climate risks /a	150,000	47,286.2	113,098.2	-	-	-	-	-	-	160,384.4		
b. Scoping and mapping of operational VC actors in target areas /b	300,000	94,572.4	-	231,834.7	-	-	-	-	-	326,407.0		
Subtotal		141,858.5	113,098.2	231,834.7	-	-	-	-	-	486,791.5		
2. Establish and maintain value chain bodies	25,000	26,270.1	26,928.2	27,599.4	28,151.4	28,714.4	29,288.7	29,874.4	30,471.9	227,298.4		
3. Promotion of linkages between producers and VC actors												
a. Engagement with VC actors												
Support by DDA to collect information /c	10	2,101.6	2,154.3	2,207.9	2,252.1	2,297.2	2,343.1	-	-	13,356.2		
District-level meetings	2,500	26,270.1	40,392.2	55,198.7	56,302.7	43,071.6	-	-	-	221,235.3		
Discussions with interested VC actors	150,000	15,762.1	32,313.8	16,559.6	33,781.6	34,457.3	17,573.2	17,924.7	-	168,372.2		
Subtotal		44,133.8	74,860.3	73,966.3	92,336.4	79,826.0	19,916.3	17,924.7	-	402,963.7		
b. Creation of and support for partnerships												
DDA support for the trainings and demonstrations /d	10	5,254.0	8,078.4	11,039.7	11,260.5	11,485.8	11,715.5	8,962.3	-	67,796.3		
Training of RIs and MSMEs on climate risks and integration into BPs /e	1,200	50,438.6	64,627.6	92,733.9	94,588.6	96,480.3	28,117.1	-	-	426,986.0		
Training of RIs and MSMEs on VC linkages and green bankable BPs	2,200	92,470.8	118,483.9	170,012.1	173,412.3	176,880.6	51,548.1	-	-	782,807.7		
Demonstrations on climate risks and green BPs	1,800	75,657.9	96,941.4	139,100.8	141,882.8	144,720.5	42,175.7	-	-	640,479.0		
BRCS/BACs support for Partnerships creation between RIs, MSMEs and VC actors /f	1,500	63,048.2	80,784.5	115,917.3	118,235.7	120,600.4	35,146.4	-	-	533,732.5		
Demonstrations dedicated for women and youth on climate risks/green BPs	1,500	63,048.2	80,784.5	115,917.3	118,235.7	120,600.4	35,146.4	-	-	533,732.5		
Partnerships creation between RIs, MSMEs and VC actors /g	1,500	63,048.2	80,784.5	115,917.3	118,235.7	120,600.4	35,146.4	-	-	533,732.5		
Subtotal		412,966.0	530,484.6	760,638.6	775,851.3	791,368.4	238,995.5	8,962.3	-	3,519,266.7		
Subtotal		457,099.7	605,344.9	834,604.9	868,187.8	871,194.3	258,911.8	26,887.0	-	3,922,230.4		
4. Development of Business Plans.												
a. Preparation of business plans for RIs & MSMEs - MG window												
Call for preparation BPs at cluster level	50	2,101.6	2,692.8	3,863.9	3,941.2	4,020.0	1,171.5	-	-	17,791.1		
BRCS/BACs for Preparation of BPs under Matching Grant Window	1,000	42,032.2	53,856.3	77,278.2	78,823.8	80,400.3	23,430.9	-	-	355,821.7		
DDAs Support for BPs Preparation	10	3,152.4	4,308.5	5,519.9	5,630.3	5,742.9	2,343.1	-	-	26,697.0		
MoFA regional and central departments	50	4,203.2	6,462.8	8,279.8	8,445.4	8,614.3	2,928.9	-	-	38,934.4		
Subtotal		51,489.4	67,320.4	94,941.8	96,840.7	98,777.5	29,874.4	-	-	439,244.2		
b. Evaluation of business plans at RIs/MSMEs level - MG window												
c. Preparation of business plans for RIs linked to VC Actors (BFF) /h												
Call for preparation of ABPs for RIs	50	-	1,615.7	4,415.9	4,504.2	2,871.4	2,928.9	1,792.5	-	18,128.6		
BRCS/BACs for Preparation of ABPs for RIs (BFF)	2,000	-	64,627.6	176,635.9	180,168.7	114,857.5	117,154.7	47,799.1	24,377.5	725,621.0		
Subtotal		-	66,243.3	181,051.8	184,672.9	117,729.0	120,083.5	49,591.6	24,377.5	743,749.6		

Table 2.1. Sustainable marketing linkages and business development [2.1]

Detailed Costs	Unit Cost (US\$)	Totals Including Contingencies (US\$)								
		2022	2023	2024	2025	2026	2027	2028	2029	
I. Investment Costs										
d. Preparation of business plans for SMEs (standalone)										
- (BFF)										
Call for preparation of ABPs for MSMEs	50	-	1,615.7	4,415.9	4,504.2	2,871.4	2,928.9	1,792.5	-	
BRCs/BACs for Preparation of ABPs for MSMEs (BFF)	1,000	-	32,313.8	88,318.0	90,084.3	57,428.8	58,577.3	23,899.6	12,188.8	
Subtotal		-	33,929.5	92,733.9	94,588.6	60,300.2	61,506.2	25,692.0	12,188.8	
Subtotal		56,743.4	178,264.4	379,767.3	387,362.6	288,292.4	217,321.9	75,283.6	36,566.3	
5. Technical Assistance to Support to the BRCs/ BACs										
Design of assessment process	50.000	-	53,856.3	-	-	-	-	-	-	
TA for support for partnership creation and preparation of BPs	3,500	88,267.5	135,717.9	139,100.8	378,354.2	385,921.3	393,639.7	250,945.3	102,385.7	
Subtotal		88,267.5	189,574.2	139,100.8	378,354.2	385,921.3	393,639.7	250,945.3	102,385.7	
6. Value Chain Specialists										
a. Senior Value Chain Development Specialist	50.400	-	54,287.2	55,640.3	56,753.1	57,888.2	59,046.0	60,226.9	61,431.4	
b. Value Chain Development Specialist	40.680	-	87,635.0	89,819.4	91,615.8	93,448.1	95,317.0	48,611.7	49,583.9	
Subtotal		-	141,922.1	145,459.7	148,368.9	151,336.3	154,363.0	108,838.6	111,015.3	
7. Institutional support to Value Chains										
Support to veterinary services in MoFA and at districts	320.000	28,245.6	28,953.2	37,093.5	75,670.8	77,184.3	78,727.9	56,211.8	-	
Support for shea tree domestication program	200.000	17,653.5	18,095.7	23,183.5	47,294.3	48,240.2	49,205.0	35,132.3	-	
Support to Tree Crop Development	480.000	42,368.4	43,429.7	55,640.3	113,506.3	115,776.4	118,091.9	84,317.6	-	
Subtotal		88,267.5	90,478.6	115,917.3	236,471.4	241,200.8	246,024.8	175,661.7	-	
Total Investment Costs		858,506.9	1,345,610.6	1,874,284.1	2,046,896.2	1,966,659.5	1,299,550.0	667,490.6	280,439.3	
II. Recurrent Costs										
A. GoG staff pro rata time on PROSPER activities										
1. District Director of Agriculture	385.56	4,051.5	12,458.9	12,769.5	34,732.9	35,427.6	36,136.1	23,036.8	23,497.5	
2. District Planning Officer		856.4	8,999.1	27,673.5	28,363.3	77,148.2	78,691.2	80,265.0	51,168.9	
3. Crop Officers		1.712.8	17,998.2	55,347.0	56,726.6	154,296.4	157,382.4	160,530.0	102,337.9	
4. WIAD Officers		1.712.8	17,998.2	55,347.0	56,726.6	154,296.4	157,382.4	160,530.0	104,384.6	
5. Agriculture Extension Officers		541.3	17,064.0	52,474.4	53,782.3	146,288.0	149,213.7	152,198.0	97,026.2	
Total Recurrent Costs			66,110.9	203,300.9	208,368.4	566,762.0	578,097.2	589,659.2	375,907.7	
Total		924,617.8	1,548,911.5	2,082,652.4	2,613,658.2	2,544,756.7	1,889,209.1	1,043,398.4	663,865.2	

la TA supported by BRCs / BACs. Budget lines for BRCs / BACs are provided separately

lb TA supported by BRCs / BACs. Budget lines for BRCs / BACs are provided separately

lc The role of the DDA is to support BRCs / BACs. Provision for BRCs / BACs are provided for separately.

ld BRCs and BACs play the leading role with support from DDAs

le The cost covers the cost of trainers as well.

lf Cost covers trainers as well.

lg This item supports collection of information above.

lh BFF window

Table 17. Subcomponent 2.2. Access to Rural Financial Services

Republic of Ghana

PROSPER

Table 2.2. Access to Rural Financial Services [2.2]

Detailed Costs

	Unit	Quantities									Total		
		2022	2023	2024	2025	2026	2027	2028	2029				
I. Investment Costs													
A. Access to Rural Financial Services.													
1. Savings mobilisation													
a. Promotion of Savings and Credit Group Methodology													
Training of trainers and mentors /a	Training Groups	2	1	3	3	-	-	-	-	9			
VSLA training and mentoring /b	Training Groups	850	850	1,200	1,200	1,200	-	-	-	5,300			
RCB training on VSLA and savings promotion /c	RCB	-	3	4	5	3	-	-	-	15			
Subtotal													
2. Activities Supported by Matching Grants													
a. Business Plans with Matching Grants for Groups of RIs													
BP with Matching grants for poorer groups of RIs - Rice	Group	-	6	8	8	8	6	-	-	36			
BP with Matching grants for poorer groups of RIs - Maize	Group	-	6	8	8	8	6	-	-	36			
BP with Matching grants for poorer groups of RIs - Soy	Group	-	6	10	10	10	8	-	-	44			
BP with Matching grants for poorer groups of RIs - Cashew	Group	-	0.5	2	4.5	5.25	4.75	2.75	0.25	20			
BP with Matching grants for poorer groups of RIs - shea	Group	-	6	6	6	6	6	-	-	30			
BP with Matching grants for poorer groups of RIs - Poultry	Group	-	6	10	10	10	10	-	-	46			
Subtotal													
b. BP with Matching Grants with MSME (Standalone)													
BP with matching grant support for MSMEs (9 employees and fewer) - Rice	Group	-	4	7	7	7	7	-	-	32			
BP with matching grant support for MSMEs (9 employees and fewer) - Maize	Group	-	4	7	7	7	7	-	-	32			
BP with matching grant support for MSMEs (9 employees and fewer) - Soy	Group	-	4	7	7	7	7	-	-	32			
BP with matching grant support for MSMEs (9 employees and fewer) - Cashew	Group	-	4	7	7	7	7	-	-	32			
BP with matching grant support for MSMEs (9 employees and fewer) - Shea	Group	-	4	7	7	7	7	-	-	32			
BP with matching grant support for MSMEs (9 employees and fewer) - Poultry	Group	-	4	7	7	7	7	-	-	32			
Subtotal													
c. Investment with Matching Grants for Nutrition and Other Poverty Initiatives													
Investment with matching grants support for off-season vegetable production	group	-	10	15	15	15	15	15	5	90			
Investment with matching grants support for post-harvest management	group	-	-	5	5	5	5	5	5	30			
Investment with matching grants support for small ruminants (goats)	group	-	5	5	5	5	5	5	5	35			
Investment with matching grants support for poultry - egg production	group	-	5	5	5	5	5	5	5	35			
Investment with matching grants support for MSME along the food system	group	-	5	5	5	5	5	5	5	35			
Subtotal													
d. Agricultural risk guarantee - GIRSAL (50% of Premium Cost) /d													
e. Agricultural Insurance /e	lumpsum	-	0.1	0.15	0.3	0.3	0.15	-	-	1			
f. Site specific monitoring of the environmental, climate and social conditions (ESMP)	lumpsum	-	0.1	0.2	0.2	0.2	0.2	0.5	0.5	1.9			
Subtotal													
3. Blended Finance Facility													
a. Development of the BFF													
TA to APEX Bank to develop the BFF	lumpsum	0.5	-	0.5	-	-	-	-	-	1			
Selection of the PFIs: TA to APEX Bank	lumpsum	0.2	0.2	0.2	0.2	0.2	-	-	-	1			
Subtotal													

Table 2.2. Access to Rural Financial Services [2.2]

Detailed Costs

	Unit	Quantities									Total
		2022	2023	2024	2025	2026	2027	2028	2029		
I. Investment Costs											
b. PFI Capacity Building											
Awareness raising and training on climate agriculture	lumpsum	0.17	0.17	0.17	0.17	0.17	0.17	-	-	1.02	
TA for PFIs to develop financial products (Green Lending) /f	lumpsum	0.2	0.1	0.2	0.2	0.2	0.1	-	-	1	
Tools and instruments to assess BPs (safeguards, mitigation, adaptation)	lumpsum	0.15	0.1	0.1	0.15	0.15	0.15	0.1	0.1	1	
TA to enhance governance and management of loan products	lumpsum	0.2	0.2	0.2	0.2	0.2	-	-	-	1	
Subtotal											
c. Management of the BFF at the APEX Bank											
BFF manager	per annum	0.5	1	1	1	1	1	1	0.5	7	
Two officers for north and middle belts	per annum	0.25	1	1.25	2	2	2	2	1	11.5	
Adaptation and Climate Coordinator	per annum	-	1	1	1	1	1	1	-	6	
Environment and Safeguard Specialist	per annum	-	1	1	1	1	1	1	-	6	
Vehicle pickup	Number	-	1	-	-	1	-	-	-	2	
Subtotal											
d. BP with BFF loans to RIs (Groups) with Value Chain Actors											
BP from groups of RIs financed by BFF loans - Rice	Number	-	2	2	2	3	4	4	-	17	
BP from groups of RIs financed by BFF loans - Maize	Number	-	2	2	2	3	4	4	-	17	
BP from groups of RIs financed by BFF loans - Soy	Number	-	2	2	3	3	4	4	-	18	
BP from groups of RIs financed by BFF loans - Cashew	Number	-	2	2	2	2	-	-	-	8	
BP from groups of RIs financed by BFF loans - shea	Number	-	2	2	3	3	4	4	-	18	
BP from groups of RIs financed by BFF loans - Poultry	Number	-	2	2	3	3	4	4	-	18	
Subtotal											
e. BP with BFF Loans for standalone MSMEs BPs (up to 20 employees)											
BP supported by BFF Loans (standalone MSMEs) - Rice	Number	-	2	2	2	2	3	3	-	14	
BP supported by BFF Loans (standalone MSMEs) - Maize	Number	-	2	2	2	2	3	3	-	14	
BP supported by BFF Loans (standalone MSMEs) - Soy	Number	-	2	2	2	2	3	2	2	15	
BP supported by BFF Loans (standalone MSMEs) - Cashew	Number	-	2	4	4	6	6	5	-	27	
BP supported by BFF Loans (standalone MSMEs) - Shea	Number	-	2	4	4	6	6	5	-	27	
BP supported by BFF Loans (standalone MSMEs)- Poultry	Number	-	2	2	2	2	3	3	-	14	
Subtotal											
f. GIRSAL Guarantee (50% of the premium cost) /g	Lumpsum	-	0.05	0.1	0.2	0.2	0.25	0.1	0.1	1	
g. Agricultural Insurance	Lumpsum	-	0.05	0.1	0.2	0.2	0.25	0.1	0.1	1	
Subtotal											
4. Rural Financial Services Specialist	person/year	0.5	1	1	1	1	1	1	0.5	7	
Total Investment Costs											
II. Recurrent Costs											
Total											

\a Volunteers trained as trainers. 1 Trainer per 25 Groups, 5300 Groups in total, 212 as total trainers, 9 Sessions for TOT (3 Days Each Training) Each Training for 25 Trainiers

\b 1 Trainer to train 25 groups. Each Trainer needs 5 days to mobilize the Group. Cost of 1 day is \$50.

\c TA to modify existing products at the banks to encourage savings mobilization

\d 50% of Premium Cost paid GIRSAL is borne by the project while the remaining 50% of the risk guarantee is incorporated in the basic business plan

\e 50% of Premium Cost paid GIRSAL is borne by the project while the remaining 50% of the risk guarantee is incorporated in the basic business plan

\f TA for PFIs to develop financial products for target group under the BFF including green lending and climate risk products

\g 50% of teh risk guarantee cost is incorporated in the Advance Business Plan (ABP)

Table 2.2. Access to Rural Financial Services [2.2]

Detailed Costs

	Unit Cost (US\$)	Totals Including Contingencies (US\$)									
		2022	2023	2024	2025	2026	2027	2028	2029	Total	
I. Investment Costs											
A. Access to Rural Financial Services.											
1. Savings mobilisation											
a. Promotion of Savings and Credit Group Methodology											
Training of trainers and mentors /a	1,200	2,521.9	1,292.6	3,974.3	4,053.8	-	-	-	-	11,842.6	
VSLA training and mentoring /b	250	223,295.9	228,889.3	331,192.4	337,816.3	344,572.6	-	-	-	1,465,766.4	
RCB training on VSLA and savings promotion /c	1,000	-	3,231.4	4,415.9	5,630.3	3,445.7	-	-	-	16,723.3	
Subtotal		225,817.8	233,413.2	339,582.6	347,500.3	348,018.3	-	-	-	1,494,332.2	
2. Activities Supported by Matching Grants											
a. Business Plans with Matching Grants for Groups of RIs											
BP with Matching grants for poorer groups of RIs - Rice	99.800	-	598,800.0	798,400.0	798,400.0	798,400.0	598,800.0	-	-	3,592,800.0	
BP with Matching grants for poorer groups of RIs - Maize	78.000	-	468,000.0	624,000.0	624,000.0	624,000.0	468,000.0	-	-	2,808,000.0	
BP with Matching grants for poorer groups of RIs - Soy	19.250	-	115,500.0	192,500.0	192,500.0	192,500.0	154,000.0	-	-	847,000.0	
BP with Matching grants for poorer groups of RIs - Cashew	192.500	-	96,250.0	385,000.0	866,250.0	1,010,625.0	914,375.0	529,375.0	48,125.0	3,850,000.0	
BP with Matching grants for poorer groups of RIs - shea	30.250	-	181,500.0	181,500.0	181,500.0	181,500.0	181,500.0	-	-	907,500.0	
BP with Matching grants for poorer groups of RIs - Poultry	25.053	-	150,318.0	250,530.0	250,530.0	250,530.0	250,530.0	-	-	1,152,438.0	
Subtotal		-	1,610,368.0	2,431,930.0	2,913,180.0	3,057,555.0	2,567,205.0	529,375.0	48,125.0	13,157,738.0	
b. BP with Matching Grants wth MSME (Standalone)											
BP with matching grant support for MSMEs (9 employees and few er)- Rice	25.244	-	100,976.0	176,708.0	176,708.0	176,708.0	176,708.0	-	-	807,808.0	
BP with matching grant support for MSMEs (9 employees and few er) - Maize	18.578	-	74,312.0	130,046.0	130,046.0	130,046.0	130,046.0	-	-	594,496.0	
BP with matching grant support for MSMEs (9 employees and few er) - Soy	21.975	-	87,900.0	153,825.0	153,825.0	153,825.0	153,825.0	-	-	703,200.0	
BP with matching grant support for MSMEs (9 employees and few er) - Cashew	21.867	-	87,468.0	153,069.0	153,069.0	153,069.0	153,069.0	-	-	699,744.0	
BP with matching grant support for MSMEs (9 employees and few er) - Shea	14.750	-	59,000.0	103,250.0	103,250.0	103,250.0	103,250.0	-	-	472,000.0	
BP with matching grant support for MSMEs (9 employees and few er) - Poultry	21.500	-	86,000.0	150,500.0	150,500.0	150,500.0	150,500.0	-	-	688,000.0	
Subtotal		-	495,656.0	867,398.0	867,398.0	867,398.0	867,398.0	-	-	3,965,248.0	
c. Investment wth Matching Grants for Nutrition and Other Poverty Initiatives											
Investment wth matching grants support for off-season vegetable production	5.000	-	50,000.0	75,000.0	75,000.0	75,000.0	75,000.0	75,000.0	25,000.0	450,000.0	
Investment wth matching grants support for post-harvest management (preservation/conservation)	5.000	-	-	25,000.0	25,000.0	25,000.0	25,000.0	25,000.0	25,000.0	150,000.0	
Investment wth matching grants support for small ruminants (goats)	12.000	-	60,000.0	60,000.0	60,000.0	60,000.0	60,000.0	60,000.0	60,000.0	420,000.0	
Investment wth matching grants support for poultry - egg production	5.000	-	25,000.0	25,000.0	25,000.0	25,000.0	25,000.0	25,000.0	25,000.0	175,000.0	
Investment wth matching grants support for MSME along the food system	5.000	-	25,000.0	25,000.0	25,000.0	25,000.0	25,000.0	25,000.0	25,000.0	175,000.0	
Subtotal		-	160,000.0	210,000.0	210,000.0	210,000.0	210,000.0	210,000.0	160,000.0	1,370,000.0	
d. Agricultural risk guarantee - GIRSAL (50% of Premium Cost) /d											
TA to APEX Bank to develop the BFF	125.000	-	12,500.0	18,750.0	37,500.0	37,500.0	18,750.0	-	-	125,000.0	
Selection of the PFIs: TA to APEX Bank	350.000	-	35,000.0	70,000.0	70,000.0	70,000.0	70,000.0	175,000.0	175,000.0	665,000.0	
Subtotal		-	15.000	16,156.9	16,559.6	16,890.8	17,228.6	17,573.2	17,924.7	18,283.2	120,617.0
e. Agricultural Insurance /e											
f. Site specific monitoring of the environmental, climate and social conditions (ESMP)	15.000	-	2,329,680.9	3,614,637.6	4,114,968.8	4,259,681.6	3,750,926.2	932,299.7	401,408.2	19,403,603.0	
Subtotal		-	99,826.4	48,470.7	104,877.6	50,672.4	51,685.9	-	-	355,533.0	
3. Blended Finance Facility											
a. Development of the BFF											
TA to APEX Bank to develop the BFF	100.000	52,540.2	-	55,198.7	-	-	-	-	-	107,738.9	
Selection of the PFIs: TA to APEX Bank	225.000	47,286.2	48,470.7	49,678.9	50,672.4	51,685.9	-	-	-	247,794.0	
Subtotal		-	99,826.4	48,470.7	104,877.6	50,672.4	51,685.9	-	-	355,533.0	

Table 2.2. Access to Rural Financial Services [2.2]

Detailed Costs	Unit Cost (US\$)	Totals Including Contingencies (US\$)									
		2022	2023	2024	2025	2026	2027	2028	2029	Total	
I. Investment Costs											
b. PFI Capacity Building											
Awareness raising and training on climate agriculture	75,000	13,397.8	13,733.4	14,075.7	14,357.2	14,644.3	14,937.2	-	-	85,145.5	
TA for PFIs to develop financial products (Green Lending) /f	150,000	31,524.1	16,156.9	33,119.2	33,781.6	34,457.3	17,573.2	-	-	166,612.3	
Tools and instruments to assess BPs (safeguards, mitigation, adaptation)	100,000	15,762.1	10,771.3	11,039.7	16,890.8	17,228.6	17,573.2	11,949.8	12,188.8	113,404.3	
TA to enhance governance and management of loan products	100,000	21,016.1	21,542.5	22,079.5	22,521.1	22,971.5	-	-	-	110,130.7	
Subtotal		81,700.0	62,204.0	80,314.2	87,550.7	89,301.7	50,083.6	11,949.8	12,188.8	475,292.8	
c. Management of the BFF at the APEX Bank											
BFF manager	50.400	26,480.3	54,287.2	55,640.3	56,753.1	57,888.2	59,046.0	60,226.9	30,715.7	401,037.6	
Two officers for north and middle belts	40.680	10,686.7	43,817.5	56,137.1	91,615.8	93,448.1	95,317.0	97,223.4	49,583.9	537,829.5	
Adaptation and Climate Coordinator	40.680	-	43,817.5	44,909.7	45,807.9	46,724.0	47,658.5	48,611.7	-	277,529.3	
Environment and Safeguard Specialist	40.680	-	43,817.5	44,909.7	45,807.9	46,724.0	47,658.5	48,611.7	-	277,529.3	
Vehicle pickup	30.000	-	33,929.5	-	-	36,180.1	-	-	-	70,109.6	
Subtotal		37,166.9	219,669.1	201,596.8	239,984.7	280,964.5	249,680.0	254,673.6	80,299.6	1,564,035.3	
d. BP with BFF loans to RIs (Groups) with Value Chain Actors											
BP from groups of RIs financed by BFF loans - Rice	487.680	-	1,050,585.7	1,076,772.7	1,098,308.2	1,680,411.5	2,285,359.7	2,331,066.9	-	9,522,504.8	
BP from groups of RIs financed by BFF loans - Maize	408.507	-	880,027.1	901,962.8	920,002.0	1,407,603.1	1,914,340.2	1,952,627.0	-	7,976,562.3	
BP from groups of RIs financed by BFF loans - Soy	158.200	-	340,802.7	349,297.6	534,425.3	545,113.8	741,354.8	756,181.9	-	3,267,176.1	
BP from groups of RIs financed by BFF loans - Cashew	1,514.899	-	3,263,474.6	3,344,820.3	3,411,716.7	3,479,951.0	-	-	-	13,499,962.6	
BP from groups of RIs financed by BFF loans - shea	258.000	-	555,797.1	569,650.9	871,565.9	888,997.3	1,209,036.3	1,233,217.0	-	5,328,264.4	
BP from groups of RIs financed by BFF loans - Poultry	444.835	-	958,286.8	982,173.2	1,502,724.9	1,532,779.4	2,084,580.0	2,126,271.6	-	9,186,815.9	
Subtotal		-	7,048,974.0	7,224,677.5	8,338,743.1	9,534,856.2	8,234,671.0	8,399,364.4	-	48,781,286.1	
e. BP with BFF Loans for standalone MSMEs BPs (up to 20 employees)											
BP supported by BFF Loans (standalone MSMEs) - Rice	117.533	-	253,195.7	259,506.9	264,697.1	269,991.0	413,086.2	421,347.9	-	1,881,824.8	
BP supported by BFF Loans (standalone MSMEs) - Maize	136.100	-	293,193.7	300,501.9	306,511.9	312,642.2	478,342.5	487,909.4	-	2,179,101.7	
BP supported by BFF Loans (standalone MSMEs) - Soy	136.100	-	293,193.7	300,501.9	306,511.9	312,642.2	478,342.5	325,272.9	331,778.4	2,348,243.6	
BP supported by BFF Loans (standalone MSMEs) - Cashew	40.233	-	86,672.0	177,664.9	181,218.2	277,263.8	282,809.0	240,387.7	-	1,246,015.5	
BP supported by BFF Loans (standalone MSMEs) - Shea	55.000	-	118,483.9	242,874.4	247,731.9	379,029.8	386,610.4	328,618.9	-	1,703,349.4	
BP supported by BFF Loans (standalone MSMEs) - Poultry	189.000	-	407,153.7	417,302.4	425,648.5	434,161.4	664,267.0	677,552.4	-	3,026,085.4	
Subtotal		-	1,451,892.8	1,698,352.4	1,732,319.5	1,985,730.4	2,703,457.8	2,481,089.2	331,778.4	12,384,620.5	
f. GIRSAL Guarantee (50% of the premium cost) /g	350.000	-	18,849.7	38,639.1	78,823.8	80,400.3	102,510.3	41,824.2	42,660.7	403,708.1	
g. Agricultural Insurance	500.000	-	26,928.2	55,198.7	112,605.4	114,857.5	146,443.3	59,748.9	60,943.9	576,725.9	
Subtotal		218,693.3	8,876,988.4	9,403,656.3	10,640,699.6	12,137,796.5	11,486,846.2	11,248,650.1	527,871.4	64,541,201.8	
4. Rural Financial Services Specialist	40.680	21,373.4	43,817.5	44,909.7	45,807.9	46,724.0	47,658.5	48,611.7	24,792.0	323,694.6	
Total Investment Costs		465,884.5	11,483,900.0	13,402,786.3	15,148,976.6	16,792,220.4	15,285,430.9	12,229,561.5	954,071.5	85,762,831.7	
II. Recurrent Costs											
Total		465,884.5	11,483,900.0	13,402,786.3	15,148,976.6	16,792,220.4	15,285,430.9	12,229,561.5	954,071.5	85,762,831.7	

\a Volunteers trained as trainers. 1 Trainer per 25 Groups, 5300 Groups in total, 212 as total trainers, 9 Sessions for TOT (3 Days Each Training) Each Training for 25 Trainiers

\b 1 Trainer to train 25 groups. Each Trainer needs 5 days to mobilize the Group. Cost of 1 day is \$50.

\c TA to modify existing products at the banks to encourage savings mobilization

\d 50% of Premium Cost paid GIRSAL is borne by the project while the remaining 50% of the risk guarantee is incorporated in the basic business plan

\e 50% of Premium Cost paid GIRSAL is borne by the project while the remaining 50% of the risk guarantee is incorporated in the basic business plan

\f TA for PFIs to develop financial products for target group under the BFF including green lending and climate risk products

\g 50% of teh risk guarantee cost is incorporated in the Advance Business Plan (ABP)

Component 3. Project Management and Policy Engagement

Table 18. Subcomponent 3.1. Project Management

Republic of Ghana
PROSPER

Table 3.1. Project Management [3.1]

Detailed Costs

	Unit	Quantities									Total		
		2022	2023	2024	2025	2026	2027	2028	2029				
I. Investment Costs													
A. Project Management													
1. Infrastructure, vehicles and equipment													
a. Office Building and Equipment													
Office building	lumpsum	0.75	-	0.25	-	-	-	-	-	1			
Computer sets	set	10	-	-	-	-	-	-	-	10			
Computer sets-2	set	-	-	10	-	-	5	-	-	15			
Multifunction Laser Printer	Unit	2	-	-	-	-	-	-	-	2			
Multifunction Laser Printer-2	Unit	-	-	-	2	-	-	-	-	2			
Multifunction Laser Printer-3 /a	Unit	-	-	-	3	-	-	-	-	3			
Office furniture	Sum	1	-	1	-	-	-	-	-	2			
Air Conditioners	Unit	10	-	-	-	-	-	-	-	10			
Office equipment, various	Sum	0.3	-	0.5	-	0.2	-	-	-	1			
Subtotal													
b. Vehicles													
4WD pickup	unit	-	-	-	-	5	-	-	-	5			
4WD pickup	unit	15	-	-	-	-	-	-	-	15			
4WD station w agon	unit	-	-	-	-	1	-	-	-	1			
4WD station w agon	unit	2	-	-	-	-	-	-	-	2			
Subtotal													
Subtotal													
2. Project management and coordination													
a. Support for IFAD Desks in MoFA and MoF													
Vehicle	unit	2	-	-	-	-	-	-	-	2			
Trainings for Desk Officers	LS	2	2	2	2	-	-	-	-	8			
Trainings for Desk Officers	LS	2	2	2	2	-	-	-	-	8			
Equipment for IFAD Desks in MoFA and MoF	LS	2	-	-	-	-	-	-	-	2			
Subtotal													
b. Support for GIMFIS Implementation													
Equipment for Internet Connectivity	unit	0.4	0.2	0.4	-	-	-	-	-	1			
c. Project support													
Supervision missions	mission	-	1	1	1	1	1	1	1	7			
Implementation support missions	mission	-	1	1	1	1	1	1	1	7			
Unspecified studies and contract supervision	LS	1	1	1	1	1	1	1	1	8			
Subtotal													
Subtotal													
3. Audit													
a. Internal audit	LS	-	1	1	1	1	1	1	1	7			
b. External audit	LS	-	1	1	1	1	1	1	1	7			
c. Meetings and workshops													
Project steering committee meetings	meeting	2	2	2	2	2	2	2	2	16			
Consultative stakeholder w orkshops	Workshop	1	1	1	1	1	1	1	1	8			
Consultative AWFB w orkshop	Workshop	1	1	1	1	1	1	1	1	8			
Subtotal													
d. Staff development													
Training	LS	2	5	3	5	3	3	3	-	24			
Subtotal													
4. Knowledge management and learning													
a. KM strategy formulation.	consultancy	1	-	-	-	-	-	-	-	1			
b. Studies and learning products including climate	LS	-	0.1	0.1	0.1	0.2	0.25	0.25	-	1			
c. Learning events and communications materials incl climate	Event	-	0.1	0.1	0.2	0.2	0.2	0.2	-	1			
d. Communications and publications	LS	1	1	1	1	1	1	1	1	8			
e. South-South and triangular cooperation - tours	Workshop	-	-	1	1	-	1	1	-	4			
f. Annual Sahel Aw ard	event	-	-	1	1	1	1	-	-	4			
g. Sahel Aw ard replenishment	event	-	-	1	1	1	1	-	-	4			
h. Develop Sahel Aw ard protocols	LS	-	-	-	1	-	-	-	-	1			
i. Enrol w omen and Youth to compete for Sahel Award	LS	-	-	1	1	1	1	-	-	4			
Subtotal													

Table 3.1. Project Management [3.1]
Detailed Costs

Unit	Quantities									Total	
	2022	2023	2024	2025	2026	2027	2028	2029			
A. Project Management											
I. Investment Costs											
5. M&E/MIS system											
M&E software (PLAMES)	Software	1	-	-	-	-	-	-	-	1	
ArcGIS	Software	1	-	-	-	-	-	-	-	1	
ArcGIS licence	Licence	-	-	1	1	1	1	1	1	6	
Specialist services	Month	2	1	1	1	1	1	1	1	9	
Training on M&E and RBM for Staff and Partners	Workshop	1	1	1	1	1	1	1	1	8	
Subtotal											
6. M&E studies and reviews											
a. Baseline Study	Study	1	-	-	-	-	-	-	-	1	
b. Mid-Term Review	Study	-	-	-	1	-	-	-	-	1	
c. Completion Study	Study	-	-	-	-	-	-	-	1	1	
d. Outcome and Impact thematic studies	lumpsum	-	-	-	1	1	2	2	2	8	
e. Environmental, Climate and Social Monitoring (ESMP)	lumpsum	1	1	1	1	1	1	1	1	8	
f. Conflict Resolution and Land Governance Dialogue (ESMP) /b	lumpsum	-	-	1	-	-	-	-	-	1	
g. Other Social Monitoring (GBV, SEAH Vulnerability) - ESMP/c	lumpsum	1	1	1	1	1	1	1	1	8	
h. Health Insurance and Outreach Monitoring [ESMP] /d	lumpsum	1	1	1	1	1	1	1	1	8	
i. Environmental, Climate and Social Audit /e	lumpsum	-	1	-	-	1	-	-	-	2	
Subtotal											
Total Investment Costs											
II. Recurrent Costs											
A. Salaries											
1. Project Coordinator	person/year	0.8	1	1	1	1	1	1	1	7.8	
2. KM/M&E Manager	year	0.8	1	1	1	1	1	1	1	7.8	
3. KM/M&E Officer	pers-year	0.8	1	1	1	1	1	1	1	7.8	
4. M&E/MIS assistant	pers-year	0.8	2	2	2	2	2	2	2	14.8	
5. Financial Controller	year	0.8	1	1	1	1	1	1	1	7.8	
6. Project Accountant	pers-year	0.8	1	1	1	1	1	1	1	7.8	
7. Project Accountant - GCF /f	pers-year	0.8	1	1	1	1	1	1	1	7.8	
8. Accountant Assistant	year	0.5	1	1	1	1	1	1	1	7.5	
9. Accountant Assistant - GCF /g	year	0.5	1	1	1	1	1	1	1	7.5	
10. Procurement Manager	year	0.8	1	1	1	1	1	1	1	7.8	
11. Procurement Assistant	year	0.5	1	1	1	1	1	1	1	7.5	
12. Admin. Assistant	year	0.8	1	2	2	2	2	1	1	11.8	
13. Office Assistant	year	0.8	2	2	2	2	2	2	2	14.8	
14. Drivers	year	0.8	2	4	4	4	4	4	4	26.8	
15. PROSPER Liaison Officer	year	0.8	1	1	1	1	1	1	1	7.8	
16. LO Assistant	year	0.8	1	1	1	1	1	1	1	7.8	
Subtotal											
B. Operating costs (Proj Mgt + Policy)											
1. Staff Monitoring Activities	LS	0.5	0.5	1	1	1	1	1	1	7	
2. MOFA-PCU/IFAD Desk Monitoring Activities	LS	0.5	0.5	1	1	1	1	1	1	7	
3. Stationary and Sanitary Supplies	LS	0.5	0.5	1	1	1	1	1	1	7	
4. Vehicle Running, Repairs, & Maintenance	vehicle/year	17	17	17	17	23	23	23	23	160	
5. Utilities	LS	1	1	1	1	1	1	1	1	8	
6. Computer & Equipment Maintenance, miscellaneous.	LS	0.5	0.5	1	1	1	1	1	1	7	
Subtotal											
Total Recurrent Costs											
Total											

la Support to IFAD Desks at MOFA Directorates

lb One-time support

lc Surveys

ld Surveys

le Workshop for ECS Officers

lf Reference IGREENFIN Workshop in Sept. 2021 in Abidjan. The PMU for participating countries of the IGREENFIN project would have 1 Project Accountant and 1 Assistant Accountant each for Ghana, Mali and Côte D'Ivoire

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Table 3.1. Project Management [3.1]

Detailed Costs

	Unit Cost (US\$)	Totals Including Contingencies (US\$)									
		2022	2023	2024	2025	2026	2027	2028	2029	Total	
I. Investment Costs											
A. Project Management											
1. Infrastructure, vehicles and equipment											
a. Office Building and Equipment											
Office building	150,000	124,126.2	-	43,469.0	-	-	-	-	-	167,595.2	
Computer sets	500	5,516.7	-	-	-	-	-	-	-	5,516.7	
Computer sets-2	1,000	-	-	11,591.7	-	-	6,150.6	-	-	17,742.4	
Multifunction Laser Printer	5,000	11,033.4	-	-	-	-	-	-	-	11,033.4	
Multifunction Laser Printer-2	10,000	-	-	-	23,647.1	-	-	-	-	23,647.1	
Multifunction Laser Printer-3 /a	10,000	-	-	-	35,470.7	-	-	-	-	35,470.7	
Office furniture	4,000	4,413.4	-	4,636.7	-	-	-	-	-	9,050.1	
Air Conditioners	2,000	22,066.9	-	-	-	-	-	-	-	22,066.9	
Office equipment, various	125,000	41,375.4	-	72,448.3	-	30,150.1	-	-	-	143,973.8	
Subtotal		208,532.1	-	132,145.8	59,117.8	30,150.1	6,150.6	-	-	436,096.4	
b. Vehicles											
4WD pickup	30,000	-	-	-	180,900.6	-	-	-	-	180,900.6	
4WD pickup	24,000	397,203.9	-	-	-	-	-	-	-	397,203.9	
4WD station w agon	60,000	-	-	-	72,360.2	-	-	-	-	72,360.2	
4WD station w agon	45,000	99,301.0	-	-	-	-	-	-	-	99,301.0	
Subtotal		496,504.9	-	-	253,260.8	-	-	-	-	749,765.7	
Subtotal		705,036.9	-	132,145.8	59,117.8	283,410.9	6,150.6	-	-	1,185,862.1	
2. Project management and coordination											
a. Support for IFAD Desks in MoFA and MoF											
Vehicle	30,000	66,200.7	-	-	-	-	-	-	-	66,200.7	
Trainings for Desk Officers	2,500	5,254.0	5,385.6	5,519.9	5,630.3	-	-	-	-	21,789.8	
Trainings for Desk Officers	2,500	5,254.0	5,385.6	5,519.9	5,630.3	-	-	-	-	21,789.8	
Equipment for IFAD Desks in MoFA and MoF	5,000	11,033.4	-	-	-	-	-	-	-	11,033.4	
Subtotal		87,742.1	10,771.3	11,039.7	11,260.5	-	-	-	-	120,813.7	
b. Support for GIMFIS Implementation											
Equipment for Internet Connectivity	100,000	44,133.8	22,619.6	46,366.9	-	-	-	-	-	113,120.4	
c. Project support											
Supervision missions	15,000	-	16,156.9	16,559.6	16,890.8	17,228.6	17,573.2	17,924.7	18,283.2	120,617.0	
Implementation support missions	10,000	-	10,771.3	11,039.7	11,260.5	11,485.8	11,715.5	11,949.8	12,188.8	80,411.3	
Unspecified studies and contract supervision	20,000	21,016.1	21,542.5	22,079.5	22,521.1	22,971.5	23,430.9	23,899.6	24,377.5	181,838.7	
Subtotal		21,016.1	48,470.7	49,678.9	50,672.4	51,685.9	52,719.6	53,774.0	54,849.5	382,867.0	
Subtotal		152,892.0	81,861.6	107,085.5	61,933.0	51,685.9	52,719.6	53,774.0	54,849.5	616,801.1	
3. Audit											
a. Internal audit	5,000	-	5,385.6	5,519.9	5,630.3	5,742.9	5,857.7	5,974.9	6,094.4	40,205.7	
b. External audit	15,000	-	16,156.9	16,559.6	16,890.8	17,228.6	17,573.2	17,924.7	18,283.2	120,617.0	
c. Meetings and workshops											
Project steering committee meetings	5,000	10,508.0	10,771.3	11,039.7	11,260.5	11,485.8	11,715.5	11,949.8	12,188.8	90,919.4	
Consultative stakeholder w orkshops	5,000	5,254.0	5,385.6	5,519.9	5,630.3	5,742.9	5,857.7	5,974.9	6,094.4	45,459.7	
Consultative AWPB w orkshop	10,000	10,508.0	10,771.3	11,039.7	11,260.5	11,485.8	11,715.5	11,949.8	12,188.8	90,919.4	
Subtotal		26,270.1	26,928.2	27,599.4	28,151.4	28,714.4	29,288.7	29,874.4	30,471.9	227,298.4	
d. Staff development											
Training	3,000	6,304.8	16,156.9	9,935.8	16,890.8	10,337.2	10,543.9	10,754.8	-	80,924.2	
Subtotal		32,574.9	64,627.6	59,614.6	67,563.3	62,023.1	63,263.5	64,528.8	54,849.5	469,045.2	
4. Knowledge management and learning											
a. KM strategy formulation.	10,000	10,508.0	-	-	-	-	-	-	-	10,508.0	
b. Studies and learning products including climate	300,000	-	32,313.8	33,119.2	33,781.6	68,914.5	87,866.0	89,623.3	-	345,618.5	
c. Learning events and communications materials incl climate	300,000	-	32,313.8	33,119.2	67,563.3	68,914.5	70,292.8	71,698.7	-	343,902.3	
d. Communications and publications	10,000	10,508.0	10,771.3	11,039.7	11,260.5	11,485.8	11,715.5	11,949.8	12,188.8	90,919.4	
e. South-South and triangular cooperation - tours	20,000	-	-	22,079.5	22,521.1	-	23,430.9	23,899.6	-	91,931.1	
f. Annual Sahel Award	40,000	-	-	44,159.0	45,042.2	45,943.0	46,861.9	-	-	182,006.0	
g. Sahel Award replenishment	40,000	-	-	44,159.0	45,042.2	45,943.0	46,861.9	-	-	182,006.0	
h. Develop Sahel Award protocols	30,000	-	-	-	33,781.6	-	-	-	-	33,781.6	
i. Enrol women and Youth to compete for Sahel Award	40,000	-	-	44,159.0	45,042.2	45,943.0	46,861.9	-	-	182,006.0	
Subtotal		21,016.1	75,398.8	231,834.7	304,034.6	287,143.8	333,890.8	197,171.3	12,188.8	1,462,679.0	

Detailed Costs

	Unit Cost (US\$)	Totals Including Contingencies (US\$)								Total		
		2022	2023	2024	2025	2026	2027	2028	2029			
I. Investment Costs												
A. Project Management												
5. M&E/MIS system												
M&E softw are (PLAMES)	20.000	22,066.9	-	-	-	-	-	-	-	22,066.9		
ArcGIS	43.000	47,443.8	-	-	-	-	-	-	-	47,443.8		
ArcGIS licence	7.000	-	-	8,114.2	8,276.5	8,442.0	8,610.9	8,783.1	8,958.7	51,185.4		
Specialist services	25.000	52,540.2	26,928.2	27,599.4	28,151.4	28,714.4	29,288.7	29,874.4	30,471.9	253,568.5		
Training on M&E and RBM for Staff and Partners	10.000	10,508.0	10,771.3	11,039.7	11,260.5	11,485.8	11,715.5	11,949.8	12,188.8	90,919.4		
Subtotal		132,558.9	37,699.4	46,753.3	47,688.4	48,642.2	49,615.0	50,607.3	51,619.5	465,184.0		
6. M&E studies and reviews												
a. Baseline Study	150.000	157,620.6	-	-	-	-	-	-	-	157,620.6		
b. Mid-Term Review	150.000	-	-	-	168,908.1	-	-	-	-	168,908.1		
c. Completion Study	150.000	-	-	-	-	-	-	-	-	182,831.6		
d. Outcome and Impact thematic studies	25.000	-	-	-	28,151.4	28,714.4	58,577.3	59,748.9	60,943.9	236,135.8		
e. Environmental, Climate and Social Monitoring (ESMP)	25.000	26,270.1	26,928.2	27,599.4	28,151.4	28,714.4	29,288.7	29,874.4	30,471.9	227,298.4		
f. Conflict Resolution and Land Governance Dialogue (ESMP) /b	300.000	-	-	331,192.4	-	-	-	-	-	331,192.4		
g. Other Social Monitoring (GBV, SEAH Vulnerability) - ESMP /c	12.500	13,135.1	13,464.1	13,799.7	14,075.7	14,357.2	14,644.3	14,937.2	15,236.0	113,649.2		
h. Health Insurance and Outreach Monitoring [ESMP] /d	12.500	13,135.1	13,464.1	13,799.7	14,075.7	14,357.2	14,644.3	14,937.2	15,236.0	113,649.2		
i. Environmental, Climate and Social Audit /e	50.000	-	53,856.3	-	-	57,428.8	-	-	-	111,285.1		
Subtotal		210,160.8	107,712.6	386,391.1	253,362.2	143,571.9	117,154.7	119,497.8	304,719.3	1,642,570.4		
Total Investment Costs		1,254,239.7	367,300.0	963,825.1	793,699.3	876,477.8	622,794.3	485,579.2	478,226.5	5,842,141.8		
II. Recurrent Costs												
A. Salaries												
1. Project Coordinator	60.000	50,438.6	64,627.6	66,238.5	67,563.3	68,914.5	70,292.8	71,698.7	73,132.6	532,906.5		
2. KM/M&E Manager	50.400	42,368.4	54,287.2	55,640.3	56,753.1	57,888.2	59,046.0	60,226.9	61,431.4	447,641.5		
3. KM/M&E Officer	40.680	34,197.4	43,817.5	44,909.7	45,807.9	46,724.0	47,658.5	48,611.7	49,583.9	361,310.6		
4. M&E/MIS assistant	10.200	8,574.6	21,973.4	22,521.1	22,971.5	23,430.9	23,899.6	24,377.5	24,865.1	172,613.7		
5. Financial Controller	50.400	42,368.4	54,287.2	55,640.3	56,753.1	57,888.2	59,046.0	60,226.9	61,431.4	447,641.5		
6. Project Accountant	40.680	34,197.4	43,817.5	44,909.7	45,807.9	46,724.0	47,658.5	48,611.7	49,583.9	361,310.6		
7. Project Accountant - GCF /f	40.680	34,197.4	43,817.5	44,909.7	45,807.9	46,724.0	47,658.5	48,611.7	49,583.9	361,310.6		
8. Accountant Assistant	10.200	5,359.1	10,986.7	11,260.5	11,485.8	11,715.5	11,949.8	12,188.8	12,432.5	87,378.6		
9. Accountant Assistant - GCF /g	10.200	5,359.1	10,986.7	11,260.5	11,485.8	11,715.5	11,949.8	12,188.8	12,432.5	87,378.6		
10. Procurement Manager	50.400	42,368.4	54,287.2	55,640.3	56,753.1	57,888.2	59,046.0	60,226.9	61,431.4	447,641.5		
11. Procurement Assistant	10.200	5,359.1	10,986.7	11,260.5	11,485.8	11,715.5	11,949.8	12,188.8	12,432.5	87,378.6		
12. Admin. Assistant	10.200	8,574.6	10,986.7	22,521.1	22,971.5	23,430.9	23,899.6	24,377.5	17,207.7	17,551.8		
13. Office Assistant	7.200	6,052.6	15,510.6	15,897.2	16,215.2	16,539.5	16,870.3	17,207.7	17,551.8	121,844.9		
14. Drivers	7.200	6,052.6	15,510.6	31,794.5	32,430.4	33,079.0	33,740.5	34,415.4	35,103.7	222,126.6		
15. PROSPER Liaison Officer	40.680	34,197.4	43,817.5	44,909.7	45,807.9	46,724.0	47,658.5	48,611.7	49,583.9	361,310.6		
16. LO Assistant	10.200	8,574.6	10,986.7	11,260.5	11,485.8	11,715.5	11,949.8	12,188.8	12,432.5	90,594.1		
Subtotal		368,239.6	510,687.0	550,574.3	561,585.7	572,817.5	584,273.8	583,770.5	595,445.9	4,327,394.3		
B. Operating costs (Proj Mgt + Policy)												
1. Staff Monitoring Activities	65.000	34,151.1	35,006.6	71,758.4	73,193.5	74,657.4	76,150.5	77,673.6	79,227.0	521,818.1		
2. MOFA-PCU/IFAD Desk Monitoring Activities	10.000	5,254.0	5,385.6	11,039.7	11,260.5	11,485.8	11,715.5	11,949.8	12,188.8	80,279.7		
3. Stationary and Sanitary Supplies	25.000	13,135.1	13,464.1	27,599.4	28,151.4	28,714.4	29,288.7	29,874.4	30,471.9	200,699.3		
4. Vehicle Running, Repairs, & Maintenance	5.000	89,318.3	91,555.7	93,837.8	95,714.6	132,086.2	134,727.9	137,422.4	140,170.9	914,833.9		
5. Utilities	40.000	42,032.2	43,085.0	44,159.0	45,042.2	45,943.0	46,861.9	47,799.1	48,755.1	363,677.4		
6. Computer & Equipment Maintenance, miscellaneous.	15.000	7,881.0	8,078.4	16,559.6	16,890.8	17,228.6	17,573.2	17,924.7	18,283.2	120,419.6		
Subtotal		191,771.7	196,575.5	264,953.9	270,253.0	310,115.3	316,317.6	322,644.0	329,096.9	2,201,728.0		
Total Recurrent Costs		560,011.3	707,262.6	815,528.2	831,838.7	882,932.8	900,591.4	906,414.5	924,542.8	6,529,122.2		
Total		1,814,250.9	1,074,562.6	1,779,353.3	1,625,538.0	1,759,410.6	1,523,385.7	1,391,993.7	1,402,769.3	12,371,264.0		

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Table 19. Subcomponent 3.2. Policy Engagement

Republic of Ghana
PROSPER

Table 3.2. Policy Engagement [3.2]

Detailed Costs

	Unit	Quantities									Total		
		2022	2023	2024	2025	2026	2027	2028	2029				
I. Investment Costs													
A. Policy Engagement													
1. Sectoral policy support to GoG													
Short Studies Related to ASWG	lumpsum	1	1	1	1	1	1	1	1	8			
TA Support to Green Finance and Green Agriculture	TA days	1	1	1	1	1	1	1	1	8			
Studies on Different Policy Topics	study	-	1	1	1	1	1	-	-	5			
Dialogue and advocacy on policy Topics /a	lumpsum	1	1	1	1	1	1	1	1	8			
Support to BoG on climate risk and green finance	Lumsum	-	0.5	-	-	0.5	-	-	-	1			
Total Investment Costs													
II. Recurrent Costs													
Total													

	Unit Cost (US\$)	Totals Including Contingencies (US\$)									Total		
		2022	2023	2024	2025	2026	2027	2028	2029				
I. Investment Costs													
A. Policy Engagement													
1. Sectoral policy support to GoG													
Short Studies Related to ASWG	2.500	2,627.0	2,692.8	2,759.9	2,815.1	2,871.4	2,928.9	2,987.4	3,047.2	22,729.8			
TA Support to Green Finance and Green Agriculture	12.500	13,135.1	13,464.1	13,799.7	14,075.7	14,357.2	14,644.3	14,937.2	15,236.0	113,649.2			
Studies on Different Policy Topics	10.000	-	10,771.3	11,039.7	11,260.5	11,485.8	11,715.5	-	-	56,272.8			
Dialogue and advocacy on policy Topics /a	7.500	7,881.0	8,078.4	8,279.8	8,445.4	8,614.3	8,786.6	8,962.3	9,141.6	68,189.5			
Support to BoG on climate risk and green finance	70.000	-	37,699.4	-	-	40,200.1	-	-	-	77,899.5			
Total Investment Costs		23,643.1	72,706.0	35,879.2	36,596.8	77,528.8	38,075.3	26,887.0	27,424.7	338,740.9			
II. Recurrent Costs													
Total		23,643.1	72,706.0	35,879.2	36,596.8	77,528.8	38,075.3	26,887.0	27,424.7	338,740.9			

Ghana

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Project Design Report

Annex 4: Economic and Financial Analysis

Mission Dates: 02/08/2021 to 20/09/2021

Document Date: 22/11/2021

Project No. 2000002673

Report No. 5864-GH

West and Central Africa Division
Programme Management Department

Annex 4: Economic and Financial Analysis

Introduction. The EFA of the PROSPER covers the overall increase in production costs at the crop level, the MSME level and the RI level, and the overall project level, which will be compared with the increase of their economic costs. The prices used for EFA correspond to those paid to producers for farmgate price. Based on the data available, the mission developed 10 models for EFA: i) three selected models for crop production (rice, maize and soy), ii) four selected matching grants Crops MSMEs (Small and Medium-sized Enterprises) for rice, maize, soy, and poultry; and iii) Loans Cluster of Rural Institutions (RI) for matching grant RI Cluster for rice, maize, and soy.

1. Productivity increases are expected through improved agricultural practices, increased use of inputs, improved crop intensity, a better valuation of downstream of different value chains, and cost-effectiveness of infrastructure such as roads. Productivity of the various speculations was low without project, mainly because of the low use of inputs (phytosanitary treatment, mineral manure, size). They have been significantly improved through the PROSPER.
2. The MSME level analysis was done for rice milling, soy aggregation, maize aggregation and poultry feed. MSME model for rice is to buy Paddy, aggregate to sell to big buyers/processors and to buy the straw from the field, mix it with salt and cashew nutshell as livestock feed. MSME Model of maize is to aggregate and to sell to big buyers and processors, and to use the maize cobs and husks to produce animal feed. MSME Model of soy is to buy soy, aggregate to sell to big buyers / processors and to buy the vegetative part from the field, mix it with salt and possibly cashew nutshell as livestock feed. MSME Model for poultry is to buy chicken, aggregate, supply feed, drugs, and other inputs, but also to buy chicken from producers, slaughter, process and sell.
3. *Financial analysis.* Financial analysis on these models covered: finance and investment, operating costs, revenue estimation, operating statement, depreciation and amortization, proposed loan (Capex and working capital) and loan repayment, free cash flow analysis showing NPV and IRR from the equity holders' perspective. The RI level analysis focused on the production cost as against revenue per hectare for rice, soy, and maize over a 20-year period for each model.
4. The increases in production costs relate to the production developed by the PROSPER as they relate to investments made, which include the purchase of seeds, and the use of fertilizers. The productivity is assumed to increase.
5. Increases in gross margins, albeit cautious, are relatively high. These increases are significantly larger for Project-targeted productions in terms of intensification. The ultimate objective is to sustainably improve farm incomes of the small and micro-farm, which represents most farms in the PROSPER area. The gross margins of the value chains analysed (rice, maize, and soy) show that their contribution to income generation is significant for small producers in the PROSPER area.
6. The financial profitability indicators of the different production models such as net present value (NPV) and financial internal rate of return (IRR) when applicable indicate that these models are highly profitable. The profitability of crops and MSME remains subject to the risk of price changes in the market. Similarly, producers' profit margins are affected by the selling prices of their products, which vary widely. Prices can range from simple to quintuple due to the defective and disorganized marketing channels, to the multitude of operators and intermediaries present in the different production areas and to the antiquated upgrading units.
7. *Infrastructure.* The project will rehabilitate 90 km of rural roads. This infrastructure improves the quality of life of rural populations, including vulnerable populations (women, youth) by: i) the opening up of communities and villages with residents who are farmers and traders, significantly improving the movement of people and goods, and improved access to advisory services, increased productivity and agricultural products and livestock and fisheries; ii) the reduction of post-harvest losses through

improved transport conditions; iii) increased producer prices due to improved market access in the local and regional markets; and improving means of transportation (vehicles, motorcycles, bicycles, tricycles, etc.) and access to rural services as well as the reduction of maintenance costs and of transport prices of people and goods. MSMEs are in the production areas. Matching grants (cost-sharing financing) allowed the MSME development around localities.

8. *Beneficiaries of the project.* The PROSPER target groups are producers, investors, MSMEs and households located in the project area. Farmers were expected to benefit directly from the project, including women, and youth. In addition SMEs and RI will take advantage of positive externalities brought by the project. Indirect beneficiaries will include local institutions and the families of workers directly employed by the project. Finally, in the targeted areas will also benefit from the increase in taxes driven by the development of economic activities.
9. *Economic analysis.* The PROSPER economic analysis is based on several assumptions about the production levels of rice, maize and soy value chains. These assumptions are conservative. Similarly, the reduction in transaction costs - due to easier access to certain technical services, information and technology - was not included. The main assumptions are as follows:
 - The 20-year economic lifespan (2022 to 2042) was selected to reflect the useful life of the major investments made. The future costs of implementing the PROSPER were considered. The year without a project is 2021.
 - Economic prices were introduced to correct the distortions of prices/financial costs due to government intervention (taxation, subsidies, financial unforeseen events, and other transfers) and imperfect labour markets, capital, and goods & services affected by the Project. For products not traded internationally, financial prices were used for economic analysis. A standard conversion factor (SCF) of 0.7 was used to reflect existing distortions and to convert financial prices into economic prices.;
 - An aggregation of benefits was made from three levels (crop level, matching grant MSME and MG crop Rural institutions) and aggregated at the project level by comparing economic costs to economic benefits. A zero residual value was assumed for Project investments and an average exchange rates of 6.03 GHS per USD was used;
 - Recurrent expenditure on the Government budget will continue to be implemented with the PROSPER, to cover the operation of the government technical services dedicated to value chain development in the PROSPER area. The costs of periodic infrastructure maintenance would be supported by the Government, professional organizations, and the private sector. Also, the annual recurring costs were extended over the economic lifespan of the Project, with 10% of these costs from the last year of project implementation (2029) to year 20 of the Project (2042);
 - The opportunity cost of capital (OCC) is 12,25%, reflecting the landlocked nature of the PROSPER area and its partial integration into the markets for capital, goods and services;
 - The cost-benefit analysis (CBA) indicators used at the project level are the NPV (net present value), and the ERR (economic rate of return);
 - The volumes of the production for consumption of the three products (rice, maize and soy) are fully absorbed by sales and partially by self-consumption; post-harvest losses are negligible.

Table 1: Summary of economic analysis of PROSPER (GHS and USD)

1.Total crops (GHa)	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	
Soy	19.781	(50,437)	72,569	72,569	72,569	58,055	58,055	58,055	5,806	5,806	5,806	5,806	5,806	5,806	5,806	5,806	5,806	5,806	5,806		
Maize		(129,994)	(168,938)	117,816	385,963	385,963	289,472	289,472	289,472	28,947	28,947	28,947	28,947	28,947	28,947	28,947	28,947	28,947	28,947		
Rice		(697,586)	(1,607,900)	(177,899)	319,339	805,085	603,814	603,814	423,814	603,814	603,814	750,814	423,814	603,814	867,814	867,814	867,814	867,814	867,814		
Total crops (GHS)		(807,799)	(1,827,276)	12,486	777,871	1,263,617	951,341	951,341	458,567	638,567	638,567	785,567	458,567	638,567	902,567	902,567	902,567	722,567	902,567		
1.Total crops (GHa)		(807,799)	(1,827,276)	12,486	777,871	1,263,617	951,341	951,341	458,567	638,567	638,567	785,567	458,567	638,567	902,567	902,567	902,567	722,567	902,567		
2.MG Crops SMEs (GHa)																					
MG Rice SME		-	(45,499,123)	(49,221,975)	(34,581,994)	(2,524,312)	6,735,631	15,829,242	26,412,333	35,141,994	43,735,928	42,782,725	42,782,725	42,782,725	42,782,725	42,782,725	42,782,725	42,782,725	42,782,725	42,782,725	
MG Maize SME		-	(4,178,105)	(3,209,583)	(8,167)	(182,912)	(375,131)	(586,572)	(819,157)	(1,075,000)	3,991,047	3,991,047	3,991,047	3,991,047	3,991,047	3,991,047	3,991,047	3,991,047	3,991,047	3,991,047	
MG Soy SME		-	23,505,750	79,299,297	87,359,338	95,519,170	95,519,170	95,519,170	95,519,170	95,519,170	95,519,170	95,519,170	95,519,170	95,519,170	95,519,170	95,519,170	95,519,170	95,519,170	95,519,170	95,519,170	
MG Poultry		-	5,984,128	10,461,472	10,449,309	17,851,326	17,851,326	17,851,326	17,851,326	17,851,326	17,851,326	17,851,326	17,851,326	17,851,326	17,851,326	17,851,326	17,851,326	17,851,326	17,851,326	17,851,326	
Total MG(GHc?)		(4,178,105)	(18,318,827)	(40,530,627)	63,043,741	110,471,053	119,519,555	128,380,581	138,707,829	152,503,527	161,097,471	160,144,268	160,144,268	160,144,268	160,144,268	160,144,268	160,144,268	160,144,268	160,144,268	160,144,268	160,144,268
3. Loans Cluster of Rural Institutions																					
MG Rice RI Cluster		-	763,461	1,110,217	1,472,687	1,945,493	1,945,493	1,945,493	1,296,995	11,024,460	11,024,460	11,024,460	11,024,460	11,024,460	11,024,460	11,024,460	11,024,460	11,024,460	11,024,460	11,024,460	
MG Maize RI Cluster		-	70,994	77,834	76,052	27,679	27,679	27,679	18,452	156,045	-	-	-	-	-	-	-	-	-	-	
MG Soy RI Cluster		-	83,996	93,892	138,852	51,252	51,252	51,252	34,168	307,515	307,515	307,515	307,515	307,515	307,515	307,515	307,515	307,515	307,515	307,515	
Total Rural Institutions		-	918,451	1,281,944	1,688,392	2,024,424	2,024,424	2,024,424	1,349,616	11,488,820	11,331,975	11,331,975	11,331,975	11,331,975	11,331,975	11,331,975	11,331,975	11,331,975	11,331,975	11,331,975	
	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	
Total bene fits (GHS)		(4,985,904)	(19,227,652)	41,825,057	65,510,004	113,759,094	122,495,321	131,356,346	141,008,786	164,450,914	173,068,012	172,114,810	172,114,810	172,261,810	171,934,810	172,114,810	172,378,810	172,378,810	172,378,810	172,378,810	172,378,810
total Benefits in \$		(826,650)	(3,188,665)	6,936,162	10,864,014	18,865,521	20,314,315	21,783,805	23,384,542	27,272,125	28,701,163	28,543,086	28,543,086	28,567,464	28,513,235	28,543,086	28,586,857	28,586,857	28,586,857	28,586,857	28,586,857
Project eco costs (\$)		4,748,118	14,558,546	18,109,646	22,756,248	21,894,989	16,311,451	13,459,338	7,301,235	730,123	730,123	730,123	730,123	730,123	730,123	730,123	730,123	730,123	730,123	730,123	
Cash flow		(5,574,968)	(17,747,211)	(11,173,483)	(11,892,234)	(3,029,468)	4,002,864	8,324,468	16,083,307	26,542,001	27,971,039	27,812,963	27,837,341	27,783,112	27,812,963	27,856,744	27,856,744	27,856,744	27,856,744	27,856,744	

10. Economic rate of return of the project. Based on the above assumptions, the Project's economic rate of return (ERR) is 22%. The ERR is satisfactory as some of the benefits could not be quantified. The NPV is positive (USD 43.7 million). All these indicators show the economic profitability of the PROSPER and are relatively high for a project structured around developing selected value chains with land and infrastructure protection issues and a relatively large area.

11. It is important to add to this the improvement of access to basic social services with roads ((Feeder roads and farm tracks, off-farm/watershed works, and communal social infrastructure), improvement in revenues; enhanced nutrition and children education. These benefits, which are not included in the calculation of the ERR, consolidate the economic profitability of the PROSPER and contribute to the justification of the investments made.

13. It is also important to note that the PROSPER has targeted population groups with precarious and relatively disadvantaged conditions, living in areas that are vulnerable from a market access perspective, and who are handicapped by high levels of transaction costs.

Table 2: Summary of economic analysis of PROSPER

1.Total crops (GHc)		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8-Y20
soy		19.781	(50.437)	72.569	72.569	72.569	58.055	58.055	58.055
Maize		(129.994)	(168.938)	117.816	385.963	385.963	289.472	289.472	289.472
Rice		(697.586)	(1.607.900)	(177.899)	319.339	805.085	603.814	603.814	603.814
Total crops (GHS)		(807.799)	(1.827.276)	12.486	777.871	1.263.617	951.341	951.341	951.341
1.Total crops (GHc)		(807.799)	(1.827.276)	12.486	777.871	1.263.617	951.341	951.341	951.341
2.MG Crops SMEs (GHc):									
MG Rice SME		-	(45.499.123)	(49.221.975)	(34.581.994)	(2.524.312)	6.735.631	15.829.242	26.412.333
MG Maize SME		(4.178.105)	(2.309.583)	(8.167)	(182.912)	(375.131)	(586.572)	(819.157)	(1.075.000)
MG Soy SME		-	23.505.750	79.299.297	87.359.338	95.519.170	95.519.170	95.519.170	95.519.170
MG Poultry		-	5.984.128	10.461.472	10.449.309	17.851.326	17.851.326	17.851.326	17.851.326
total MG (GH c?)		(4.178.105)	(18.318.827)	40.530.627	63.043.741	110.471.053	119.519.555	128.380.581	138.707.829
3. Loans Cluster of Rural Institutions									
MG Rice RI Cluster		-	763.461	1.110.217	1.472.687	1.945.493	1.945.493	1.945.493	1.296.995
MG Maize RI Cluster		-	70.994	77.834	76.852	27.679	27.679	27.679	18.452
MG Soy RI Cluster		-	83.996	93.892	138.852	51.252	51.252	51.252	34.168
Total Rural Institutions		-	918.451	1.281.944	1.688.392	2.024.424	2.024.424	2.024.424	1.349.616
		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8
Total bene fits (GHS)		(4.985.904)	(19.227.652)	41.825.057	65.510.004	113.759.094	122.495.321	131.356.346	141.008.786
total Benefits in \$		(826.850)	(3.188.665)	6.936.162	10.864.014	18.865.521	20.314.315	21.783.805	23.384.542
Project eco costs (\$)		4.748.118	14.558.546	18.109.646	22.756.248	21.894.989	16.311.451	13.459.338	7.301.235
Cash flow		(5.574.968)	(17.747.211)	(11.173.483)	(11.892.234)	(3.029.468)	4.002.864	8.324.468	16.083.307
NPV (\$)		43.139.365							
ERR		22,3%							

- 15.** *Sensitivity analysis.* To test the profitability of the PROSPER under different scenarios, a sensitivity analysis was carried out compared to the base case. The sensitivity of the Project relates to increases in costs, and decreases in benefits, and delays in achieving benefits.
- 16.** The sensitivity analysis tests the robustness of the results of the economic profitability study with respect to the parameters that are used in the EFA approach. The idea is to classify the input data according to its ability to influence the results of the ERR. This also makes it possible to deepen the quality of the hypotheses and to identify those generating high variability.
- 17.** The estimation is made variable by variable (VBV) and in terms of scenarios. VBV analysis indicates the sensitivity of ERR to increasing/decreasing costs, assuming constant benefits, or increasing/decreasing benefits while costs are constant (*Ceteris paribus*). On the other hand, the analysis in terms of scenarios tells us about the simultaneous increase/ decrease in costs and benefits of the PROSPER.
- 18.** In terms of “variable by variable” analysis. A decrease in benefits from 10% to 40% results in an economically profitable Project: this rate drops to 22% to 11% respectively since the OCC is around 12.25%. An increase in costs, while having constant benefits, from 10% to 60% would leave the ERR higher than the OCC.

Table 3: Sensitivity of the ERR to the change in the additional costs and benefits of the Project (%)

decrease in benefit by:	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8-Y20
10%	(744.165)	(2,869.799)	6,242,546	9,777,613	16,978,969	18,282,884	19,605,425	21,046,088
ERR	(5,492,283)	(17,428,345)	(11,867,100)	(12,978,636)	(4,916,020)	1,971,432	6,146,087	13,744,853
20%	(661,480)	(2,550,932)	5,548,930	8,691,211	15,092,417	16,251,452	17,427,044	18,707,633
ERR	(5,409,598)	(17,109,478)	(12,560,716)	(14,065,037)	(6,802,572)	(59,999)	3,967,707	11,406,398
40%	(496,110)	(1,913,199)	4,161,697	6,518,408	11,319,313	12,188,589	13,070,283	14,030,725
ERR	(5,244,228)	(16,471,745)	(13,947,948)	(16,237,840)	(10,575,676)	(4,122,862)	(389,054)	6,729,490
Increase in costs by:								
10%	5,222,930	16,014,400	19,920,610	25,031,873	24,084,488	17,942,596	14,805,271	8,031,358
ERR	(6,049,780)	(19,203,066)	(12,984,448)	(14,167,859)	(5,218,966)	2,371,719	6,978,534	15,353,183
20%	5,697,742	17,470,255	21,731,575	27,307,498	26,273,987	19,573,742	16,151,205	8,761,482
ERR	(6,524,592)	(20,658,920)	(14,795,413)	(16,443,484)	(7,408,465)	740,574	5,632,600	14,623,060
40%	6,647,366	20,381,964	25,353,504	31,858,748	30,652,985	22,836,032	18,843,073	10,221,729
ERR	(7,474,215)	(23,570,630)	(18,417,342)	(20,994,734)	(11,787,463)	(2,521,717)	2,940,733	13,162,813
60%	7,596,989	23,293,673	28,975,433	36,409,997	35,031,982	26,098,322	21,534,940	11,681,976
ERR	(8,423,839)	(26,482,339)	(22,039,271)	(25,545,983)	(16,166,461)	(5,784,007)	248,865	11,702,566
scenario analysis:								
	10% B & 10% C	(5,967,095)	(18,884,199)	(13,678,064)	(15,254,261)	(7,105,519)	340,287	4,800,154
	10% B & 20% C	(6,441,907)	(20,340,054)	(15,489,029)	(17,529,885)	(9,295,018)	(1,290,858)	3,454,220
	10% B & 60% C	(8,341,154)	(23,251,763)	(19,110,958)	(22,081,135)	(13,674,015)	(4,553,148)	762,352
								10,824,359

19. A simultaneous increase in costs between 10% and 60% combined with a decrease in benefits of 10% gives an ERR greater than or equal to the OCC. Overall, the PROSPER is not sensitive to variations in costs and aggregate benefits of the Project. The ERR remains at an acceptable level as it does not consider certain direct and indirect benefits. Also, environmental benefits such as improving soil fertility, reducing erosion, improving groundwater recharge and better management of the natural resource base, through soft and transversal actions of the Project have not been estimated.

20. Calculated over a relatively long economic lifespan, the sensitivity analysis makes it possible to assess the risk weighing on the execution of the Project following an unfavourable development in the economic and financial situation, in particular the degradation of the local socio-political situation, an inflationary trend, and the poor governance or even the dismantling of cooperatives and the degradation of infrastructure (rural roads, hydro-agricultural schemes, etc.) resulting from the lack of their regular maintenance.

APPENDICES OF EFA

I. CROP MODELS:

- 1.** Soy
2. Maize
- 3.** Rice

II. MATCHING GRANTS CROPS MSMES:

- 4.** Rice
5. Maize
- 6.** Soy
- 7.** Poultry

III. LOANS CLUSTER OF RURAL INSTITUTIONS (RI) FOR MG:

- 8.** Rice
9. Maize
- 10.** Soy

IV. ECONOMIC ANALYSIS AT DIFFERENT LEVELS (CROPS, MG, RI)

1.Soybean

2. Maize

3. Rice

4. MG Rice SME

5. MG Maize SME

6. MG Soy SME

CASHFLOW PROJECTIONS FROM TOTAL INVESTMENT PERSPECTIVE (In Ghc)																									
Year-0	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6	Year-7	Year-8	Year-9	Year-10	Year-11	Year-12	Year-13	Year-14	Year-15	Year-16	Year-17	Year-18	Year-19	Year-20					
Cash Inflow:																									
Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	
Sales Revenue	17,099,898	21,565,779	24,966,747	26,539,652	28,132,031	29,819,053	29819953.15																		
Liquidation value of Fixed Assets						1,608,200	1608200																		
TOTAL INFLOWS	-	17,099,898	21,565,779	24,966,747	26,539,652	28,132,031	31,428,153	31428153.15																	
CASH OUTFLOW:																									
Investments																									
In-use Value of Existing Fixed Assets:																									
Land	200,000																								
Other existing assets	1,128,000																								
Required Additions to Fixed Assets:																									
Sheds	50,000																								
Ashok Leyland 1116 drop-side deck	170,000																								
Soya Threshers	824,000																								
Pickup vehicle	170,000																								
Motor bikes	48,000																								
Tricycles	247,000																								
Industrial Scales	20,120	34,880																							
Tapauline	24,000	-																							
Handheld stitching machine	7,680																								
Purchases:																									
soya	14,871,608	17,555,677	20,659,653	21,961,211	23,278,884	24,675,617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	24675617	
Sub-total	15,747,408	18,255,557	20,659,653	21,961,211	23,278,884	24,675,617	24675617																		
Direct Labour:																									
Warehouse Manager	54,000	55,050	61,997	65,903	69,857	74,049	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	74048,8719	
Procurement officers	43,200	44,160	49,598	52,723	55,896	59,239	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096	59239,1096		
Assistant Warehouse Managers	36,000	38,700	41,332	43,935	46,572	49,366	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746	49,956,91746		
Drivers (production and sales)	28,800	30,960	33,065	35,148	37,257	39,493	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397	39492,7397			
Security	18,000	19,350	20,666	21,968	23,286	24,883	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873			
Thresher Labour	120,000	129,000	137,772	146,452	155,239	164,553	164,553,0562	164,553,0562	164,553,0562	164,553,0562	164,553,0562	164,553,0562	164,553,0562	164,553,0562	164,553,0562	164,553,0562	164,553,0562	164,553,0562	164,553,0562	164,553,0562	164,553,0562				
Social Security Contribution(13%)	23,400	25,155	26,866	28,558	30,272	32,088	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635				
Casual Labourers	19,200	20,640	22,044	23,432	24,838	26,328	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931				
Sub-total	342,600	362,625	393,339	416,119	443,207	469,799	469,799,812																		
Utilities & Other Production Overheads:																									
Waterbowl Rent	72,000	77,450	83,903	87,374	93,143	98,732	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430	98731,20430			
Tractor hiring for threshing	20,000	22,144	23,598	25,062	26,520	28,076	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613	28,076,8613			
Hourly Wage	520,931	609,933	686,533	766,533	844,533	922,533	922,533,2685	922,533,2685	922,533,2685	922,533,2685	922,533,2685	922,533,2685	922,533,2685	922,533,2685	922,533,2685	922,533,2685	922,533,2685	922,533,2685	922,533,2685	922,533,2685	922,533,2685				
Electricity	18,000	18,360	20,666	21,968	23,286	24,883	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873				
Water	12,000	12,900	13,777	14,645	15,524	16,405	16,405,0582	16,405,0582	16,405,0582	16,405,0582	16,405,0582	16,405,0582	16,405,0582	16,405,0582	16,405,0582	16,405,0582	16,405,0582	16,405,0582	16,405,0582	16,405,0582					
Assistant Accountant	24,000	25,800	27,554	29,300	31,048	32,911	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164					
Assistant Accountant	24,000	25,800	27,554	29,300	31,048	32,911	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164	32,911,061164					
Personnel Officer	18,000	19,350	20,666	21,968	23,286	24,883	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873	24682,95873					
Marketing Officers	31,200	33,540	35,821	38,077	40,36																				

CASHFLOW PROJECTIONS FROM TOTAL INVESTMENT PERSPECTIVE (In Ghc)																									
	Year-0	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6	Year-7	Year-8	Year-9	Year-10	Year-11	Year-12	Year-13	Year-14	Year-15	Year-16	Year-17	Year-18	Year-19	Year-20				
Cash Inflow:	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢	Gh¢							
Sales Revenue	17,099,898	21,565,779	24,966,747		26,539,652	28,132,031	29,819,953	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15	298,19953,15		
Liquidation value of Fixed Assets					1,608,200	1608200	1608200	1608200	1608200	1608200	1608200	1608200	1608200	1608200	1608200	1608200	1608200	1608200	1608200	1608200	1608200	1608200	1608200		
TOTAL INFLOWS	-	17,099,898	21,565,779	24,966,747		26,539,652	28,132,031	31,428,153	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	31,428,153,15	
CASH OUTFLOW:																									
Investments																									
In-use Value of Existing Fixed Assets:																									
Land	200,000																								
Other existing assets	1,128,000																								
Required Additions to Fixed Assets:																									
Sheds	50,000																								
Ashok Leyland 1116 drop-side deck	170,000																								
Soya Threshers	824,000																								
Pick-up vehicle	170,000																								
Motor bikes	48,000																								
Tricycles	247,000																								
Industrial Scales	20,120	34,880																							
Tapauline	24,000	-																							
Handheld stitching machine	7,680	-																							
Purchases:																									
soya	14,871,608	17,585,677	20,659,653		21,961,211	23,278,884	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	
Sub-total	15,747,408	18,255,557	20,659,653		21,961,211	23,278,884	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617	24,675,617		
Direct Labour:																									
Warehouse Manager	54,000	58,050	61,997		65,903	69,857	74,049	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	74,048,8719	
Procurement officers	43,200	46,440	49,598		52,723	55,886	59,239	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096	59,239,1096		
Assistant Warehouse Managers	36,000	38,700	41,332		43,935	46,572	49,366	49,365,9748	49,365,9748	49,365,9748	49,365,9748	49,365,9748	49,365,9748	49,365,9748	49,365,9748	49,365,9748	49,365,9748	49,365,9748	49,365,9748	49,365,9748	49,365,9748	49,365,9748			
Drivers (production and sales)	28,800	30,966	33,065		36,148	37,257	39,493	39,492,7397	39,492,7397	39,492,7397	39,492,7397	39,492,7397	39,492,7397	39,492,7397	39,492,7397	39,492,7397	39,492,7397	39,492,7397	39,492,7397	39,492,7397	39,492,7397	39,492,7397			
Security	18,000	19,350	20,666		21,968	23,286	24,683	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873				
Thresher Labour	120,000	129,000	137,772		146,452	155,239	164,553	164,553,0582	164,553,0582	164,553,0582	164,553,0582	164,553,0582	164,553,0582	164,553,0582	164,553,0582	164,553,0582	164,553,0582	164,553,0582	164,553,0582	164,553,0582	164,553,0582	164,553,0582			
Social Security Contribution(13%)	23,400	25,155	26,866		26,558	30,272	32,088	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635	32,087,84635				
Casual Labourers	19,200	20,640	22,044		23,432	24,838	26,326	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931	26,328,48931				
Sub-total	342,600	368,295	399,339		416,119	443,207	469,799	469,798,9812	469,798,9812	469,798,9812	469,798,9812	469,798,9812	469,798,9812	469,798,9812	469,798,9812	469,798,9812	469,798,9812	469,798,9812	469,798,9812	469,798,9812	469,798,9812	469,798,9812			
Utilities & Other Prodn. Overheads																									
Warehouse Rent	72,000	77,400	82,663		87,871	93,143	98,732	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493			
Tractor hiring for threshing	-	208,000	222,144		236,139	250,307	265,326	265,325,5863	265,325,5863	265,325,5863	265,325,5863	265,325,5863	265,325,5863	265,325,5863	265,325,5863	265,325,5863	265,325,5863	265,325,5863	265,325,5863	265,325,5863	265,325,5863	265,325,5863			
Haulage	52,921	68,193	86,533		86,533	86,533	86,533,2685	86,533,2685	86,533,2685	86,533,2685	86,533,2685	86,533,2685	86,533,2685	86,533,2685	86,533,2685	86,533,2685	86,533,2685	86,533,2685	86,533,2685	86,533,2685	86,533,2685				
Electricity	18,000	19,350	20,666		21,968	23,286	24,683	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873	24,682,95873				
Water	12,000	12,900	13,777		14,645	15,524	16,455	16,455,30582	16,455,30582	16,455,30582	16,455,30582	16,455,30582	16,455,30582	16,455,30582	16,455,30582	16,455,30582	16,455,30582	16,455,30582	16,455,30582	16,455,30582	16,455,30582				
Fuel and Lubricants	31,040	32,048	34,063		36,787	39,048	41,357	41,357,2822	41,357,2822	41,357,2822	41,357,2822	41,357,2822	41,357,2822	41,357,2822	41,357,2822	41,357,2822	41,357,2822	41,357,2822	41,357,2822	41,357,2822	41,357,2822				
Sub-total	92,436	132,837	155,867		159,7043	164,0753	167,887	167,887,512	167,887,512	167,887,512	167,887,512	167,887,512	167,887,512	167,887,512	167,887,512	167,887,512	167,887,512	167,887,512	167,887,512	167,887,512	167,887,512	167,887,512			
Indirect Labour:																									
Managing Director	96,000	103,200	110,218		117,161	124,191	131,642	131,642,4466	131,642,4466	131,642,4466	131,642,4466	131,642,4466	131,642,4466	131,642,4466	131,642,4466	131,642,4466	131,642,4466	131,642,4466	131,642,4466	131,642,4466	131,642,4466				
Deputy Managing Director	72,000	77,400	82,663		87,871	93,143	98,732	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493	98,731,83493				
Accountant	48,000	51,600	55,109		55,581	62,095	65,821	65,821,2232	65,821,2232	65,821,2232															

7. Poultry

8. MG Rice RI Cluster

9. MG Maize RI Cluster

ECONOMIC AND FINANCIAL ANALYSIS																								
Maize	3																							
Hectares	1																							
Yield increase per year over project phase	10%																							
Cost increase per year over project phase	15%																							
Cost increase from inflation	10%																							
Cost increase from adaptation	5%																							
	unit	qty	unit price	Base year	yr 1	Yr2	yr3	yr 4	yr 5	yr 6	yr 7	yr 8	yr 9	yr 10	yr 11	yr 12	yr 13	yr 14	yr 15	yr 16	yr 17	yr 18	yr 19	yr 20
			GHS																					
Revenues																								
Yield per ha	kg	3750																						
Price	GHS/kg	1.4																						
Revenue				5.250	5.775	6.353	6.988	7.687	7.687	7.687	7.687	7.687	7.687	7.687	7.687	7.687	7.687	7.687	7.687	7.687	7.687	7.687		
Production cost																								
Hiring of Land	Ha	1	100	100	550				146	146	146	146	146	146	146	146	146	146	146	146	146	146	146	
Mechanization																								
Harrowing	Ha	1	240	240	276	317	365	420	420	420	420	420	420	420	420	420	420	420	420	420	420	420		
Planting	Ha	1	250	250	288	331	380	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437		
Harvesting	Ha	1	600	600	690	794	913	1.049	1.049	1.049	1.049	1.049	1.049	1.049	1.049	1.049	1.049	1.049	1.049	1.049	1.049			
Threshing	Ha	1	250	250	288	331	380	437	437	437	437	437	437	437	437	437	437	437	437	437	437	437		
Inputs																								
Certified seed	1 kg	45	10	450	518	595	684	787	787	787	787	787	787	787	787	787	787	787	787	787	787	787		
Weedicide	lts	3	17	51	59	67	78	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89		
NPK	50 kg	4	85	340	391	450	517	595	595	595	595	595	595	595	595	595	595	595	595	595	595	595		
1st weed control: Herbicide (superdupa)	250 ml	5	45	225	259	298	342	394	394	394	394	394	394	394	394	394	394	394	394	394	394	394		
Labor																								
Weedicide Application	manday	7.5	50	375	431	496	570	656	656	656	656	656	656	656	656	656	656	656	656	656	656	656		
Application of NPK fert	Ha	1	100	100	115	132	152	175	175	175	175	175	175	175	175	175	175	175	175	175	175	175		
1st Weed control: Application of herbicide (superdupa)	Ha	1	150	150	173	198	228	262	262	262	262	262	262	262	262	262	262	262	262	262	262	262		
Gathering	Ha	1	300	300	345	397	456	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525		
Other operational cost																								
Sacks	pcs	30	4	120	138	159	183	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
Transport	Ha	1	260	260	299	344	395	455	455	455	455	455	455	455	455	455	455	455	455	455	455	455		
Extension and supervision	Ha	1	120	120	138	159	183	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210		
Crop insurance	Ha	5%		172	197	227	261	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300		
Total				4.103	5.153	5.293	6.087	7.000	7.146	7.146	7.146	7.146	7.146	7.146	7.146	7.146	7.146	7.146	7.146	7.146	7.146			
Hired labor				1.340	1.541	1.772	2.038	2.344	2.344	2.344	2.344	2.344	2.344	2.344	2.344	2.344	2.344	2.344	2.344	2.344	2.344			
Family labor				925	1.064	1.223	1.407	1.618	1.618	1.618	1.618	1.618	1.618	1.618	1.618	1.618	1.618	1.618	1.618	1.618	1.618			
Income after labor cost				1.147	622	1.059	900	686	540	540	540	540	540	540	540	540	540	540	540	540	540			
Income before labor cost				2.072	1.686	2.282	2.307	2.304	2.158	2.158	2.158	2.158	2.158	2.158	2.158	2.158	2.158	2.158	2.158	2.158	2.158			
Incremental net income				(387)	210	235	231	85	85	85	85	85	85	85	85	85	85	85	85	85	85			
Nb Farmers				0	400	400	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600			
Nb Farmers cumul				0	400	800	1400	2000	2600	3200	3600	7200	10800	14400	18000	21600	25200	28800	32400	36000	39600	43200	46800	
add'n'nb farm				-	83.996	93.892	138.852	51.252	51.252	34.168	307.515	307.515	307.515	307.515	307.515	307.515	307.515	307.515	307.515	307.515	307.515			
NPV				1.058.336																				
IRR				46%																				
Discount rate				12.25%																				

IV. ECONOMIC ANALYSIS AT DIFFERENT LEVELS (CROPS, MG, RI)

Economic analysis		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20
1.Total crops (GHc)		19.781	(50.437)	72.569	72.569	72.569	58.055	58.055	58.055	5.806	5.806	5.806	5.806	5.806	5.806	5.806	5.806	5.806	5.806	5.806	
soy																					
Maize		(129.994)	(168.938)	117.816	385.963	385.963	289.472	289.472	289.472	28.947	28.947	28.947	28.947	28.947	28.947	28.947	28.947	28.947	28.947	28.947	
Rice		(697.586)	(1.607.900)	(177.899)	319.339	805.085	603.814	603.814	603.814	423.814	603.814	603.814	750.814	423.814	603.814	867.814	867.814	867.814	867.814	867.814	
Total crops (GHS)		(807.799)	(1.827.276)	12.486	777.871	1.263.617	951.341	951.341	951.341	458.567	638.567	638.567	638.567	785.567	458.567	638.567	902.567	902.567	902.567	902.567	
1.Total crops (GHc)		(807.799)	(1.827.276)	12.486	777.871	1.263.617	951.341	951.341	951.341	458.567	638.567	638.567	638.567	785.567	458.567	638.567	902.567	902.567	902.567	902.567	
2.MG Crops SMEs (GHc):																					
MG Rice SME		-	(45.499.123)	(49.221.975)	(34.581.994)	(2.524.312)	6.735.631	15.829.242	26.412.333	35.141.984	43.735.928	42.782.725	42.782.725	42.782.725	42.782.725	42.782.725	42.782.725	42.782.725	42.782.725	42.782.725	42.782.725
MG Maize SME		(4.178.105)	(2.309.583)	(8.167)	(182.912)	(375.131)	(586.572)	(819.157)	(1.075.000)	3.991.047	3.991.047	3.991.047	3.991.047	3.991.047	3.991.047	3.991.047	3.991.047	3.991.047	3.991.047	3.991.047	
MG Soy SME		-	23.505.750	79.299.297	87.359.338	95.519.170	95.519.170	95.519.170	95.519.170	95.519.170	95.519.170	95.519.170	95.519.170	95.519.170	95.519.170	95.519.170	95.519.170	95.519.170	95.519.170	95.519.170	
MG Poultry		-	5.984.128	10.461.472	10.449.309	17.851.326	17.851.326	17.851.326	17.851.326	17.851.326	17.851.326	17.851.326	17.851.326	17.851.326	17.851.326	17.851.326	17.851.326	17.851.326	17.851.326	17.851.326	
total MG (GHc?)		(4.178.105)	(18.318.827)	40.530.627	63.043.741	110.471.053	119.519.555	128.380.581	138.707.829	152.503.527	161.097.471	160.144.268	160.144.268	160.144.268	160.144.268	160.144.268	160.144.268	160.144.268	160.144.268	160.144.268	160.144.268
3. Loans Cluster of Rural Institutions																					
MG Rice RI Cluster		-	763.461	1.110.217	1.472.687	1.945.493	1.945.493	1.945.493	1.296.995	11.024.460	11.024.460	11.024.460	11.024.460	11.024.460	11.024.460	11.024.460	11.024.460	11.024.460	11.024.460	11.024.460	
MG Maize RI Cluster		-	70.994	77.834	76.852	27.679	27.679	27.679	18.452	156.845	-	-	-	-	-	-	-	-	-	-	
MG Soy RI Cluster		-	83.996	93.892	138.852	51.252	51.252	51.252	34.168	307.515	307.515	307.515	307.515	307.515	307.515	307.515	307.515	307.515	307.515	307.515	
Total Rural Institutions		-	918.451	1.281.944	1.688.392	2.024.424	2.024.424	2.024.424	1.349.616	11.488.820	11.331.975	11.331.975	11.331.975	11.331.975	11.331.975	11.331.975	11.331.975	11.331.975	11.331.975	11.331.975	
		Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20
Total bene fits (GHS)		(4.985.904)	(19.227.652)	41.825.057	65.510.004	113.759.094	122.495.321	131.356.346	141.008.786	164.450.914	173.068.012	172.114.810	172.114.810	172.261.810	171.934.810	172.114.810	172.378.810	172.378.810	172.378.810	172.378.810	172.378.810
total Benefits in \$		(826.850)	(3.188.665)	6.936.162	10.864.014	18.865.521	20.314.315	21.783.805	23.384.542	27.272.125	28.701.163	28.543.086	28.543.086	28.567.464	28.513.235	28.543.086	28.586.867	28.586.867	28.586.867	28.557.017	28.586.867
Project eco costs (\$)		4.748.118	14.558.546	18.109.646	22.756.248	21.894.989	16.311.451	13.459.338	7.301.235	730.123	730.123	730.123	730.123	730.123	730.123	730.123	730.123	730.123	730.123	730.123	
Cash flow		(5.574.968)	(17.747.211)	(11.173.483)	(11.892.234)	(3.029.468)	4.002.864	8.324.468	16.083.307	26.542.001	27.971.039	27.812.963	27.812.963	27.837.341	27.783.112	27.812.963	27.856.744	27.856.744	27.826.893	27.856.744	
NPV (\$)		43.139.365																			
ERR		22,3%																			

Ghana

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Project Design Report

Annex 5: Social Environment and Climate Assessment (SECAP) Review Note

Mission Dates: 02/08/2021 to 20/09/2021

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West and Central Africa Division
Programme Management Department

Annex 5: SECAP Review Note

Introduction

This Social, Environmental and Climate Assessment Procedure (SECAP) review note has been prepared for the Promoting Rural Opportunities, Sustainable Profits and Environmental Resilience (PROSPER) project. PROSPER's overall goal is to contribute to sustainable poverty reduction, healthy rural population and reduced income uncertainties due to climatic change with an objective to increase target households' income, nutrition and food security by engaging them in profitable agribusiness linkages, increasing productivity and improving crop quality using climate smart cropping technologies. The project's duration is eight years.

Situational analysis and potential project impacts

The population of Ghana is estimated to 29,767,108 people in 2018, 49.3% female and 51.7% male (World Bank, 2019b). The population has more than tripled in fifty years with an average annual growth rate of 2.5% in the last decade. The Ashanti Region has the highest population in the country, followed by Greater Accra and Eastern Regions. According to the time series analysis, within the period 1960 to 2010, the proportions for the Upper West and Upper East regions declined, pointing to out-migration to other regions, especially Greater Accra and Ashanti.

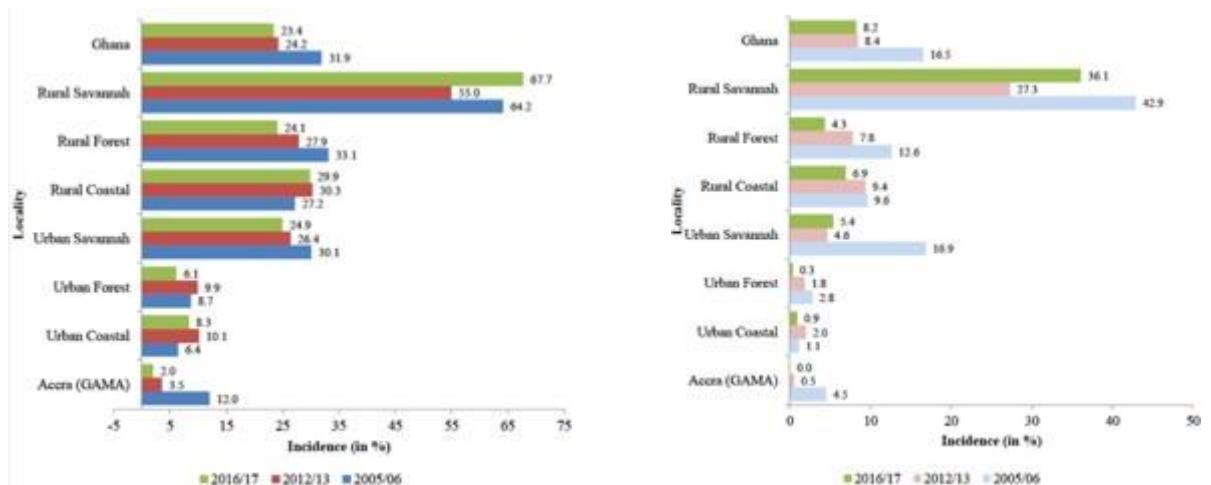
The country features a diverse and culturally rich population with eight main ethnic groups (Akan, Ga-Dangme, Ewe, Guan, Gurma, Mole-Dagbani, Grusi, and Mande) distributed across the ten administrative regions. The largest is the Akan, with 47.5% of the total population and mainly residing in the central and coastal areas of the country; followed by the Mole-Dagban characterising the North of the country and the Ewe who are predominant in the Volta region (UNDP, 2016).

In Ghana, the classification of a locality as urban or rural is based on population size. More than half of Ghana's population (56.6%) live in urban areas and 44.4% in rural areas in 2018 (World Bank, 2019b). Ghana's economy before 2005 relied heavily on agriculture but the industry and services sectors have become increasingly important and have outpaced agriculture, with the services sector becoming the largest contributor to GDP accounting for 46.3% of the GDP in 2018. Agriculture accounts for 19.7 % of Ghana's Gross Domestic Product in 2018 (GSS, 2019). Nevertheless, the agriculture sector employs nearly half of the workforce and is the main source of livelihood for the majority of the country's poorest households (World Bank, 2017).

Ghana has substantially improved various indicators of human capital development and access to services. Fertility declined from 6.2 births per 1,000 women to 3.9 between 1988 and 2017 (World Bank, 2019b). The percentage of births attended by skilled personnel rose from 40 to 71 % during the same period. Child health has also significantly improved. Stunting in children under 5 years of age dropped and the share of underweight children under 5 years of age substantially declined between 2004 and 2017. There were also significant improvements in access to sanitation, electricity, and clean drinking water.

Poverty

Poverty rates. Ghana attained significant poverty reduction and shared prosperity in the last 25 years, and has been at the forefront of poverty reduction in Africa since the 1990s. Poverty (GH¢1,314.0) has reduced from 31.9% in 2005 to 23.4% in 2017 and extreme poverty (GH¢792.05) from 16.5% in 2005 to 8.2%, which is much lower than the mean poverty rate of Sub-Saharan Africa (GSS, 2018). Nevertheless, decline in poverty and extreme poverty shows signs of slowing down. Much greater progress in poverty reduction was achieved between 1992 and 2006, when poverty declined by 23.2 % age points and the incidence of extreme poverty halved, declining from 37 % in 1992 to 18 % in 2006 (GSS, 2018).



Poverty (right) and extreme poverty (left) incidence per locality in Ghana in 2017 (GSS, 2018)

Rural vs. urban. This positive development in poverty reduction is mainly driven by decreasing urban poverty rates. Poverty and extreme poverty in Ghana are predominantly a rural phenomenon. Apart from the coastal belt which exhibited a similar pattern of poverty within rural and urban areas, the patterns of the savannah and forest areas are quite distinct. In 2017, the poverty rate was 49.6% in rural savannah and 25.3% in rural forests. The geographic variations of extreme poverty incidence are also more pronounced than overall poverty incidence, with extreme poverty being the highest in rural Savannah (36.1% in 2017). Poverty remains endemic in the northern regions of the country, with the poverty rate standing at 70.9% for Upper West, 54.8% for Upper East, 61.1% for Northern respectively in 2017, recording significant increases in poverty rates, by 10.7% for Upper East and 10.4% for Northern region (GSS, 2018). It is not surprising that poverty in Ghana is a rural phenomenon and in particular a rural savannah phenomenon since agriculture is the major economic activity in the rural savannah area of Ghana. In 2017, the poverty incidence was highest (42.7%) among households whose heads are self-employed in the agricultural sector. While people migrate to escape from rural unemployment, under-employment, poverty, and to search for better socio-economic opportunities, the reality they face in cities like Accra is very high unemployment rates, and lack of access to housing and basic services such as water and sanitation.

Gender, age and living with disabilities. Households are 31.4% are female-headed and 78.6% are male-headed. In 2017, the poverty incidence among male-headed households was higher (25.8%) than among female-headed households (17.6%), following the trends since 1992 (GSS, 2018). However, using asset poverty data, gender distribution of wealth in Ghana is biased in favour of males and this is true for both urban and rural communities. About 62% of female headed households fall into the two poorest wealth quintiles compared with 39% of male headed households. The proportion of poor female-headed households in the cities in northern Ghana also rose between 1992 and 2006, though it declined in rural areas in northern Ghana and in both the urban and rural areas in southern Ghana during the same period. Poverty was lowest among households headed by retired persons (1.6%). In 2011, the Ministry of Health discontinued the collection of data on persons with disabilities. Concrete disaggregated data as well as government policies or programmes targeting persons, and in particular children with disabilities are lacking (UNDP, 2016).

Child poverty. Child poverty rates are especially problematic with 3.65 million, or 28.3% of all children, living in poverty. A child is almost 40% more likely to live in poverty than an adult, compared to only 15% more likely in the 1990s. One child in ten lives in extreme poverty, meaning 1.2 million children live in households that are unable to provide even

adequate food (GSS, 2018).

Inequalities. Just as poverty, inequality represents a growing challenge in Ghana with multiple implications for the realization of economic and social potentials and the achievement of the SDGs. Inequality in Ghana has been growing while poverty levels are declining. Nationally, the Gini coefficient has increased slightly from 41.9% in 2006 to 43% in 2017 (GSS, 2018). The redistribution effect was negative and partially offset the growth effect by 1.4%. Thus, poverty reduction would have been higher without the worsened redistribution or increased inequality, an indication that the nation's income is concentrated among a few groups of people. If the challenge with inequality in the country is not resolved, all efforts aimed at spurring up economic growth may not translate into poverty reduction at the expected rate (GSS, 2018).

Determinants of poverty. Looking at the transformation of Ghana's economy, the agriculture sector, upon which the economy of the country has traditionally depended, is being replaced by a rapidly expanding services sector. This shift has resulted in widening the income and infrastructure gaps between rural and urban dwellers as industries and jobs become more concentrated in higher-skilled sectors, often located in the urban south.

Education. One strong determining factor for poverty is the level of education. The contribution to national poverty incidence by households headed by an uneducated person is 72.4%, whilst the highly educated accounts for less than 1%. The level of poverty reduces as the educational level of the household head rises. 40% of household heads with no education are poor compared with 12.4% with BECE, 7.5% with secondary education and 0.9% among those with tertiary education (GSS, 2018). This is partly because they have acquired the skill that could make them employable and productive. In Ghana therefore, educational attainment could contribute to poverty reduction.

Slowdown of the agriculture sector. 44% of the country's population continue to live in rural areas and depend on agriculture, and rapid urbanisation is beginning to compound the issues of weak rural resources and stretched urban capacity. Despite having become a lower priority for the government, agriculture employs a huge number of unskilled workers and provides livelihoods for more than 70% of the rural population, including a large share of the country's poorest households. The agricultural sector provides a critical source of employment for the 300,000-350,000 new workers who enter the Ghanaian labor force each year (World Bank, 2017). Inclusive agricultural growth remains so effective in reducing poverty, especially when large numbers of the poor depend on farming.

Climate vulnerability. Among rural communities where poverty is prominent, the poverty incidence has been much higher in those living in the rural savannah zone. According to Participatory Development Associates (2011), the factors driving impoverishment in the Northern Region are varied and inter-linked. In their view, the increasingly discordant climate, with extremes of drought, flooding and windstorms are perhaps the most significant among the multiple burdens shaping population wellbeing in Northern Ghana. As the seasons become distorted due to climate change, the dependence of the majority of the population on a single annual harvest of subsistence crops exacerbates the population's vulnerability. While some of these impoverishing factors are primarily caused by external factors, there are also aspects which derive from actions of local and national institutions (e.g. non-inclusive governance practices and policy guidance, as well as tardiness among some duty bearers when it comes to provision of seeds, credit and agriculture extension services) (UNDP, 2016).

Informal employment. Furthermore, the 2010 Population Census found that just over 86% of Ghana's workforce are employed in the informal sector, making both job security and revenue generation a substantial challenge (UNDP, 2014). The informal sector is a dominant part of the Ghanaian economy, including being the largest employer but information on it is not collected and thus unavailable to policy makers to properly address the situation.

Gender. Ghana is among the champions of gender equality in ECOWAS. It ranks second in its Gender Inequality Index in 2018 (0.538, higher than Sub-Saharan African average of 0.569, 140th place globally). Such an indicator measures various dimensions of gender inequality in access to education, employment, health and political empowerment. However, gender inequality remains high and gender is still an important dimension of poverty and food insecurity in Ghana. Women and girls have fewer opportunities than their male counterparts in almost all aspects of public life and quality of life.

Education. Compared to most Sub-Saharan African countries, Ghana has relatively high literacy and net primary school enrolment with more girls attending primary school than boys. At national level primary school enrollment is at 85.3% for female (vs. 83.9% for male), with 95.1% completion of primary school for female in 2017. When progressing to lower secondary school, the rate goes down to 38% of female completion of lower secondary school in low income bracket which is below national average of 73% for females (World Bank, 2019a). According to the SDG progress report, while Ghana has been able to provide access to education for the majority of children, quality of education is lagging behind. Poor learning outcomes are evidenced by proficiency in learning and pass rates.

Maternal health. Although fertility remains relatively high in Ghana (3.9 children per woman in 2017), it should be noted that it has declined significantly from seven children per woman to just under four over the last 30 years (World Bank, 2019a). Rural women (5.45), married women (4.97) and women with no formal education (5.51) reported the highest mean number of children ever born (UNDP, 2016). Contraceptive prevalence is still low at 30%. High fertility exposes women of childbearing age to greater risk of morbidity and mortality.

Child marriage. Ghana has made considerable progress in addressing early child marriages. The proportion of children who marry before age 15 and 18 has fallen significantly between 2006 and 2017. While the proportion of girls who married before age 15 has declined from 1.1% in 2006 to 0.4% in 2017, the proportion of those who married before age 18 has also fallen from 12% to 8.1% during the same period. Early child marriage is reported to be most prevalent in the rural regions of Upper West (1.3%), Northern (1.2%) and Volta (1.1%) regions, however Ashanti, Brong Ahafo and Western regions recorded no early marriages before age 15 (GSS, 2018).

Gender based violence (GBV). Different forms of violence against women is reported to be common in Ghana (UN Women). Some of the key indicators regarding prevalence include lifetime physical and/or sexual intimate partner violence (24%), physical and/or sexual intimate partner violence in the last 12 months (19%), lifetime non-partner sexual violence (4%), and child Marriage defined as girls marrying at age below 18 years old (21%), female genital mutilation/cutting (4%). Psychological violence has the highest incidence among ever partnered women in Ghana particularly among divorced, separated or widowed women. 24.8 % of divorced, separated or widowed women suffered from psychological violence compared with 21.3 % in the category married/living together (GoG, 2019). It is reported that women and girls with disabilities are at least two to three times more likely to experience gender-based violence and abuse at a magnitude greater than women without disabilities¹.

Ghana has enacted laws aimed at addressing gender-based violence; namely Domestic Violence Act, 2007 (Act 732) which defines the crime of domestic violence and provides for arrest and prosecution of perpetrators of domestic violence as well as creation of a fund to support abuse victims.

The Domestic Violence and Victim Support Unit (DOVVSU) is a unit in the Ghana Police Service, which has the mandate to oversee matters of domestic abuse against women and

¹ Rashida Manjoo, Report of the Special Rapporteur on violence against women, its causes and consequences: women with disabilities, para. 31, U.N. Doc. A/67/227 (Aug. 3, 2012) (hereinafter Manjoo, Women with Disabilities).

children. The unit provides support and protection for victims of domestic abuse by interrelating activities with the Department of Social Welfare, the International Federation of Women Lawyers and the Legal Aid Board. DOVVSU operates under the Police Service Act, the Criminal and other Offences Act, Act 29/60, the Children's Act, Act, 560 /98, the Juvenile Justice Act, Act 653/2003, Ghana Domestic Violence Act (Act 732) 2007.

While the above legislation was deemed as important step forwarded, it is criticized by some that it does not adequately provide for training of law enforcement personnel nor does it provide support for certain categories of abuse victims; such as women with disabilities.

Ghana's constitution and legal framework are in theory in line with IFAD policy on zero tolerance policy on Sexual Harassment/Sexual Exploitation and Abuse, however implementation remains subject to awareness, capacity building and enforcement.

Access to land. In spite of a progressive land ownership system, customary land use systems prevail whereby property rights of the assets is normally with the household heads (FAO, 2018). Household heads are most often men in Ghana and women have temporary usufruct rights that can be lost when they marry or lose their husband. Significant gender disparities exist in land holdings, with men holding 3.2 times more of the total farms than women and 8.1 times more of the medium-large farms (of 5 acres and more) (FAO, 2018). Female headed households have less access to land for farming (89% in Northern Ghana vs a 96% national average). Female headed households are also more likely to be smallholders (farming five acres or less). 87% of female headed households are smallholders compared with 60% of male. 4% of farms are more than 11 acres compared with 16% of men heading a household (IFAD, 2019). Limited access of women to land (i.e. collateral) also results in more limited access to financial services.

Division of labour. Statistics traditionally reveal that domestic tasks are primarily carried out by women. This means that women are less likely to be able to take full advantage of economic opportunities, to respond to changing market opportunities, and to participate in income-generating activities (FAO, 2018). 65 % of men spend on average from 0 to 10 hours per week in domestic activities, while 89 % of women spend more than 10 hours a week (FAO, 2018). The share of men and women with a primary employment in agriculture is similar, but women are more often contributing family workers rather than self-employed in farm enterprises compared to men (FAO, 2018). Women are mainly engaged in producing about 70% of food crops, such as rice, maize, cassava, cocoyam, groundnuts, soybean and vegetables. Although women are able to feed their families by producing food crops, they are disadvantaged when it comes to benefiting from cash/industrial crop interventions to promote income (FAO, 2018). Agricultural produce traders are mostly women.

Youth. Ghana's population has a youthful structure with a broad base consisting of large numbers of children, adolescents and young people. Youth are a diverse and heterogeneous group defined by the UN as women and men in the age group from 15 to 24 years. The definition of youth in Ghana is broader and regards persons between 15 and 35 years of age to be youth. Youth constitute 35.9% of the population; 44% of the youth live in rural areas (GoG, 2019). Youth are concentrated in four regions: Ashanti (20.2%), Greater Accra (17.9%), Eastern (11.4%) and Western (11.0%).

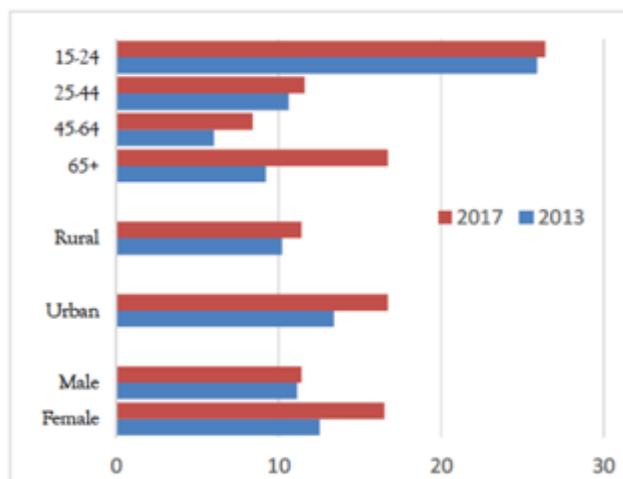
Medium youth development. The Youth Development Index of the Commonwealth Secretariat compares the youth development of 183 countries. Ghana has a medium Youth Development Index of 0.581 in 2016, mainly because of a low health and well-being and education score. Other areas such as education and employment are in the medium range while civil (0.599) and political (0.802) participation score in a high range. The total score has improved since 2010 (0.565) (The Commonwealth, 2016).

Education: The quality of pre-primary education is still low. Even after several years of basic schooling, many students lack basic literacy and numeracy skills. 34% of youth

between the ages of 15 and 24 score below the minimum literacy proficiency in urban areas (Darvas et al., 2017).

Poverty and unemployment: The youth unemployment rate in Ghana is estimated at 26.4% in 2017 representing an increase of 15.5% from 2013. Given the high labour under-utilisation rate of 42%, the proportion of unemployed youth could be more. Youth unemployment is high among females and is largely an urban phenomenon (GSS, 2018). The proportion of youth that are neither in employment, education nor training also increased from 21.5% in 2010 to 27.1% in 2015. The rate is higher among females than males suggesting a higher level of inactivity outside the school system among females (GoG, 2019). According to UNDP, high unemployment youth is linked to a number of factors including:

- Weak linkage between the educational system and productive sectors of the economy
- Mismatch of skills acquired by the youth vis-à-vis what is required by the job market;
- Weak support systems for entrepreneurship and small-scale business development for self-employment.



Unemployment rate in percent by sex, locality and age in 2013 and 2017 (GoG, 2019)

Limited services and infrastructure. Many preconditions for successful youth engagement are not well developed in rural areas of Ghana, including difficult access to markets and financial services, travel to urban centers and costly access to internet.

Child labour. Child labour continues to be prevalent in Ghana; every fifth child is directly affected and more than one-in-ten (14.2%) engaged in the worst forms, particularly hazardous work (GSS, 2014). Apart from the Greater Accra and Central Regions, each region has more than 20% of children as victims. In rural communities many children are involved in agriculture including livestock and fisheries, doing work which by its nature or circumstance is injurious to their health. Ghana has ratified the UN Convention on the Rights of the Child as well as all key Conventions of child labour; such as the ILO Conventions on Minimum Age and on Worst Forms of Child Labour. The country also has a comprehensive legal framework including the 1992 Constitution; Children's Act, 1998; Child Rights Regulation, 2002; Human Trafficking Act, 2005; and the Amendments to the Criminal Code, 1998. Key stakeholders and partners include The Child Labor Unit (CLU) of the Ministry of Employment and Labour Relations (MELR), National Steering Committee on Child Labour (NSCCL), and Department of Children (DOC) of the Ministry of Gender,

Children and Social Protection (MoGCSP) as well as development partners; namely ILO and UNICEF.

People living with disabilities

About one-fifth of Ghana's population is estimated to be living with either a physical, intellectual or emotional disability. Despite constitutional and legislative guarantees on the rights of persons with disability, the laws have not been adequately implemented and they therefore continue to face discrimination. Social stigma and inequalities in access to employment, education and healthcare and to public facilities remain challenges to people with disabilities. In 2011, the Ministry of Health discontinued the collection of data on persons with disabilities. Concrete disaggregated data as well as government policies or programmes targeting persons, and in particular children, with disabilities are lacking.

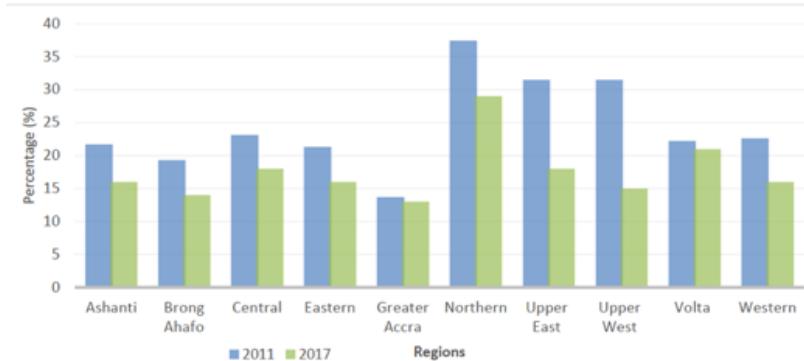
Children. Approximately one in every five children aged 2-17 years has a functioning difficulty related to seeing, hearing, walking, fine motor skills, and learning among others. Children with disabilities are often less likely to attend school, access medical services, or have their voices heard in society. They are at risk of physical and emotional abuse, neglect, violence and exploitation (GoG, 2019).

Unemployment. Persons living with disability who are unemployed constitute 13% of all unemployed persons in 2017. Unemployment is highest among those with emotional disability, followed by sight, hearing and physical disabilities (GoG, 2019).

Nutrition

Food insecurity. Significant regional disparities exist concerning nutrition and food security in Ghana. Food insecurity is a major contributing factor to the poor nutritional status of the population in the northern regions of Ghana. Among the regions of greatest concern, which include Upper East, North Eastern, Savnnah, Upper West, Northern, Brong-Ahafo, Ahafo, Bono, Bono East and Ahafo, Oti and Volta, 16% of households were considered food insecure. Food insecurity is linked to the inability of households to produce sufficient quantities of staples to meet their food needs. This can be attributed to poor soil quality, unfavourable weather conditions, constrained access to inputs, and limited financial resources to expand production (USAID, 2018a). Also, food insecurity is a highly seasonal phenomenon in the north, as there is only one rainy season and a long dry season. July is the peak of the lean season, with 90% of households experiencing issues of access to food which is pricier and less available, while poor agricultural households have often exhausted their food stocks and need to buy food on the market at high prices (harvest around September-December).

Chronic malnutrition. The prevalence of stunting (chronic malnutrition or low height-for-age) is 19% nationally, but rises to 33% in Northern region. The prevalence of acute malnutrition (wasting or weight-for-height) is also much higher in the northern regions, and at 9%, is highest in Upper East region. Central region also has high levels of both stunting and wasting, at 22% and 8%, respectively (UNICEF, 2017). Differences in stunting levels can be seen according to maternal education and wealth levels—only 16% of children whose mothers have secondary education are stunted, while the rate rises to 26% for children whose mothers had no formal education. Similarly, 9% of children in the highest wealth quintile are stunted, while 25% of children in the lowest wealth quintile are stunted (UNICEF, 2017).



Prevalence of stunting among children under 5 years by regions, 2011 and 2017 (GoG, 2019)

Childbearing begins early in Ghana. By age 19, 36.1 % of adolescents had begun childbearing in 2014 which is an increase from 28.9 % in 2008 (UNICEF, 2017). This has serious consequences because, relative to older mothers, adolescent girls are more likely to be malnourished and have a low birth weight baby who is more likely to become malnourished and be at increased risk of illness and death than those born to older mothers (UNICEF, 2017).

Micronutrient deficiencies. In Ghana, micronutrient malnutrition continues to affect many children under five years of age and women.

Children. Vitamin A deficiency affects about 20% of children in Ghana, with a higher prevalence in Ghana's northern belt (31%), and lower among children residing in wealthier households (9%) (UNICEF, 2017). Anemia is markedly higher in the Northern belt (53.2%) compared to the Middle (28.2%) and Southern (32.3%) belts. Although rates of anemia have declined from 78% in 2008 to 66% in 2014, the rate is still far above the 40% WHO threshold for a severe public health concern. A similar disparity was observed with ID and IDA as the prevalence in the Northern belt was substantially higher than in the other strata. About 35% of anemic children had concurrent iron deficiency (UNICEF, 2017).

Women. One in five women is anemic, and about 14% and 9% has ID and IDA, respectively. Among anemic women, 40% had concurrent ID (UNICEF, 2017).

Overweight prevalence. Overweight and obesity are increasingly important issues in Ghana 33% to 40% increase since 2003 for overweight in ECOWAS) and affect women disproportionately. In Ghana, 41% of women are overweight against 22% of men. Gender disparity is stronger for obesity, with 4.5% of men being obese compared to 16% of women being considered obese. Furthermore, prevalence of overweight/obesity is almost double in urban areas compared to rural areas, and is strongly positively associated with socio-economic status (USAID, 2018a).

Status of environment and climate change

Climate. Ghana has a warm, humid climate. Mean annual rainfall of the country is estimated at 1187 mm. Mean annual temperatures range from 26.1°C near the coast to 28.9 °C in the extreme north. Annual potential open water evaporation has been estimated as ranging between 1350 mm in the south to about 2000 mm in the north. The actual amount of evaporation depends on a number of factors including water availability, vegetation cover and prevailing weather conditions among others. Most of Northern Ghana falls within the Guinea Savanna Ecological Zone, which is associated with total annual rainfall of about 1000-1300 mm/annum. The rainy season is 140-190 days in duration.

The Middle Belt falls within the transition ecological zone with rainfall of up to 1300mm/annum and the deciduous forest ecological zone with rainfall up to 1500mm/annum.

Land cover. Ghana reporting to the UNCCD shows a detailed land use classification for 2015 (GoG, 2018). Cropland is prevalent (47%) and a valuable resource for Ghana while,

tree-covered areas (35%) are still remaining despite showing signs of decrease.

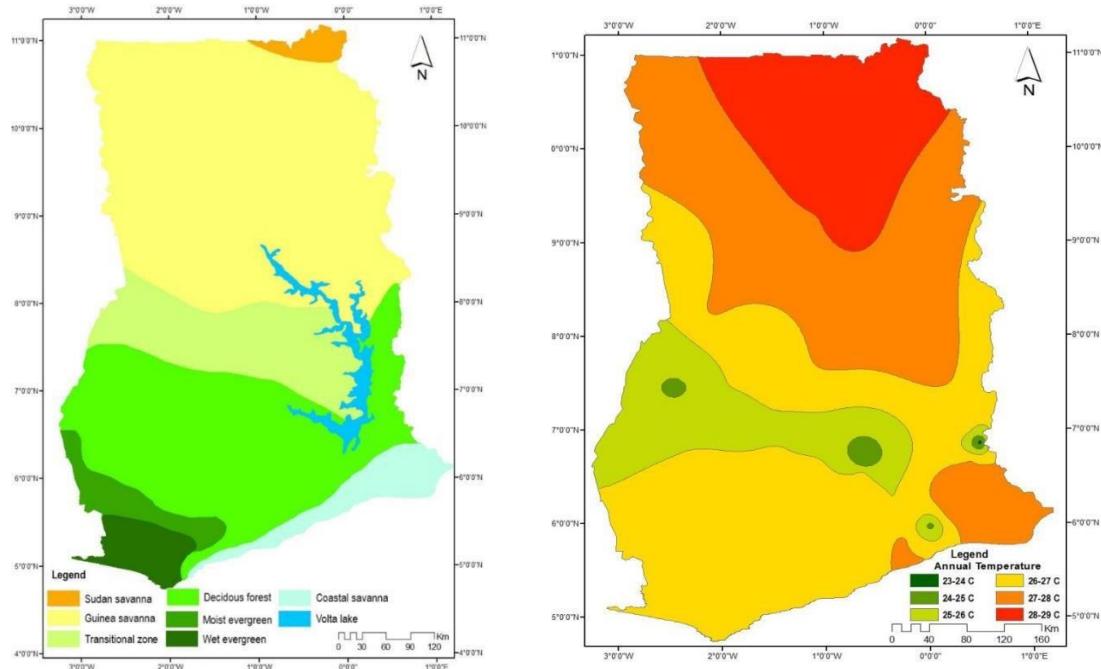
	km2	% of total land
Tree-covered	83852	35%
Grassland	31591	13%
Cropland	113067	47%
Wetland	296	0%
Artificial surfaces	2289	1%
Other land	69	0.03%

Land cover 2015 (GoG, 2019)

Agro-ecological zones. There are six agro-ecological zones defined on the basis of climate, reflected by the natural vegetation and influenced by the soils (FAO, 2005).

Zone	Rainfall	Portion of total area	Length of growing season	Dominant land use systems	Main food crops
	(mm/yr)	(%)	(days)		
Rain forest	2 200	3	Major season: 150-160 Minor season: 100	forest, plantations	roots, plantain
Deciduous forest	1 500	3	Major season: 150-160 Minor season: 90	forest, plantations	roots, plantain
Transition zone	1 300	28		annual food and cash crops	maize, roots, plantain
Guinea savannah	1 100	63	180-200	annual food and cash crops, livestock	sorghum, maize
Sudan savannah	1 000	1	150-160	annual food crops, livestock	millet, sorghum, cowpea
Coastal savannah	800	2	Major season: 100-110 Minor season: 50	annual food crops	roots, maize

Agro-ecological zones of Ghana (FAO, 2005)



Agro-ecological zones (left) and averages temperatures (right) in Ghana (IFAD, 2019)

Agro-ecological specificities and key value chains. Agricultural activities in Ghana follow the agro-ecological specificities of the country. While in Northern Ghana and the Middle Belt the potential for agriculture is high, smallholders suffer due to inadequate marketing infrastructure (e.g., rural roads, processing and storage facilities), limited post-harvest support and most importantly lack of access to sustainable/profitable output markets.

Most of Northern Ghana falls within the Guinea Savanna Ecological Zone, which is associated with total annual rainfall of about 1000-1300 mm/annum. The rainy season is 140-190 days in duration. Smallholders in Northern Ghana grow mainly soya, maize, sorghum and millet. Also, in this region rice cultivation in the valley bottoms has emerged with great potential to reduce poverty levels. MoFA has increased its support to rice production in the northern region through the Planting for Foods and Jobs (PFJ) initiative with the goal of making Ghana self-reliant in rice production by 2023. Evidence shows that rice yields can increase from 15 bags to 50 bags per acre through timely planting, proper agronomic practices, certified seeds and fertilizers. Nevertheless, the lack of appropriate agricultural machinery and inadequate linkages to markets paying reasonable prices, affect the wider adoption of rice production by smallholders in the region. Shea nuts are also an important source of income for smallholders in the north. Shea trees cover around 77,670 square kilometers in this region and support the livelihood of approximately 900,000 rural women². Over the past decades trade in shea butter has been on the rise because of increased demand in the European Union, Japan, India, Canada and the United States. International buyers are increasingly becoming stringent with the quality and traceability of the nuts and butter. Processing is predominantly done manually through traditional methods but also mechanically using semi/fully mechanized industrial systems. Manual production, done mainly by women, is usually organized through groups and cooperatives. Manual extractive processes are labor intensive and inefficient as far as the usage of water, energy and time is concerned.

² SNV, 2011

The Middle Belt falls within the transition ecological zone with rainfall of up to 1300mm/annum and the deciduous forest ecological zone with rainfall up to 1500mm/annum. In the Middle Belt smallholders grow mainly cassava, plantain, maize, and yam, soya and rice cultivation in valley bottoms is prevalent in the Eastern region and the erstwhile Volta region (now divided as the northern Oti region and the southern Volta region). However, the productivity for these crops is often less than 50% of potential due to outdated technologies, mechanization shortage and limited extension outreach. The cashew value chain has also emerged as an important source of smallholders' livelihood in the Middle Belt, mainly in the erstwhile Brong-Ahafo and Ashanti regions. The Eastern region and the erstwhile Volta region include parts with forest savannah and coastal savannah climatic conditions which support cashew production – the majority of cashew is produced in this region. Cashew generates income for about 350,000 smallholder farmers. The planted acreage of cashew trees in Ghana is around 325,000 Ha. The total Raw Cashew Nut (RCN) production (2018) across Ghana is estimated to be 115,000 metric tons comprising approximately 3.1% of the global production. The main cashew growing areas are the erstwhile Brong Ahafo region producing more than 40,000 metric tons of RCN, the erstwhile Northern region producing more than 10,000 metric tons and the Ashanti Region³. The main destinations of RCN exports are India and Vietnam while kernels are exported mainly to the European Union, USA, Brazil and Canada. Around 88% of cashew farms are owned by smallholders with farm sizes ranging from 0.8 to 3.0 ha⁴. Cashew trees start fruiting in the seventh year which continues for 15 to 20 years. The average production is around 400 kg/ha compared to the potential yield of more than 1 tonne/ha. Production is affected by factors such as difficulty in accessing good planting materials and improved farm inputs, inadequate extension services, pest infestations, incidences of bush fire, loss of soil nutrients and inadequate soil moisture due to erosion and lack of suitable conservation measures and the reduced fruiting due to impact of harmful agricultural chemicals on pollinators. The cashew producers are also affected by the lack of access to credit, weak farmers' organizations and lack of effective marketing mechanisms. Cashews can grow on even marginal lands and can stabilize the soil in which it grows; they help to alleviate the pressure on local vegetation and increase soil fertility thus mitigating the effects of drought and desertification. In addition, the use of cashew shells to fire boilers and ovens during processing reduces the need for cutting down trees for fuelwood, and hence reduces the pressure on surrounding forests. Cashew trees, as any other trees, serve as carbon sinks.

Vegetables such as tomato, pepper, okra, garden eggs, and cabbage are grown usually as backyard production for subsistence and supplementary income in both the Northern and the Middle Belts. Most vegetables are produced under rain-fed conditions which makes their availability highly seasonal, with the peak season occurring between June and September. However, productivity is usually less than 50% of attainable yields due to traditional cultivation practices, the lack of irrigation systems and limited use of improved inputs. Nevertheless, in the rainy season there is usually a glut in the supply of vegetables and farmers experience high post-harvest losses due to lack of processing and storage facilities.

In comparison to the rainy season, there is a significant drop in production volume during the dry season. During this period, the supply of vegetables in the rural areas is affected by poor transportation and cold storage infrastructure, the lack of adequate refrigeration facilities in local markets, and the limited supply of processed and preserved vegetables. The limited supply of vegetable leads to increased prices with those vegetables that are perceived to be local (kontomire, okra, roselle, garden eggs) being more affordable,

3 Nitidae, 2018Africa

4 Cashew Initiative, 2010

compared to vegetables that are perceived as foreign or exotic (lettuce, cabbage, cucumber, cauliflower, beetroot)5.

Biodiversity: Ghana is relatively rich in biodiversity with 3,600 plants species, 221 species of amphibians and reptiles, 748 species of birds, 225 mammalian species, 392 marine species of organisms and a high endemism of butterfly species (GoG, 2016). The country's biodiversity is under threat from several human-induced pressures, including habitat loss and degradation resulting from farming, urbanisation and extractive industries as well as over-exploitation. Other threats include climate change, invasive species and pollution, particularly with regard to aquatic habitats. There are indications that the populations of almost all animal species, including invertebrates such as snails, are on the decline and that rodents are now dominating the species exploited as bushmeat.

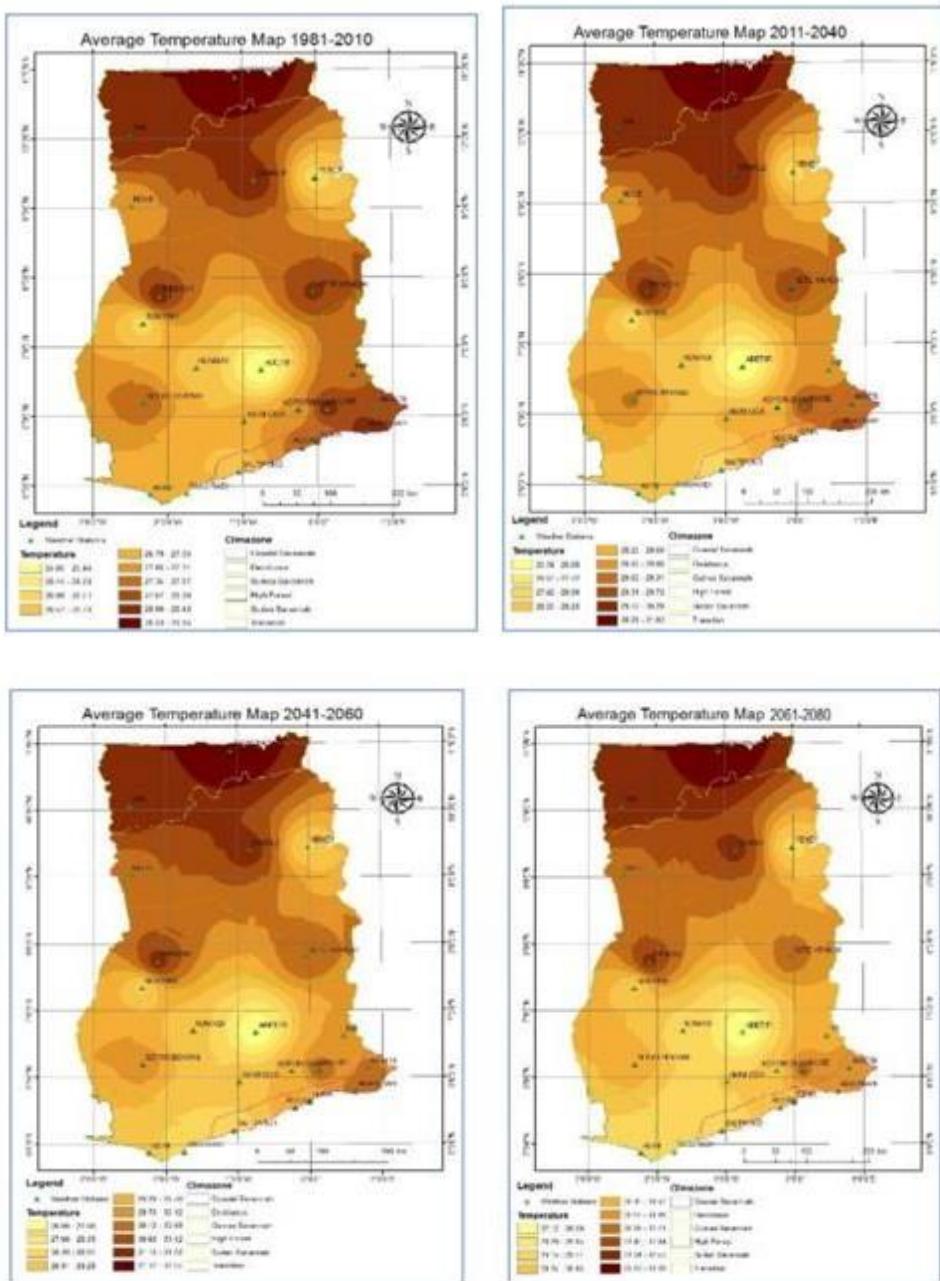
Water. Almost half of the water used in Ghana originates from three international rivers (Volta, Bia and Tano), which flow in from outside its borders, putting the country at risk of water insecurity if political tensions arise over declining water availability. Tension exists between Ghana and Burkina Faso as a result of Burkina Faso's decision to withdraw water from the Volta Basin, reducing water levels required for hydropower generation in Ghana (USAID, 2018b). A recent study projected flows in the Volta Basin could fall by 24 % by 2050 and 45 % by 2100 due to reduced rainfall and increased evaporation. About 25 % of the population does not have access to clean water. Declining rainfall levels, drought and rising temperatures are straining available water resources amidst increased demand from high rates of urbanization and industrialization (University of Ghana, 2014).

Fisheries. Seafood is an important part of the Ghanaian diet and economy, making up 40–60 % of protein intake and contributing 4.5 % to national GDP (World Bank, 2017). The sector primarily comprises marine fisheries with some inland, freshwater fisheries in Lake Volta, Lake Botsumtwi and other reservoirs. Rising sea surface temperatures alter migratory patterns and reproductive cycles of key species such as anchovies, sardines, tilapia and catfish. The decline in fisheries sector productivity from climate variability and overfishing forces Ghana to spend over \$200 million per year on seafood imports to satisfy domestic demand (FAO, 2016).

Climate change

ND-GAIN index, an index measuring a country's vulnerability to climate change in combination with its readiness to improve resilience, lists Ghana as the 68th most vulnerable and the 81st least prepared country (ND-GAIN, 2019). This implies that the country has both a great need for investment and innovation to improve readiness and a great urgency for action.

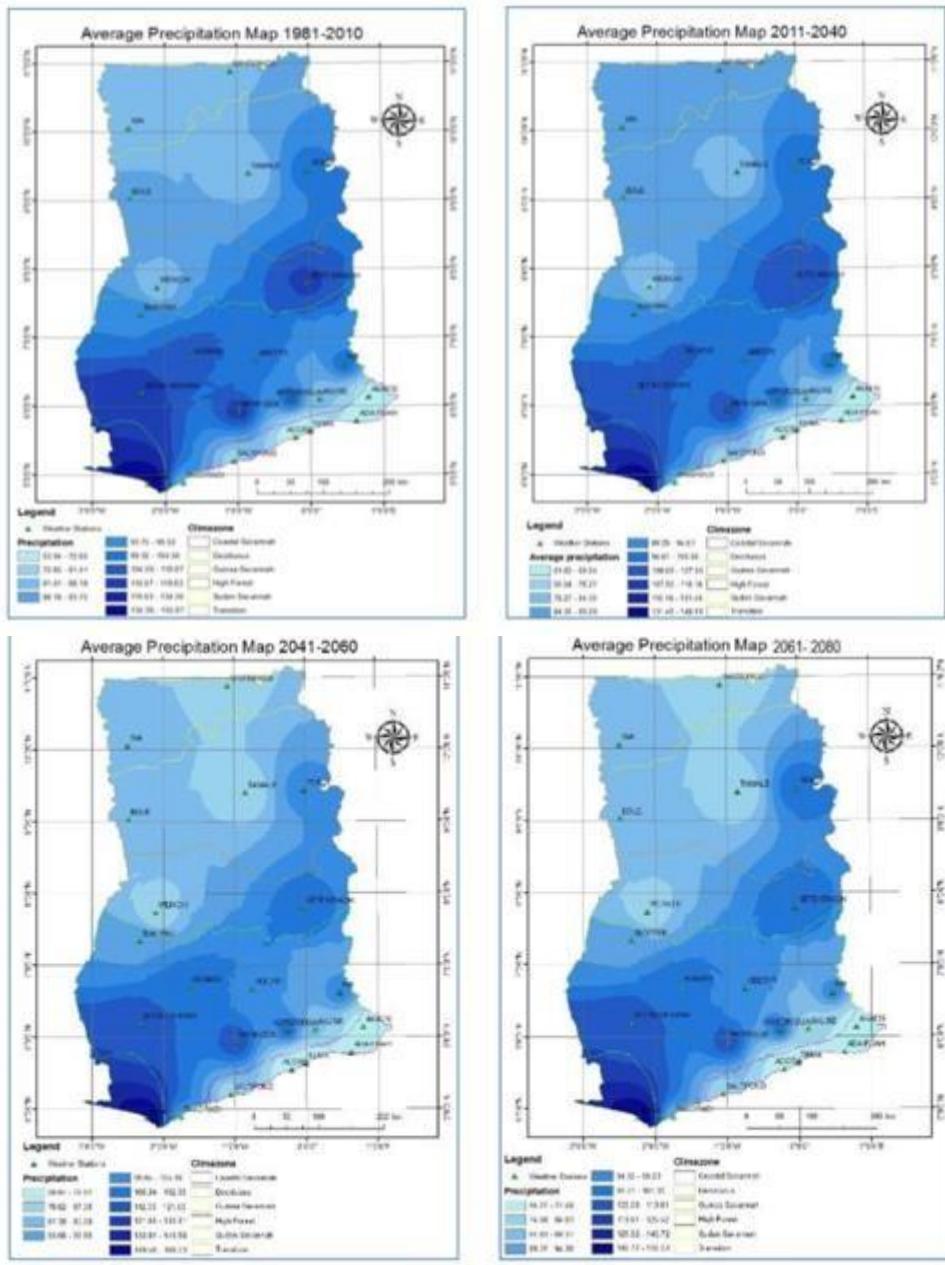
Increasing temperature. The increase in Ghana's mean annual temperature since the 1960s was an average annual temperature of approximately 1°C (an average increase of 0.21°C per decade) while the average number of "hot" nights per year (73) increased, with the rate of increase most pronounced from September to November. Climate changes projections forecast, and increase shows an increase in average annual temperatures between 1.4–5.8°C by 2080 and an increase in the frequency of hot days and nights of 18–59 % by 2060, with the highest percentage between the months of July and September (GoG, 2015a). The increase is expected to be most severe in the north of the country.



Maps of observed and project average temperatures 1980-2010 (upper left), 2011-2040 (upper right), 2041-2060 (lower left) and 2061-2080 (lower right) (GoG, 2015a)

Rainfall patterns. Although inter-annual and inter-decadal rainfall levels were highly variable, overall rainfall saw a well-defined cumulative reduction of 2.4 % per decade since 1980. Based on the historical rainfall patterns (1980-2010), rainfall across the country has been projected to decrease by 2.9% in the near future (2040). This will be followed by a slight increase in the mid future (2060) by 1.1% and later decrease in the far future (2080) by 1.7% (GoG, 2015b). More erratic and intense rainfall will occur during the wet season while there will be lower precipitation levels during the dry season. As for temperatures, changes in rainfall are more intense towards the north than the south rainfall.

The uncertainty associated with rainfall increases farmers' uncertainty as to when fields should be prepared and seeds should be sown.



Maps of observed and project average rainfall 1980-2010 (upper left), 2011-2040 (upper right), 2041-2060 (lower left) and 2061-2080 (lower right) (GoG, 2015a)

Increasing sea level and temperatures. Sea level has raised of 63 mm over the past 30 years. Rise in sea surface temperatures is expected to be approximately 2–4°C and sea level rise of 75–190 mm by 2100 resulting in an average coastal erosion and shoreline loss of 0.38 m per year. Ghana's coastal regions, including its largest city, Accra, are expected to face a sea level rise of 13–45 cm in 100 years and are especially vulnerable to flooding and waterborne disease (GoG, 2015a).

Extreme events. These changes in rainfall and temperature will increase the frequency and intensity of extreme events. Ghana is most exposed to risks from floods and droughts, particularly in the Northern Savannah belt. The duration of long-lasting heat waves is expected to increase by 22 days by 2100, potentially causing more severe droughts. At

the same time, intensity of heavy rains is expected to increase (+4% by 2100) and the proportion of total annual rainfall that falls in such heavy rain events will also increase. This combination may intensify seasonal and inter-annual variation – with drought in one year and floods in the next, or even droughts and floods within the same season. Exposure to other risks related to coastal hazards, including storm surges and coastal erosion will also increase (GoG, 2015a).

Land degradation

Land cover change to agriculture. The most obvious land cover change in Ghana is the major increase in agricultural land in all regions of the country. However, the largest increases can be seen in the northeast, east-central, and southwestern regions of Ghana. This rate of agricultural expansion is unprecedented in the country's history, overrunning many of the other land cover types, including Ghana's savannas, woodlands, and forests.

Deforestation. Agriculture expansion has been one of the main drivers of deforestation, which is still a major challenge in Ghana. Having lost over 60% of its forest cover from 1950 to the turn of the last century (2.7 million hectares), Ghana's deforestation rate has been approximately 3% per year (320,803 ha/year) since 2000. Recent years have also seen a marked increase in the deforestation rate. From 2013 to 2015, the annual deforestation rate in Ghana rose to 794,214 ha per annum (GoG, 2017). Wood harvesting, population and development pressure as well as mineral exploitation and mining have also contributed to deforestation. Differences, however, exist between the high and forest zone and savanna areas. Fires and livestock have more important roles in the savanna grassland vegetation. The recognition of the savanna and transition as the main source of fuel wood and charcoal also makes charcoal production an important driver.

Crop land degradation. Crop lands are also subject to different forms of land degradation, including soil erosion, soil fertility and productivity decline and reduced soil organic carbon stocks, soil physical deterioration, including soil structure, compaction and surface sealing. This is due to the removal of natural vegetation; improper soil management practices; poor management of annual, perennial and tree crops; overgrazing; depletion of soil nutrients without replenishment; slash- and-burn agriculture; low input of mineral fertilizers and organic amendments (compost, manure, crop residues). These practices are closely resulting from poverty; lack of access to farm inputs (including access to credit) and infrastructure; limited education, access to knowledge and extension services; and insecure land tenure, and increasing population pressure (GoG, 2018).

Impacts of land degradation and climate change

Agriculture. Most agricultural production in Ghana relies on small, rain-fed plots that are highly vulnerable to the impacts of climate change and land degradation. Improper soil management practices combined with erratic precipitation patterns have severe consequences on production, as only 2 % of the country's irrigation potential has been tapped. Rising temperatures are projected to lower yields in major staple crops (cassava, yams, plantains, maize and rice). Cassava yields, for example, are projected to fall by 29.6 % by 2080 and maize yields by 7 % by 2050 (USAID, 2018b). Total crop failure is expected to occur approximately once every five years in Ghana's northern region due to delayed or diminished rains. Cocoa, a major cash crop and Ghana's second leading foreign exchange earner, is sensitive to rising temperatures and drought. Areas suitable for cocoa production, which lie primarily along the coast, are contracting as temperatures rise, floods increase, and soil salinization and coastal erosion continue (USAID, 2018b).

Even without climate change, agriculture in Ghana faces serious challenges such as low productivity due to low input usage (including fertilizers), water supply variability and high transactions costs. There are also market imperfections in the input markets and services including land, labour, credit and extension. The market failure in the agricultural sector therefore increases the vulnerability of resource-poor farmers and complicates the effects

of climate-induced shocks, which in turn makes it more difficult for them to cope with climate change (UNDP, 2014).

Food security. The agricultural sector's vulnerability to climate change effects threatens the food security and livelihoods of the majority who depend on the sector. According to a report by the World Bank, climate change is expected to adversely affect the stability of Ghana's agricultural sector with the country's millions of smallholder farmers. The report also highlights that climate change is projected to accentuate the rise in food prices in the future. While the price of rice is projected to increase 60% by 2015 without climate change, it could go up by as much as 121% once climate change is taken into account. Similarly, while the price of maize is projected to increase 60 % without climate change, with climate change this increase could be 153% (World Bank, 2015).

Smallholder and women's vulnerability. Climate change vulnerability in Ghana is greatest for those who are strongly dependent on natural resources and have the lowest capacity to cope with these changes. As a result, the impacts of climatic events are more profound, and the recovery time is prolonged. This vulnerability is exacerbated by the poor market conditions for smallholder farming in Ghana. With their current assets, capacities, and connections to markets, smallholders are not equipped to deliver a regular supply of adequate volumes of quality produce required for sustainable market access. Smallholder farmers (especially female-headed farming households) in Ghana are particularly vulnerable to the impacts of climate change and variability due to the compounding impacts on yield from poor lateritic soils, limited irrigation, and limited transport to markets. In Ghana, women constitute 52% of the agricultural labour force and produce 70% of subsistence crops (NDESA, 2017). In addition, they depend on water and crops due to their responsibilities in the household. They are hampered in their adaptive capacity to climate change due to various factors, including inaccessibility of financial resources, a lack of information and technology, and unfavourable land tenure systems.

Fisheries. Seafood is an important part of the Ghanaian diet and economy, making up 40–60 % of protein intake and contributing 4.5 % to national GDP. The sector primarily comprises marine fisheries with some inland, freshwater fisheries in Lake Volta, Lake Botsumtwi and other reservoirs (USAID, 2018b). Rising sea surface temperatures alter migratory patterns and reproductive cycles of key species such as anchovies, sardines, tilapia and catfish. The decline in fisheries sector productivity from climate variability and overfishing will not only affect fishermen and fish-mongers but all Ghanaian's food security.

Institutions and legal framework

Institutions

National development. In order to implement the 2030 Agenda and commitments under Ghana Agenda 2063 consistently and sustainably, Ghana is using the decentralised planning system as set out in the National Development Planning (Systems) Act, 1994 (Act 480). This system assigns planning functions to ministries at national level, and to local authorities, namely Metropolitan, Municipal and District Assemblies at sub-national level. Coordination is vested in the National Development Planning Commission at the apex, supported by 16 Regional Coordinating Councils. The Ministry of Planning provides policy coordination and monitoring support. Collaboration and consultation are encouraged between government agencies and stakeholders through the decentralised planning approach. Stakeholders include the private sector, civil society, traditional authorities, persons living with disability, development partners, academic and research institutions, and other interest groups.

Nutrition. The food security agenda is led by the Ministry of Food and Agriculture while the nutrition policies are under the responsibility of the Ministry of Health, in coordination with the Ghana Health Agency, an executive agency responsible for implementation of national policies. Ghana's Cross-Sectoral Planning Group (CSPG), a multi-stakeholder

platform under the National Development Planning Commission, is working to introduce a nutrition baseline and identify trends in nutrition financing. The CSPG played an active role in the development of the 2013 National Nutrition Policy.

Social protection and gender. Social protection and gender are under the responsibility of Ministry of Gender, Children and Social Protection. The Ministry is mandated to coordinate and ensure gender equality and equity, promote the survival, social protection and development of children, vulnerable and excluded and persons with disability and integrate fulfillment of their rights, empowerment and full participation into National development. The Ministry is supported by gender desks in other sector ministries, departments and agencies to mainstream gender issues in their sector plans and programmes.

Youth. The youth development agenda is under the leadership of the National Youth Authority, a statutory body created to co-ordinate and facilitate youth development activities in the country. A Youth Employment Agency was established under the Youth Employment Act 2015 (Act 887) to empower young people to contribute meaningfully to the socio-economic and sustainable development of the nation. Its objective is to support the youth between the ages of 15 to 35 years through skills training and internship modules to transit from a situation of unemployment to that of employment.

Environment management and climate change. The Ministry of Environment, Science, Technology and Innovation is the sector ministry with responsibility to formulate, develop, implement, monitor and evaluate environmental policies in Ghana, including the National Climate Change Policy. Under the Ministry, the Environmental Protection Agency acts as the National Focal Point for Climate Change and is responsible for all National Communication to the UNFCCC. The management of natural resources is also shared with the Ministry of Lands, Forestry and Mines, the Ministry of Food and Agriculture, the Ministry of Local Government and Rural Development and the Ministry of Fisheries and Aquaculture Development. Regional and district-level decentralized departments are responsible for implementation and have a dual reporting mandate to district and regional councils, and the Ministries of Food and Agriculture. Local and international non-governmental organizations as well as research institutions play a critical role in the implementation of various environmental management projects.

International agencies. Currently there are 26 agencies of the United Nations providing the country with technical assistance for sustainable economic, social, environmental and institutional development. The agencies work with government, civil society organizations, and the private sector to address critical development challenges through capacity development, strengthening of accountability systems and the delivery of quality social services, with a focus on the most deprived and vulnerable populations (GoG, 2019). There are several multilateral (African Development Bank, World Bank) and bilateral agencies (USAID, DFID, GIZ, SNV) operating in the nutrition, social protection, youth and climate and environmental management at various levels in Ghana. They provide financial and technical support to a wide range of stakeholders to contribute towards improving the welfare and well-being of Ghanaians.

Traditional authorities. Chieftaincy is one of the oldest and most highly revered institutions in Ghana. Traditional leaders serve as agents of development due to their ability to mobilize people and resources for development projects such as health facilities, police stations, and schools. Since the adoption of the SDGs, several traditional leaders have initiated programmes and projects in support of government efforts to attain the SDGs (GoG, 2019). The National House of Chiefs is a body of elected representatives from Ghana's Regional Houses of Chiefs that is recognized by the Constitution. It is charged to advise on issues related to culture and chieftaincy, and works towards the codification of customary law.

Policy, legal and regulatory frameworks

National Development Planning. The National Development Plan Commission has developed a 40-year development plan (the 2057 vision, to mark the 100th anniversary of Ghana's independence). The long-term plan features five main goals, as follows: i. Create an equitable, healthy and disciplined society; ii. Build an industrialized, inclusive and resilient economy; iii. Build safe, well-planned and sustainable communities; iv. Build effective, efficient and dynamic institutions; v. Strengthen Ghana's role in international affairs. The "Coordinated Programme of Economic and Social Development Policies – The Agenda for Jobs: Creating Prosperity and Equal Opportunity for All, 2017-2024" serves as the basis for the preparation of the medium-term national development policy framework, which contained strategies consistent with the SDGs targets.

Food security and nutrition. The National Nutrition Policy was adopted in 2013 and seeks to: (a) reposition nutrition as a crosscutting issue, (b) facilitate integration and mainstreaming of nutrition into all national development efforts, (c) provide a framework for nutrition-specific and nutrition-sensitive services and interventions, (d) guide the implementation of high-impact interventions, and (e) strengthen sectoral capacity for the effective delivery of these interventions (UNDP, 2016). The policies translate into government's flagship initiatives, such as [Planting for Food and Jobs \(PFJ\)](#) and [Infrastructure for Poverty Eradication Program \(IPEP\)](#), seeking to contribute to the modernization of the agricultural sector, the structural transformation of the national economy through food security, employment opportunities, reduced poverty and infrastructure investment in agriculture sector assets (e.g., warehouses and small dams).

Social protection. A number of programmes have been implemented in the last few years under the National Social Protection Strategy, including the National Health Insurance System, the school feeding programme, and the Livelihood Empowerment against Poverty cash transfer programme. However, there are still gaps in the overall social protection system along the life-long cycle and challenges in ensuring that all in need can access these services, including IDPs and refugees (UNDP, 2016). Other outstanding issues include birth registration, early child (girl) marriages, domestic violence, violence against children, gender-based violence (UNDP, 2016).

Youth. Measures to protect the well-being and welfare of Ghanaian children include the Children's Act, 1998 (Act 560); Child and Family Welfare Policy (2014), and the Child Protection Policy (2013). The National Youth Policy (2010) and its Implementation Plan prioritised human development and technology; economic empowerment; youth participation, governance and leadership; culture, sports and national orientation. The Child and Family Welfare Policy (2013) seeks to prevent and protect children from all forms of violence, abuse, neglect and exploitation; effectively coordinate. The objective for youth development under the medium term national development policy framework (2018-2021) is to create opportunities for effective and positive youth participation in national socio-economic development and political governance (GoG, 2019). The "Planting for Food and Jobs" initiative also aims at providing job opportunities for unemployed youth in agriculture and related sectors.

Gender. Ghana has enacted legislation to prevent all forms of domestic violence and abuse, ensure access to justice and provide the necessary institutional support to affected women and men. The Domestic Violence Act 2007 (Act 732) provides comprehensive framework for the prevention of and protection against domestic violence and criminalizes various forms of physical and sexual violence, economic and psychological abuse and intimidation. The act was translated into the 2009-2019 National Plan and Policy Action led by the Domestic Violence Secretariat at the Ministry of Gender, Children and Social Protection. Ghana has also adopted several of the international gender conventions/treaties in its legal framework, including the CEDAW. In May 2015, the government of Ghana published a National Gender Policy, the purpose of which is to mainstream gender equality in development processes through targeted interventions and improvements to the legal, social, political, cultural and economic conditions of Ghanaians,

particularly women, girls and children. There are five main policy commitments: (1) to improve women's rights and access to justice (2) to improve women's empowerment and livelihoods (3) targeted improvement to accountable governance structures and women's leadership and participation (4) improve women's economic justice and interrogate; and (5) improve gender roles and relations. The Ministry of Gender, Children and Social Protection is tasked with operationalizing the policy through a Strategic Implementation Plan and the plan makes clear the protocols and guidelines to be followed by relevant Ministries. To address the underlying structural barriers to women and girls' economic empowerment, government is taking steps to pass into law the Affirmative Action Bill (GoG, 2019).

Environment. The Ghana National Environmental Policy was launched in November 2012 with the vision to manage the environment in a sustainable way to benefit Ghanaian society. The objective of this policy is to promote healthy lifestyles and reduce risk factors that arise from environmental, economic, social, and behavioural causes thereby promoting healthy lifestyles in a healthy environment. The policy notes that proper management of Ghana's resources requires that efforts should be redirected into more environmentally sustainable programs and practices.

Climate Change. Ghana has formulated a Climate Change Mitigation and Adaptation Strategy and a National Climate Change Policy, in which it is also acknowledge the strategic priority of enhancing the country's resilience to natural disasters. The primary challenge is that the country relies heavily on donor support in direct financing of climate change mitigation and adaptation. Of the over \$30 billion pledged for climate change-related actions globally, Ghana has successfully secured about \$21.3 million from only four of the more than twenty-five international public funding initiatives since 2008 (UNDP, 2016). Ghana submitted its Nationally Determined Contribution in 2015 with a target of 15% unconditional emission reduction and a 45% conditional emission reduction against Business as Usual by 2030. AFOLU figures strongly as part of the mitigation actions through the promotion of sustainable forest use through REDD+ is one of the five sectors identified for emission reduction. The adaptation policy actions focus on agriculture and food security through climate-smart landscapes, sustainable forest resource management, managing climate-induced health risks, integrated water resource management and building resilience for gender and vulnerable people (GoG, 2015b).

Sustainable Development Goals. In June 2018, the Government of Ghana and the United Nations in Ghana jointly signed the UN Sustainable Development Partnership 2018-2022 (UNSDP), a five-year strategic framework that sets out the collective vision and response of the UN system to national development priorities. Ghana submitted its report on progress towards achieving the SDGs in May 2019. In general, 67 of the 101 indicators Ghana is currently monitoring showed improvements since 2013, while about 20 worsened (GoG, 2019).

Project Specific Considerations

- Supporting Infrastructure elements under PROSPER.** In general, PROSPER will support three complementary types of climate-resilient infrastructures under subcomponent 1.2, namely off-farm/watershed works and hazard mitigation measures; feeder roads and farm tracks; and communal social infrastructure. These investments aim to improve the sustainability of NR-related livelihoods and to stimulate socioeconomic advancements in the participating clusters. The NR remediation infrastructures may comprise soil and water conservation structures, such as contour bunds, reforestation and shelterbelts, bench terraces, tied ridges, water harvesting and storage ponds, as well as climate resilience measures in line with local conditions. The District Assembly will undertake all procedures as appropriate to acquire/lease any land needed for construction. PROSPER envisages expanding and rehabilitating road networks (feeder roads and farm tracks, culverts and small bridges), as well as shared domestic water supply structures (boreholes with hand or solar pumps), sanitation facilities and waste management systems, and alternative/green energy schemes (including resource

and energy recovery from waste).

2. Each capital investment plan will include appropriate management, operation, maintenance and ongoing financing arrangements, with overall responsibility resting with the community where relevant. In each case, agreement will be reached between the District Assembly and the community leadership on the post-construction asset management by various community gender-balanced committees, building on previous local norms and the organizational training delivered under Subcomponent 1.1. The off-farm/watershed works and hazard mitigation infrastructure and the Feeder roads/Farm tracks will be funded 100% by the project. For water supply, the current national practice is for communities to make a cash contribution equivalent to one-year facility maintenance costs that shall be deposited in a bank account to demonstrate commitment towards long-term sustainability of the installation. For household toilet systems, the project will pay for the core element of the facility, such as the concrete slab or digni-loo unit, while the beneficiaries excavate the pit and build the superstructure with their own resources.
3. Off-farm/watershed works and hazard mitigation infrastructure will be community-managed. The infrastructure for NR remediation and environmental protection will be maintained by a Natural Resources and Environmental Management Committee to be established under the project at the community level. Feeder roads and farm tracks will be maintained by the Department of Feeder Roads, who will be involved in implementation to enable them to take over post-construction maintenance. Water harvesting, water supply and waste systems will be managed by a Water and Sanitation Management Team (WSMT), a statutorily recognized body operating under the auspices of the District Assembly Works Department. Water will be sold at the tap and revenue raised used to maintain the supply systems. Sanitation and waste management systems will be maintained by the concerned households. Environmental sanitation and waste disposal and recovery systems will be coordinated by the WSMT and supervised by the District Assembly Works Department. An Environmental and Social Management Framework (ESMF), which is prepared as part of the PROSPER design, will identify potential impacts of the infrastructure elements under the subcomponent and will integrate measures for addressing them.

Expansion into natural area. The project will support investments in both the Rice and Maize value chains. It is important to note that since 2008, farmers have more than doubled the acreages of maize and rice in order to meet household consumption demand. On the other hand, Ghana suffers from one of the highest rates of deforestation in the world, and reports estimate that the average annual rate of forest cover lost between 1990 and 2010 was 1.96%. In addition, the rate between 2005 and 2010 was 2.24% and there are identified areas of high biodiversity outside of protected areas. Rice production in Ghana overlaps with two WWF Global 200 terrestrial priority ecoregions, one Conservation International hotspot, five Ramsar sites and 35 Important Bird Areas. Rice is grown in some of the most vulnerable regions to climate change in Ghana. Specifically, the northern savannahs experience severe soil degradation and high vulnerability to desertification, severely impacted by rice production.

Use of Agrochemicals. There is documented evidence of highly toxic chemical pesticides and insecticides being used for rice production in Ghana. Misuse and overuse of these agrochemicals has led to water pollution and environmental contamination, making the risk to biodiversity higher.

Environmental and social category

Based on the IFAD guideline, the environmental and social **category for this project is B.** The following actions will be undertaken by the project to maintain this category; (i) would not impact on any sensitive areas or result in loss natural habitat and biodiversity, project intervention will be confined in existing cultivated lands; (ii) project activities will not be located in areas at high risk of geophysical hazards, thus the risk to agriculture, livestock and small-scale infrastructure are considered to be minimal; (iii) the project design will be directed at environmentally sound and sustainable agriculture and livestock: (a) priority

will be given to multiple water use system for the water use efficiency and strong water management; (b) use of fertilizers will be under the guidance and supervision of the related experts, smallholders will be encouraged to use the bio-fertilizer and vermicomposting as far as possible; (c) ensure adequate mitigation measures are in place to minimize expansion of cultivations into natural/critical habitats, and that no deforestation will incur. (d) use of pesticide will be strictly monitored and will be under the support and guidance of related technicians, project will adopt integrated pest management; (e) project will work to minimize the waste from agriculture or livestock and as far as possible these will be recycled; (f) alternative renewable technology will be used from the production to marketing level; (g) project supported infrastructure are small scale and are not envisioned to cause significant adverse impacts however all necessary measures will be taken to address any such impacts including construction related ones;

(h) carrying capacity assessments will be conducted before and during the project intervention to ensure that project intervention has well respected the carrying capacity and does not further deteriorate the environment; (i) project will actively engage and benefit the vulnerable and socially marginalized communities in project's every activities hence the social risk are minimal. Women, youth, socially disadvantaged groups, disable people will be mainstreamed in value chains.

Climate risk category

Within Ghana, climate change is expected to have more significant effects on the Northern, Upper West and Upper East Regions (hereafter "northern regions") of Ghana, which fall within the Guinea and Sudan Savanna Zones. Agricultural production in the area is dominated by rain-fed agriculture with low levels of irrigation development, confined to a single growing season. There is an increased reliance on chemical fertilisers, although these are rarely applied in appropriate quantities. Considering that the programme will be implemented in some of these regions, the climate risk classification is high. A detailed Environmental and Social management Framework (ESMF) is attached as Annex to this SECAP review note. It provides a framework for the development of site-specific Environmental and Social Management Plans (ESMPs) and Environmental and Social Impact Assessments (ESIAs) as relevant.

Recommendations for project design and implementation

The geographic area of intervention extends to eight regions in the North and three neighbouring regions in the Middle Belt (Bono East, Bono and Oti). PROSPER will actively collaborate with the newly approved AAFORD project in relation to financial services linkage development and access to affordable loans. The Project has 3 components including Component 1 Development of rural institutions and socioeconomic infrastructure, Component 2: Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains and Component 3: Project management and policy engagement.

Subcomponents include; Subcomponent 1.1: Capacity building of rural institutions, enterprises and households, Sup-component 1.2: Development of socioeconomic infrastructure, Subcomponent 2.1: Sustainable marketing linkages and business development, Subcomponent 2.2: Access to rural financial services. New value chain clusters will be developed both in economically backward areas, poverty pockets in the relatively better off economic regions, as well as in climate change vulnerable areas.

It will provide services to 70,000 poor rural households (420,000 individuals with an average of 6 members per household). The project will target the most vulnerable, the poorest, women (40%) and youth (30%) and 5% PWDs. The project will focus on (i) field crops; namely maize, rice, and soy bean that are already supported by other IFAD projects; (ii) value chains such as shea, cashew, poultry will be targeted for livelihoods diversification at the household level; and (iii) vegetables will be supported for nutritional purposes. Selection of value chains to be selected in a given area will differ from one ecological zone to the other but not all value chains will be targeted at the same region.

Climate-smart agriculture. Ghanaian agriculture and food systems are climate

dependent and recognized as one of the most vulnerable sectors to climate change while significant productivity growth in agriculture is also required. IFAD's funded projects can help to usescientific and technological interventions to address the challenges posed by climate change at the operational (farmer) level through the development of:

- a. **Climate-cropping resilient systems.** Climate change is increasing the unpredictability of rainfall in Ghana. Limited access to irrigation, low rates of technological uptake, and the limited use of modern production methods exacerbate output volatility and contribute to food insecurity. These trends will only intensify the vulnerability of the agricultural sector unless measures are taken to mitigate these risks, including investment in irrigation, the development and introduction of drought-tolerant and shorter-duration crop varieties—especially staple grains such as maize and rice—and improved water management techniques on rain-fed farmland.
- b. **Supporting water conservation and irrigation systems.** Given the multiple uses of water (such as for agriculture, power generation, transport, industry, domestic purposes, ecosystems, fisheries and livelihoods), addressing the problems of adaptation to the challenges that climate change poses need to be addressed. Water resources will be at risk of depletion with increased temperatures and decreased rainfall, in particular in northern Ghana. A substantial proportion of Ghanaians directly depend on agriculture for their livelihoods, it is particularly important that IFAD's projects contribute to improved water resources management in combination with sustainable land management land management is cultivated.
- c. **Alternative livelihoods systems.** There is over-reliance on rain-fed agriculture and livestock in the northern region of Ghana that makes communities vulnerable to climate change, with limited capacity to capture, manage and conserve water. Because of erratic rainfall patterns, there is limited ability to increase productivity and low capacity for livelihood diversification. Financial resources and capacity enhancement will be required to provide the knowledge and alternative means of livelihood activities and the ability for agricultural intensification. The diversification of livelihood options into sectors that are not dependent on rainfall could be supported by IFAD's projects. This could include options such as food processing, small ruminants and tree seedling nurseries. These adaptation solutions would have a particular focus on supporting livelihood options for women, who are very often most vulnerable to the impacts of climate change.
- d. **Narrowing yield gaps by increasing per-hectare productivity.** Poor management practices, including incomplete crop recovery (i.e., harvesting all suitable crop) and inadequate agronomic management are some of the main factors contributing to yield gaps. IFAD's funded projects should continue with farmers' organizations to advise farmers on what to grow, how to grow it and how to market the produce. In particular, training could focus on the use of improved seeds, herbicides and fertilizers, improved post-harvest storage and processing, inter-cropping systems and water management practices.
- e. **Private sector engagement to develop new value chains.** To strengthen economic opportunities for farmers' organizations and cooperatives, IFAD's projects will engage potentially new private sector actors as input and service providers and off-takers. They are essential to stimulate markets that incentivize farmers to produce more at a better quality. Eliminating unnecessary requirements, burdensome procedures, and other administrative barriers to testing and registering new crop varieties and improved agricultural inputs would foster private investment in agricultural research and promote the commercialization of technological

innovations. In addition, clarifying and reinforcing intellectual property rights, strengthening quality assurance in seed markets, and rigorously enforcing seed-labelling rules would further support private investment in agricultural technology and the elaboration of the input value chain. Measures will be taken to ensure that the youth and women are integrated and benefit from these new value chains.

Further studies needed

A detailed Environmental and Social management Framework (ESMF is attached as Annex to this SECAP review note. It provides a framework for the development of site-specific Environmental and Social Management Plans (ESMPs) and Environmental and Social Impact Assessments (ESIAs) as relevant.

Monitoring and evaluation

The project's M&E should well capture gender and household poverty disaggregated data. All the project reports will reflect issues of gender, youth, marginalized and disadvantage communities, and indigenous communities. The final project reports systematically identify gender gaps and gender related project success. The Project Coordination Unit (PCU) will lead in the monitoring and evaluation process in close collaborations with other implementing partners and stakeholders. A monitoring committee comprised of the project team, representatives from corresponding government authorities, other financial organizations will be formed at central, provinces, district, municipality and cluster level. These committees will ensure regular monitoring and report delivery to the project office.

Appendix 1: Gender roles

Value chain	Women's Role	Men's role
Crops: Maize, soybean, rice, vegetables	Planting, weeding, cleaning, watering, harvesting Connection with local resource persons Access up to the local market Processing work	Ploughing, partially engage in plantation, weeding, cleaning, and irrigation Purchase: Seed, fertilizers Contact with technician Link with market Processing work Dominate on decision making process
Livestock: Poultry and small ruminants	Poultry farm cleaning Sell to the local buyer Assist to run the local meat shop Connection with local resource person	Shed and poultry farm cleaning Purchase of related materials Contact with technicians Link with market Support on processing work Dominate on decision making process
Trees: Shea	The shea resource is the domain of women because within the household they are traditionally responsible for gathering non-agricultural products (e.g., wild fruits) and also because processing the shea nuts into butter is considered women's work. Very significantly and unlike most cash-crops, women control the revenues from the sale of shea butter, which they use to cover the cash needs of their households and families.	
Trees: Cashew	Women comprise 70% of the labor force and many women participate in the selling of raw nuts at marketing centers. Women make juice and alcohol from cashew apples, and are also highly involved in the processing of apples and nuts at the household level. Women show significant interest working in existing cashew processing companies Consequently, processing jobs are a favored alternative way of earning income for women in rural communities	Men tend to work more with the hard labor associated with cashew production and other agricultural activities. Large traders/exporters and their agents generally tend to be men.

Appendix 2: Environment, Social and Climate Risk Screening

Screening for eligibility

Letter of Interest (Eligibility Screening Form)

Please complete all the required ~~spes~~ in this form

1. Name: Surname Other Names:

Maiden name (for married women):

2. Sex: (a) Male { } (b) Female { }

3. Date of birth:

4. Highest Education Level: (a) No formal education { } (b) Primary School { } (c)
Secondary

School { } (d) Vocational school (e) Tertiary Education { }

5. Which community do you belong to:

6. How long have you lived in this community:

7. How do you belong to this community: (a) by birth { } (b) by marriage { } (c) other
(specify): --

8. Chiefdom District

9. What enterprise are you interested in

10. Do you have any experience in this enterprise: (a) Yes { } (b) No { }. If yes, how many years:

11. Do you belong to any youth or women organization: (a) Yes { } (b) No { }. If yes, what is the name:

12. Do you belong to any cooperative society: (a) Yes { } (b) No { }. If yes, what is the name: -----

13. Do you have access to any land for the enterprise: (a) Yes { } (b) No { }

14. If yes to question 13, where is the land located-----
.....; and what is the area size of the land?

15. What kind of title do you have to the land: (a) Government paper { } (b) Inheritance from parent { } (c) husband or wife's consent { } (d) family allocation { } (e) community's allocation { } (f)

Others (specify):

Endorsements:

Applicant: I certify that the information provided here is correct

Name:

Signature: _____

Date: _____

Community/traditional leader:

Name:
Sign:
Date:

Verifications:

Comments by the Local Government Liaison Office:-----

Name of Officer: Designation:

Sign and date:

Comments by the District Project Coordination Office:-----

Name of Officer: Designation:

Sign and date:

Appendix 3: Screening for Agric Enterprises

A: Screening Form for Agri-Enterprise Projects

General Information

Project Name:	
Name of applicant:	
Name of Cooperative:	
Name of Group:	
Project Location:	
Project sector (e.g. rice farming, cocoa seedling processing, etc.)	
Estimated Cost:	
Proposed Date of Commencement:	
Expected Project duration:	
Site (estimated area in ha):	
Any equity/contribution brought into the	
Any plan for new construction:	

B: Screening for Environmental and Social Issues for Sub-projects

		Additional explanation of
1. Will the sub-project develop any wetlands?		
2. Would the sub-project result in economic displacement ⁶ (loss of assets or access to resources) or physical resettlement?		
3. Would the sub-project result in conversion and/or loss of physical cultural resources?		
4. Will the sub-project have significant social adverse impacts (affecting access to and/use rights to land, access to potable water and water for other uses) on local communities or other project-affected parties?		
5. Will the project trigger unsustainable natural resource management practices (fisheries, forestry, livestock, and significant increase in use of agrochemicals) that exceed the carrying capacity?		
6. Does the sub-project include conversion of significant areas (above 50 ha) of natural forests/other wild lands?		
7. Would the project potentially cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. habitat loss, erosion/ other form of land degradation, fragmentation, hydrological changes)?		
8. Does the proposed project target area include ecologically sensitive areas ⁷ of global significance for biodiversity conservation and/or biodiversity-rich area; habitats depended on by endangered species?		
9. Does the project involve fisheries development in situations where little information exists on sustainable yield?		
10. Could the project pose a risk of introducing invasive alien species?		
11. Does the project involve the transfer, handling or use of genetically modified organisms/living modified organisms that may have an adverse effect on threatened biodiversity?		
12. Is the project site close to any oil and gas installation such as flow stations, oil terminal, oil or gas pipeline right of way?		
13. Has oil spill/ or pipeline fire ever been recorded around project site?		
14. Does the project involve land use changes (agricultural intensification and/or expansion of the cropping area) and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods?		
15. Will the project result in increased use of agrochemicals which may affect the natural environment/human health?		

6 Economic displacement implies the loss of land, assets, access to assets, income sources or means of livelihoods (see SECAP Procedure Guidance Statement 13)

⁷ Sensitive areas' include: protected areas (national parks, wildlife/nature reserves, biosphere reserves);

areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance) and areas with high social vulnerability due to poverty, disease, ethnicity and race

16. Does the project include small-scale irrigation and drainage projects, and water impoundment including small dams (except in wetlands)?			
17. Does the project involve agricultural intensification and/or expansion of cropping area in non-sensitive areas?			
18. Do the project activities include rangeland and livestock development?			
19. Does the project involve artisanal fisheries where there is information on sustainable yield?			
20. Do the project activities include aquaculture and/or mariculture?			
21. Do the project activities include watershed management or rehabilitation?			
22. Does the project include large-scale soil and water conservation measures?			
23. Does the project include small and micro enterprise development sub-projects?			
24. Does the project involve credit operations through financial service providers, including credit for pesticide/other agrochemicals, livestock purchasing, irrigation, etc.?			
25. Do the project activities include natural resources-based value chain development?			
26. Would any of the project activities have minor adverse impacts on physical cultural resources?			
27. Would the project have low probability to have physical resettlement or economic displacement?			
28. Does the project include development of agro-processing facilities?			
29. Will the project require a migrant workforce during construction?			
30. Will the project require seasonal workers to plant and/or harvest produce			
31. Will the construction or operation of the project cause an increase in traffic on rural roads?			

Guidance for sub-project categorization:

"Yes" response to any of questions 1-11	Sub-project Environmental and	ESIA is required for subproject
"Yes" response to questions 12-29	Sub-project Environmental and	Sub-project to adopt the ESMP in the general ESMF

"No" response to almost all questions	Subproject Environmental and	No further analysis is required
---------------------------------------	------------------------------	---------------------------------

Appendix 4: Screening for Market Infrastructure

A: General Information for (Market) Infrastructure Sub-Projects

Name of market infrastructure:	
Infrastructure type:	
Location:	
Proposed Date of Commencement:	
Expected Project duration:	
Estimated cost:	
Estimate number of communities to be served:	
Estimated number of entrepreneurs to be served:	

B: Screening for (Market) Infrastructure Sub-projects

Question	Yes	No
1. Will the project activities include construction/rehabilitation of rural roads or other rural infrastructure in protected/sensitive areas? ⁸		
2. Does the project include construction of roads or other infrastructure that entail the total area being cleared of 50 ha or above?		
3. Does the project include construction of dam (s)/reservoir (between 5-15 m high with a reservoir exceeding 2 million m ³)?		
4. Does the project involve large-scale irrigation schemes rehabilitation/development (above 100 ha)?		
5. Does the project involve significant extraction of ground water (significantly above recharge capacity)?		
6. Does the project include water-based (ground or surface) development where it is believed that significant depletion due to climate change or overutilization has occurred?		
7. Does the project involve significant extraction, diversion or containment of surface water?		
8. Does the project include drainage or correction of natural water bodies (e.g. river draining)?		
9. Will the project include construction/rehabilitation of rural roads that pass through oil infrastructure locations such as flow stations, tank farms or oil and gas pipelines??		

⁸ Sensitive areas' include: protected areas (national parks, wildlife/nature reserves, biosphere reserves); areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of

historical, religious, archaeological or other cultural significance) and areas with high social vulnerability due to poverty, disease, ethnicity and race.

10. Would any of the project activities have minor adverse impacts on physical cultural resources?		
11. Does the project include development of agro-processing facilities?		
12. Will the project require a migrant workforce during construction?		
13. Will the construction or operation of the project cause an increase in traffic on rural roads?		
14. Has the government or community guaranteed the lease of the land for the (market) infrastructure?		
15. Is there any plan in place for sustainability of the infrastructure during the project life time?		
16. Does the project include specific measures to protect against dust (such as dust masks and water spraying)?		
17. Has arrangement been made to pay adequate compensation for private property that may be affected by the construction of the project?		
18. Will construction equipment with moderate decibels be used and the timing of use be so that people will experience less discomfort?		
19. Will tree and vegetation replanting be carried out to stabilize slopes and re-green road sides?		

Guidance for categorization:

"Yes" response to any of	Environmental and	ESIA is required
"Yes" response to	Environmental and	Sub-project to adopt the general ESMP in the
"No" response to almost all questions 1-13 and	Environmental and social category is C	No further analysis is required

Appendix 5: Climate Screening Form

Climate Screening Form for Sub-Projects

To be used with the environmental and social screening forms.

Screening for Climate Issues

Question	Yes	No	Additional Explanation of 'Yes' response*
1. Is the project area subject to extreme climatic events such as flooding, drought, tropical storms, or heat waves?			
2. Do climate scenarios for the project area foresee changes in temperature, rainfall or extreme weather that will adversely affect the project impact, sustainability or cost over its lifetime?			
3. Will the project make investments in low-lying coastal areas/ zones exposed to river flooding and coastal storm surge?			
4. Will the project promote agricultural activity in marginal and/or highly degraded areas that have increased sensitivity to climatic events (such as on hillsides, deforested slopes or floodplains)?			
5. Is the project located in areas where rural development projects have experienced significant weather- related losses and damages in the past?			
6. Will the project develop/ install infrastructure in areas with a track record of extreme weather events?			
7. Is the project target group entirely dependent on natural resources (such as seasonal crops, rain-fed agricultural plots, and migratory fish stocks) that have been affected by in the last decade by climate trends or specific climatic events?			
8. Will climate variability likely affect agricultural productivity (crops/ livestock/fisheries) or the associated incidence of pests and diseases for the project target groups?			
9. Would weather-related risks or climatic extremes likely adversely impact upon key stages of identified value chains in the project (from production to markets)?			
10. Is the project investing in climate-sensitive livelihoods that are diversified?			
11. Is the project investing in infrastructure that is exposed to infrequent extreme weather events?			
12. Is the project investing in institutional development and capacity building for rural institutions (such as farmer groups, cooperatives) in climatically heterogeneous areas?			
13. Does the project have the potential to become more resilient through the adoption green technologies at a reasonable cost?			
14. Does the project intervention have opportunities to strengthen indigenous climate risk management capabilities?			
15. Does the project have opportunities to integrate climate resilience aspects through policy dialogue to improve agricultural sector strategies/policies?			
16. Does the project have potential to integrate climate resilience measures without extensive additional costs (e.g.			

improved crop variety, capacity building; or including climate risk issues in policy processes)			
17. Based on the information available would the project benefit from a more thorough climate risk and vulnerability analysis to identify additional complementary investment actions to manage climate risks?			

Guidance for categorization:

"Yes" response to any of questions 1-9	Sub-project Climate risk is High	Climate risk Analysis is required for sub-project
"No" response to almost all questions	Sub-project climate risk is moderate	Sub-project to adopt the ESMP in the general ESMF

Appendix 6: Environmental and Social Management Plan

Parameter (Activity & Significance)	Activity (Proposed Mitigation Means)	Recommended Monitoring Indicator	Responsibility for Implementation monitoring	Indicators and Monitoring means	Recommended frequency of monitoring	
Component 1: Development of rural institutions and socioeconomic Subcomponent 1.2 Development of socioeconomic infrastructure.						
ENVIRONMENTAL, CLIMATE & SOCIAL MONITORING						
Socioeconomic Infrastructure (Moderate)	Feasibility study for feeder/track roads and causeways, dykes	Baseline on status of the environmental climate and social conditions in the selected communities	PCU / contractor/ Ministry of infrastructure (MOI)	Site-specific ESMP reports Adherence to laid legal and policy requirements (Category B)	Once, at the beginning of project	
Environmental and social baseline (Moderate)	Conduct a baseline assessment to obtain baseline values of key environmental, Climate and social parameters in concerned communities	See environmental, climate and social indicators mentioned below	PCU/ National Environment Agency (EPA)	Field survey	Baseline, once at beginning of project	
Land and soil degradation (Moderate)	Monitor quality of soil and other biological conditions	Soil micro-organism count Soil organic matter count Adopt use of climate friendly technics	PCU (<i>Safeguards and climate team</i>)	Field measurement, incl. soil sample analysis	Annual (or after cropping cycle)	
Surface and subsurface water quality (Moderate)	Monitor sample quality of surface and subsurface water at random sites	Water quality	PCU	Field measurement and Laboratory test	Annual (or after cropping cycle)	
Degradation of Forest and wetland (Moderate)	Monitor quality of forest and wetlands	Changes in forest and wetland area	PCU	Remote sensing and field assessment	Baseline, Mid-Term, End- Term	
Erosion and gully (Moderate)	Monitor quality of land	Changes in area of bare surfaces	PCU	Remote sensing and field assessment	Baseline, Mid-Term, End- Term	
Bush and pipeline fire	Monitor quality of vegetation	Changes in vegetal cover	PCU	Remote sensing and field assessment	Annual	

Loss of biodiversity (Moderate)	Monitor quality of biodiversity	Changes in abundance of biodiversity	PCU	Field survey	Annual	
Waste proliferation (High)	Monitor quality of land, water, and air	Changes in soil, air, and water quality	PCU	Field measurement and laboratory test	Annual	
Use of agrochemicals (Moderate)	Monitor quality of plant, soil, and water	Changes in quality of plant, soil, and water	PCU	Laboratory test	Annual	
Flooding (High)	Monitor quality of land	Extent of land inundation	PCU	Field survey and remote sensing	Quarterly	
GHG emissions (High)	Monitor quality of air	Preponderance of GHG in the air	PCU/ National Environment Agency (EPA)	Field measurement	Annually	
Socio-economic conditions (Moderate)	Conduct a combined sustainable livelihood analysis (SLA) / resilience assessment, providing baseline status of key socio-economic conditions in selected communities	Food security, assets, employment, income, production methods and volumes, access to markets and finance, social inclusion, disaster preparedness	PCU	Field survey Field measurement (update)		
Community conflict (internal) (Moderate)	Monitor the effectiveness of grievance redress mechanism	Occurrence of violent conflicts within selected communities	PCU/ Ministry of social affairs and local development	Community visit		
Youth violence (militancy and cultism) (Moderate)	Monitor youth violence situation	Occurrence of youth violence within selected communities	PCU/Ministry of Justice	Community visit	Quarterly	
Resource-based conflict (farmers – pastoralists) (High)	Monitor conflict situation	Occurrence of violent conflicts between selected communities and external parties	PCU	Community visit	Quarterly	
Loss of (access to) agricultural	Monitor land access and ownership	Change in land access and ownership for women and	PCU	Community visit	Annually	

land (Moderate)		youth				
Social exclusion (Moderate)	Monitor inclusion of women, PWD, and youth in decision-making	Percentage of women, PWD and youth represented in community-level decision-making committees, associations and meetings	PCU/ Ministry of Justice	Community visit	Annually	
Elite capture (High)	Monitor (political) interference, conflicts of interest, corruption	PCU	PCU/ ministry of agriculture	Community visit	Annually	
Unsafe and non-healthy working conditions (Moderate)	Monitor health impacts and child labour	Number of cases reported and suspected of health impact due to use of agro-chemicals, accidents due to use of production and processing machinery and related faulty wiring and, use of child labour.	PCU/ Ministry of Heath	Community visit	Annually	
Gender-based Violence including Sexual Exploitation, Abuse (High)	raise awareness or interventions on SEA	Percentage of people sensitized	PCU/ Ministry of Justice/ Gender and women	Community visit	Annually	
Financing (Moderate)	Subscribe to the principles of sustainable environmental, climate and social management in the financing of business plans (ESMS of FIs such as RCBs)	Number of MFIs partners that have integrated sustainability into their financing (ESMS of FIs such as RCBs)	PCU	Community visit	Annually	
Socioeconomic Infrastructures (Moderate)	Feasibility studies	Reports	PCU/ Ministry of infrastructures	Community visit	First year	

Business Plan Development per activity (Moderate)	Screening of sub-activity + Site specific E&S impacts Assessment (ESMP)	Reports	PCU	Community visit	At the beginning prior to activity implementation	
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Appendix 7. ESMF



REPUBLIC OF GHANA

PROMOTING RURAL OPPORTUNITIES SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE – PROSPER

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK - ESMF

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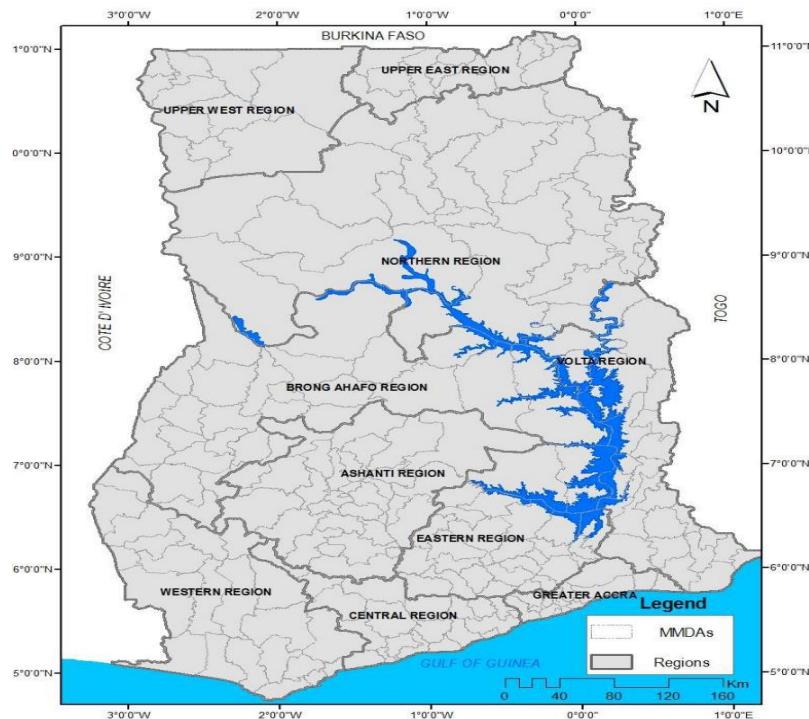
Administrative
Ghana

-- DRAFT

2021

Map of

REPORT --
September



PREFACE

This **Environmental and Social Management Framework (ESMF)** for the Government of Ghana will be applied to all activities financed by the International Fund for Agriculture Development (IFAD) through the leadership of the Government of Ghana, more precisely the Ministry of Food and Agriculture (MOFA) for technical and/or financial support to the "**Promoting Rural Opportunities Sustainable Profits and Environmental Resilience - PROSPER**".

PROSPER Project Coordination Unit (PCU), supported, both financially and technically by IFAD will, at the request of the MOFA be hosted at the national level in the field, most likely in Tamale, and responsible for the overall coordination of project activities, with field-based environmental, climate, and social safeguards compliance, as well as gender and social inclusion works directly led by the respective locally recruited Senior **Safeguards and Climate Specialists - SSCS**, and **Senior Gender and Social Inclusion Specialist - SGSSIS** to ensure good compliance on safeguards, as well as on Gender and Social Inclusion mainstreaming so to foster and sustain an overall satisfactory project safeguards performance throughout its lifespan. They will frequently liaise with **District level hired Focal Points (DFP)** as part of the MOU with Local Authorities (DDAs) supported by Ghanaian Environmental Protection Agency (EPA) on all safeguards-related issues, consistently with both applicable national legislations, and IFAD SECAP procedures. The same goes also with regards to financial intermediaries aimed at supporting local farmers to access to fundings. APEX Bank, the designated entity, will also have a Safeguards and climate coordination unit at their level. An Environmental, Social, Climate Specialist and a Gender and Social Inclusion Specialists will be hired to ensure all funding proposal are screened and in full compliance prior to their funding.

Until the physical footprints of proposed project activities are clearly defined by/after project approval¹, this document will remain a living document and thus subject to subsequent modifications and changes in line with the evolving situation or scope of the project activities. As an iterative process, therefore, much closer participatory consultation with the IFAD, GoG, and formal clearance and public disclosure of this ESMF will be necessary.

¹ - This is also function of the variation of the current **Project Development Objective (PDO)**, which is susceptible to variation before/by the Appraisal stage. Until then, the ESMF remains flexible and adaptable based on any changes that occur.

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ABBREVIATIONS

Acronyms	Meaning
1D1F	One District One Factory
AAFORD	Affordable Agricultural Financing for Resilient Rural Development Project
ABP	Advanced Business Plan
ASWG	Agricultural Sector Working Group
AU	African Union
BAC	Business Advisory Centre
BBP	Basic Business Plan
BoG	Bank of Ghana
BP	Business Plan
BRC	Business Resource Centre
CSA	Climate-Smart Agriculture
COP	Conference of the Parties to the United-Nations Framework Convention on Climate Change
DA	District Assembly
DAES	Directorate of Agricultural Extension Services
DDA	District Department of Agriculture
DSF	District Stakeholder Forum
DDWS	District Department of Water and Sanitation
DNA	Designated National Authority
EA	Environmental Assessment
EIA	Environmental Impact Assessment
ESA	Environmental and Social Assessment/Audit
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESRF	Emergency Support to Rural Livelihoods and Food Systems Exposed to COVID-19
ESIA	Environmental and Social Impact Assessment
ESS	Environmental and Social Safeguards
FARA	Agribusiness Learning Alliance
FAO	Food and Agriculture Organization of the United-Nations
FMA	Financial Management Assessment
FNS	Food and Nutrition Security
GADP	Ghana Agricultural Development Plan
GAIP	Ghana Agricultural Investment Programme
GASIP	Ghana Agricultural Sector Investment Programme
GBV	Gender based violence
GCF	Green Climate Fund
GCX	Ghana Commodities Exchange
GEA	Ghana Enterprises Agency
GEWE	Gender Equality and Women's Empowerment
GFD	Ghana Federation of the Disabled
GHG	Greenhouse Gas
GIRSL	Ghana Incentive Based Risk Sharing Agricultural Lending
GJSP	Ghana Jobs and Skills Project
GoG	Government of Ghana
GRM	Grievance Redress Mechanism
GSI	Gender and Social Inclusion
GSICS	Gender and Social Inclusion Specialist
GVS	Gender and Vulnerability Specialist
ICO	IFAD Country Office
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFR	Interim Financial Report
IGA	Income Generation Activities

IGREENFIN	Inclusive Green Financing Initiative
IPM	Integrated Pest Management
IPRM	Integrated Project Risk Matrix
IWRM	Integrated Water Resources Management
KAP	Knowledge Attitude Practice
LFM	Logical Framework Matrix
LULUCF	Land Use, Land-Use Change and Forestry
MDDW	Minimum Dietary Diversity for Women
MESTI	Ministry of Environment, Science, Technology and Innovation
MIYCN	Maternal, infant, and young child nutrition
MLGRD	Ministry of Local Government and Rural Development
MNDPF	Medium-Term National Development Policy Framework
MoF	Ministry of Finance
MoFA	Ministry of Food and Agriculture
MoGCSP	Ministry of Gender, Children and Social Protection
MoTI	Ministry of Trade and Industry
MPI	Multidimensional Poverty Index
MSME	Micro-, Small- and Medium-Enterprise
MSP	multi-stakeholder platform
NCD	Non-communicable disease
NDC	Nationally Determined Contribution
NFIDS	National Financial Inclusion and Development Strategy
NNP	National Nutrition Policy
NOTUS	No Objection Tracking and Utilities System
NRGP	Northern Rural Growth Programme
NRM	Natural Resources Management
PERD	Planting for Export and Rural Development
PFI	Participating Financial Institutions
PFJ	Planting for Foods and Jobs
PRM	Procurement Risk Matrix
PROSPER	Promoting Rural Opportunities, Sustainable Profits and Environmental Resilience
PWD	Person with Disability
PLWD	Person Living with Disability
RAFIP	Rural and Agricultural Finance Programme
RCB	Rural Commercial Bank or Rural Community Bank
RAMSAR	Ramsar Convention on Wetlands of International Importance
REP	Rural Enterprises Programme
RFSP	Rural Financial Services Project
RI	Rural Institution
RTIMP	Roots and Tubers Improvement & Marketing Programme
SBCC	Social Behaviour Change Communication
SC	Steering Committee
SCGV	Safeguards, Climate, Gender and Vulnerability
SCS	Safeguards and Climate Specialist
SDG	Sustainable Development Goals
SSCS	Senior Safeguards and Climate Specialist
SGSIS	Senior Gender and Social Inclusion Specialist
UNSDP	UN Sustainable Development Partnership
WEF	World Economic Forum
WSMT	Water and Sanitation Management Team

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EXECUTIVE SUMMARY

Ghana is a lower-middle-income country with an estimated per capita GDP (i.e., \$2,221 (2019), 6.5% one of the highest rates in the world). Ghana's economy is heavily dependent on the export of specific commodities (i.e., gold, cocoa and oil), and remains vulnerable to commodity price shocks. Ghana is a country in a dynamic transition trend from extreme fragility to greater resilience to external and climate-induced shocks, but many development challenges remain despite the tangible sustainable development efforts initiated by both the current and previous Government authorities/regimes. In this challenging environment and context, Government is addressing the main drivers of country fragility, namely high rates of population growth and outmigration, limited access to resources, regional instability, unsustainable fiscal deficits, the limited capacity of the public administration, and structural vulnerabilities and shocks such as climate change and environmental degradation. These drivers of the country fragility are resulting in intensely negative socio-economic and environmental effects particularly in the agricultural sector. At present there are insufficient financial resources and technical capacity to build the resilience of organizations for transformative smallholder agriculture.

While several reforms lead to a more conducive business environment, Ghana's rank in the 2020 Doing Business Report was 118 among 190 economies. The impact of COVID-19, still ongoing, has resulted in economic slowdown and socioeconomic challenges that are detailed below. 23% of Ghana's population are monetary poor and 8.2% live in extreme poverty. When it comes to multidimensional poverty (across three dimensions: education, health, and living standards). The highest concentration of extreme poor (36%) lives in the Savannah region.² Poverty, in the Middle Belt and other areas is lower than in the North. Agriculture accounts for 21% of Ghana's total GDP, 71% of employment in rural areas, over 40% of export earnings. Factors contributing to rural poverty include underdeveloped agricultural technologies, poor access to financial services (especially among women), lack of secured market linkages, inadequate marketing infrastructure, post-harvest losses, lack of advisory services, and cumulative environmental degradation. Most of Northern Ghana falls within the Guinea Savannah Ecological Zone. Here smallholders grow mainly soya, maize, sorghum, rice, millet and vegetables. The challenges affecting agricultural development are compounded by the negative effects of climate change, such as increasing dry spells and rising temperatures, and degradation of arable land and critical infrastructure.

The Promoting Rural Opportunities, Sustainable Profits and Environmental Resilience Project (PROSPER) aims to strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority VCs in the Northern and Middle Ecological Belts of Ghana taking advantage of the increased demand created by the national agro-processing strategy. PROSPER aims to provide a framework for the long-term engagement with and financing for private sector-led, pro-poor agricultural VC development tailored to the specific needs and potential of small-scale producers and operators in targeted regions of Ghana.

PROSPER is aligned with the development strategies set out in the Medium-Term National Development Policy Framework (MNDPF 2018-2021) and priorities set by MoF in the National Financial Inclusion and Development Strategy (NFIDS 2017-23). MoFA's Ghana Agriculture Investment Plan (2018-2021) – Investing for Food and Jobs, Gender and Agricultural Development Strategy (2015), is aligned with the international development framework including the UN 2030 SDGs (2015), AU CAADP-Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods (2014) and the ECOWAS Vision 2050 (2021). PROSPER aligns with the MoGCSP's National Gender Policy (2015), the Agenda for Jobs (2018-21) policy framework, National Youth Policy (2010) and Nutrition Policy (2014), while taking into

² Ghana Living Standards Survey, 2018.

account changes in the socioeconomic landscape of the country and recent developments at the international level.

The geographical targeting strategy of PROSPER considers (i) high rural population, (ii) high poverty prevalence, (iii) high rate of food and nutrition insecurity, (iv) strong concentration of female and male youth and (v) presence of economic opportunities relevant to the project in each district, combined with indicators of climate vulnerability and the level of cumulative degradation of the productive NR base (particularly soil, water and trees).

The geographic area of intervention extends to eight regions in the above-mentioned Belts. All five regions in the Northern Belt, (Upper West, Upper East, North-East, Savannah and Northern), have a high poverty head count, the highest 92% (Wa West District, Upper West). The three neighbouring regions in the Middle Belt (Bono East, Bono and Oti) are relatively less poverty stricken on average than those in the Northern Belt but contain pockets with a markedly high poverty head count peaking at 78% Kintampo South District, Bono East. The number of regions has risen from five at Independence to the present 16, but the administrative divisions do not coincide with the environmental and socioeconomic conditions. Broadly, poverty is progressively deeper from South to North with the drier climate and increasingly challenging setting for agriculture with the negative impact of climate change. The poverty analysis underpinning the geographical targeting of PROSPER is presented in the PIM.

Selection criteria will be developed and validated with communities. These criteria include: (i) poverty and food insecurity; (ii) community interest and demand; (iii) synergies with other donor-supported projects; (iv) site potential (including downstream effects, physical cultural resources, hydrogeological potential and saline-water intrusion dynamics in rice production schemes);(v) proximity to weekly rural markets and linkages with off-takers, and; (vi) land size of group members (not exceeding five hectares of land under rice/vegetables). The project targeting strategy, including gender equality and women's empowerment.

Key environmental, climate and social risk category classification and issues:

In line with IFAD's Social, Environmental and Climate Change Assessment Procedures (SECAP), PROSPER is classified as a **Category B operation** and equally falls under **category B** of Ghana's Environmental and Social Impact Assessment (ESIA) Guidelines and Procedures, implying that PROSPER is likely to cause limited environmental and social impacts which are mostly small in size, mostly site-specific and thus can be successfully managed by appropriate preventive actions and/or mitigation measures provided in this ESMF. Key risks, impacts and opportunities to environmental and social management are: poor governance and lack of institutional, technical and organizational capacity, implementation capacity by service providers for foreseen socioeconomic infrastructures; which will be addressed through the effective implementation of the ESMF/ESMP. As stated in component 1 (precisely subcomponent 1.2) community-driven socioeconomic infrastructure will be subject to feasibility studies/ESIA and approval by EPA. The project will not result in involuntary resettlement, or impact on physical cultural resources.

From a Climate Change Risk Assessment standpoint, the project is classified as **High**. The target communities are substantially dependent on climate-sensitive natural resources, especially rainfed agricultural plots and tree crops such as shea and cashew. Large parts of the project area are increasingly exposed to droughts and flash-flooding. GHG emissions through increased production and processing and climate variability, including unexpected dry spells, unpredictable rainfall and low/high temperatures, can affect the project risks, impacts, sustainability and returns on investments. However, the project has the potential to integrate climate resilience measures, such as improved techniques of growing and processing of tree crops (cashew and shea) and in the fight against deforestation through the systematic use of integrated agroforestry systems,

solar panels and/or biogas using efficient and usable friendly biodigesters, as well as the usage of biofertilizer. Systematic climate risk analysis will be undertaken by the project throughout implementation to ensure adequate and timely monitoring and management of climate change risks.

Environmental management and monitoring plans

Pertinent national legal, institutional, and regulatory frameworks were carefully reviewed to set in context the Environmental and Social Management Framework (ESMF) for PROSPER. The environmental, climate and social context and present challenges for the targeted eight regions were reviewed. Some of the mitigation and adaptation plans recommended in the ESMF include, amongst others:

- ✓ capacity building of multiple actors in technical, management and governance aspects, and strengthening of women's and youth farmers organizations,
- ✓ At household level, upgrading of vegetable gardens but also water infrastructure with solar or biogas powered irrigation pumping systems, intercropping, systematically introducing nutrient and vitamin-rich crops particularly for the selected VCs (rice, maize, soybean), agroforestry, promotion of sustainable land and water management practices and youth training support/youth incubation including on sustainable management of natural resources.
- ✓ Infrastructure investments (feeder, track roads, causeways, culvert, small connecting bridges) will be subject to screening, feasibility studies and license approval by the relevant institutions to ensure that there is minimal social and environment impact but also the infrastructures withstand to climate change impacts (floods, salinity, wildfire, etc....).
- ✓ Ecosystem preservation activities as the rehabilitation of thousands of hectares of mangroves and community forests.
- ✓ creation of solution-oriented inclusive platforms for high-level policy dialogue between private operators, FBO/RIs and public authorities and access to land and credit/loans. .
- ✓ support climate resilient and smart infrastructure in the targeted areas to expand arable land and water management productivity and reduce poor people's vulnerability to natural hazards, food insecurity and nutrition, the nature of risks and exposure to climate change.
- ✓ Sustainable land use and forest ecosystems will contribute to reducing GHG emissions. Climate resilient infrastructure (land and water development) and upgraded household-level vegetable gardens will lead to secure production and reduce the risk of low yields while contributing to expanding the period of production from the 3 months of the rainy season to 6 to 9 months within the dry season.
- ✓ Good climate resilient/smart agricultural practices in rice, maize, soybean, Shea and Cashew, and household-oriented horticulture will be promoted to address drought, flooding, salinization, locusts effects and harsh environments (land degradation).
- ✓ Development of a capacity building strategy, the project will address the limited knowledge of climate change impacts on smallholder agricultural value chains and landscapes and effective adoption and implementation of adaptation interventions.
- ✓ development of new modules on climate resilient agriculture, waste management and renewable energy for solar-operated boreholes/water pumps and other warehouses/workshop centers.
- ✓ Improve collaboration with Ghana National Meteorological Agency to ensure production and dissemination of key agro-climatic information to farmers at regular intervals.
- ✓ As much as is possible, discourage cultivation in areas that are very close to the major river systems to minimize overflow during normal flow seasons

- ✓ Improve collaboration with research institutes to introduce early maturing/short duration and flood resistant rice varieties to the farmers to reduce flood impacts
- ✓ Support and strengthen Seed Labs/silos/warehouses to be able to carry out rigorous tests on seeds to ensure that only genuine foundation seeds are used by farmers
- ✓ If any usage is foreseen, timely collaborate with regulating agencies to ensure that agrochemicals, soil fertility systems meet the approved FAO/WHO standards; training and certification of 'spraying gangs' to eliminate agrochemical misapplication; public health and safety concerns and soil and water pollution
- ✓ Support Value Chain actors in conversion of rice wastes into briquettes and vegetable stalk to animal feeds
- ✓ Improve community security arrangements by supporting dialogue and understanding between farmers and pastoralists to reduce resource conflicts. Support to strengthening existing informal and formal existing grievance redress mechanisms proposed in the ESMF/ESMP and establishing new ones where they don't exist. Such systems will address concerns that may be raised associated with other project activities.
- ✓ Avoid farming along recognized grazing routes and demarcated grazing reserves, transhumance corridors or cattle ranches;
- ✓ Support promotion of land governance and efficient land management as adaptation measures
- ✓ Contractors will be required to comply with national and state regulations governing the environment, public health and safety and labor practice.

Estimated Costs for Environmental and Social monitoring plans

A total of **\$3 million USD** has been estimated for the environmental and social monitoring for PROSPER. About **\$2,080,000** is expected to be expended at the base 3 years while the rest is spread across the 4th to 8th year. The fund covers environmental and social monitoring plans including:

- Site specific studies for socio-infrastructure rehabilitation and new infrastructure (including roads, causeways, markets infrastructures, etc.), will be conducted
- Training including 'spraying gangs', draining of rice paddies, and construction of water harvesting structure for dry season irrigation ;
- Support for conflict resolution including stakeholders' dialogue on conflict management and land governance
- Health and Safety including Health insurance for agro-entrepreneurs.

A successful mainstreaming of ESMF into implementation of the PROSPER project also requires adequate sensitization and the strengthening of institutional capacities through capacity building programs. The sums of **\$920,000** and **\$2,080,000** respectively have been estimated for additional capacity building activities and the hiring of Focal points at local Government level in all the **85 districts** of project areas. In total, both the Environmental and Social Monitoring costs and capacity building cost, and the cost of hiring key specialists account for **\$3,000,000** to enhance environmental, climate and social opportunities as well as and address any potential adverse impacts.

1- INTRODUCTION

To support its sustainable development strategy and program, particularly towards alleviating rural poverty of the most fragile and vulnerable populations by the end of 2035, the Government of Ghana has requested and obtained the support of the **International Food and Agriculture Development (IFAD)** with the development of the "**Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)**" project³.

This ESMF has been prepared in support to the PROSPER project. The project has been screened against IFAD's Social, Environmental and Climate Assessment Procedures (SECAP) and deemed a **Moderate Risk** project for Social and Environmental safeguards, and **High Risk** thereby requiring appropriate avoidance and mitigation measures in place to ensure that all activities are carried out consistently with the SECAP and applicable national regulation and core requirements.

This ESMF has been prepared in such a way as to set out the basic principles, rules, guidelines, and procedures for screening, assessing, and managing the likely potential social, environmental and climate risks and impacts of those proposed outputs and activities already been defined, as well as yet undefined interventions. It contains measures and plans to avoid, and where avoidance is not possible, to reduce, mitigate and/or offset adverse risks and impacts. The ESMF specifies the most likely applicable social and environmental policies, standards, protocols, and requirements and how those requirements will be met through procedures for the screening, assessment, approval, mitigation, and the robust monitoring and reporting of social, environmental and climate risks and impacts associated with the activities to be supported under PROSPER.

For the project outputs that have been defined with a reasonable degree of certainty, this ESMF includes indicative provisions outlining the management plans required to addressing likely social, environmental and climate change related risks and impacts, as well as several of the requirements of applicable policies, standards, procedures, including the applicable national regulations. The preparation of the ESMF was consultative enough and inclusive of women, youth, and vulnerable groups and many other key stakeholders met during the field consultations, namely the Ministry of Agriculture (both in Accra and in Tamale and Kumasi) - District Directorates of Agriculture (DDA), the Ministry of Environment and forestry, The Environmental Protection Agency, the Ministry of Water, the District Directorate of Water Agencies (DDW), the local government, Municipalities/Mayors, Academia and Research centers, local Farmer-based Organization/FBO, farmers cooperatives, Women and/or Youth Associations, Private sectors active in the Agricultural field, local Banks, other government/donor funded operations, etc. Once completed, and consistently with IFAD requirements, the ESMF will be publicly disclosed both in-country and on the IFAD website, prior to the project approval to ensure project stakeholders and any other interested party has a free access to the documents. Both the Government of Ghana and IFAD will ensure all approved documents are available on their respective website to enable whoever is interested to freely and publicly access these documents and provide any inputs they found necessary. Since stakeholders' consultation and engagement is an iterative process, this process will be continued and randomly monitored to ensure systematic consistency and transparency throughout the project lifecycle.

1.1. Country and Project Context and Rationale

A. National context and rationale for IFAD involvement

a. National Context

³ - Moving forward and for simplification purpose, we will be most often using the term "**The Project**" in lieu and place of the full denomination of the "**Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)**" project.

Economic context. Ghana is a lower-middle-income country with an estimated per capita GDP of USD 2,221 (2019). In 2019, GDP grew by 6.5%, up from 6.3% in 2018 – one of the highest rates in the world. Ghana’s economy is dependent on the export of a limited number of commodities such as gold, cocoa and oil, and remains vulnerable to commodity price shocks. In 2020, the inflation rate was 9.2%, unemployment at 4.53%, and national debt at 78% of GDP (64% in 2019).⁴ While several reforms lead to a more conducive business environment, Ghana’s rank in the 2020 Doing Business Report was 118 among 190 economies. The impact of COVID-19 has resulted in economic slowdown and socioeconomic challenges that are detailed below.

Poverty and food insecurity. 23% of Ghana’s population are monetary poor and 8.2% live in extreme poverty.⁵ When it comes to multidimensional poverty (across three dimensions: education, health, and living standards), the proportion increases to 45.6%, especially in rural areas, where it is far higher (64.6%) than urban areas (27.0%).⁶ Wealth distribution is biased towards men: 62% of female-headed households fall into the two poorest quintiles – compared to 39% of male-headed households. The regions of the Northern Belt have the highest prevalence of poverty, up to 62% in the rural areas. The highest concentration of extreme poor (36%) lives in the Savannah region.⁷ Poverty, in the Middle Belt and other areas is lower than in the North. While some of the regions have lower poverty levels overall, there are persistent pockets of poverty, food insecurity, undernourishment and malnutrition.

Persons with disabilities (PWD) represent 3% of the total population.⁸ More than half living in rural areas are concentrated in the Middle Belt and almost a quarter in the Northern Belt. Ghana has a prevalence of undernourishment of 7%, while moderate or severe food insecurity in the population stands at 49.6%.

Agricultural and rural development context. Agriculture accounts for 21% of Ghana’s total GDP, 71% of employment in rural areas, over 40% of export earnings. Agricultural imports are substantial, mainly wheat, rice, chicken (frozen), milk and fish. Rain fed agriculture prevails in 96% of arable land. Around 85% of farming households own less than 10 ha of land and more than two-thirds own less than 2 ha cultivable land. Factors contributing to rural poverty include underdeveloped agricultural technologies, poor access to financial services (especially among women), lack of secured market linkages, inadequate marketing infrastructure, post-harvest losses, lack of advisory services, and cumulative environmental degradation. Only 37% of the rural population has access to accounts in formal financial Institutions (FIs). Furthermore, rural institutions are generally weak with limited capacity to support small-scale producers. The challenges affecting agricultural development are compounded by the negative effects of climate change, such as increasing dry spells and rising temperatures, and degradation of arable land and critical infrastructure.

Most of Northern Ghana falls within the Guinea Savannah Ecological Zone. Here smallholders grow mainly soya, maize, sorghum, rice, millet and vegetables. Rice cultivation in the valley bottoms has great potential to reduce poverty levels. Dry season vegetable production is significant at irrigation sites. The productivity for these crops remains below potential, due in part to lack of access to inputs, mechanization and extension outreach. Shea trees cover around 77,670 square kilometres in the Northern zone and support the livelihood of approximately 900,000 rural women. Trade in shea butter has been rising with strong export demand.

The *Middle Belt* falls within the transition ecological zone. Here smallholders grow mainly cassava, plantain, maize, yam and soya, with rice cultivation in valley bottoms. The cashew value chain (VC) generates income for about 350,000 smallholder farmers.

⁴ Statista, 2021.

⁵ Ghana Living Standards Survey, 2018.

⁶ Ghana’s Multidimensional Poverty Index (MPI) Report, UNDP, 2020. The indicators that contribute most to multidimensional poverty in Ghana are lack of health insurance coverage, undernutrition, school lag and households with members without any educational qualification.

⁷ Ghana Living Standards Survey, 2018.

⁸ 2010 Population and Household Census.

Cashews can grow on even marginal lands and can stabilize the soil in which it grows while serving as carbon sinks. However, production is affected by (less than 50% of potential) factors such as difficulty in accessing good planting materials and improved farm inputs, inadequate extension services, access to credit, weak RIs and lack of effective pricing and marketing mechanisms, pest infestations, incidences of bush fire, loss of soil nutrients and inadequate soil moisture.

Vegetables such as tomato, pepper, okra, garden eggs and cabbage are grown mostly under rainfed conditions as backyard production for subsistence and commercial purposes in both the Northern and Middle Belts. Availability is highly seasonal, peaking June-September. Productivity is usually less than 50% of attainable potential due to traditional cultivation practices, the lack of irrigation systems, limited use of improved inputs and high post-harvest losses.

The *livestock* sector is an important component of Ghana's agriculture. In 2019, the sector contributed about 13.3% of agricultural GDP in direct products and had a growth rate of 5.4%, (SRID, 2020). Most rural households (41.5%) keep some form of livestock, livestock as an adjunct to crop farming. Small and large ruminants are kept as a form of security and not as a source of protein, so the direct contribution to household food and nutrition security is low.

The **COVID-19** pandemic resulted in a GDP growth of 1.1% in 2020 down from the pre-pandemic levels of 4.8% in 2020. Petroleum receipts, import duties and other tax revenues were negatively affected, reducing the fiscal space for the GoG. 77.4% of households in Ghana have experienced declines in income. Reduced remittances to rural areas contributed to food insecurity. The country's average monthly food inflation recorded an increase from 8.4% in March 2020 to 13.7% in July 2020. While food prices continued to rise into 2021, the overall economic crisis eased and growth is projected to increase to 4.0% in 2021 and 4.1% in 2022.

To mitigate the socioeconomic impact of COVID-19, the GoG took several measures, including: the establishment of the Coronavirus Alleviation Programme (CAP), starting with a USD 219 million contribution from the Ministry of Finance (MoF); a reduction in the inter-bank policy rate from 15.5% to 14% by the Central Bank of Ghana; lowering reserve requirements from 10% to 8% to increase credit availability and affordability. The Ministry of Food and Agriculture (MoFA) launched an Agricultural Response Plan increasing the supply of subsidized seeds and fertilizers to poor smallholders; IFAD's Emergency Support to Rural Livelihoods and Food Systems Exposed to COVID 19 (ESRF) supported the GoG efforts in this area.

Ghana's economy showed signs of recovery in the second half of 2020 and is projected to grow by 4.2% in 2021 and 5.3% in 2022. However, volatile commodity prices and lingering uncertainty over the COVID-19 pandemic still present key downside risks.⁹

National strategies, policies, and lead institutions. The Medium-Term National Development Policy Framework (MNDPF 2018-2021) recognizes the growth of agriculture as the main driving force for rural development and transformation. The Ghana Agricultural Development Plan (GADP) focuses on the development of the agricultural sector from 2018 to 2021 through modernization and transformation. MoFA has increased support to the production of field crops through the Planting for Foods and Jobs (PFJ) initiative for farmers in the Northern and Middle Belts with 2-3 acres land to access improved seeds and fertilizers, with a 50% subsidy, extension services and marketing opportunities. GoG is implementing the PERD (2019-2023) programme for job creation and export diversification through tree-crops and has established the Tree Crops Development Authority. To ensure coordination and policy dialogue, MoFA chairs the Agricultural Sector Working Group (ASWG) established between the GoG and development partners including IFAD.

The One District One Factory (1D1F) programme led by the Ministry of Trade and Industry (MoTI) aims at establishing at least one medium-to-large-scale industrial enterprise in every district to create quality jobs and achieve a balanced spread of industries. The programme established 104 companies so far, of which 68 were existing

⁹ <https://www.worldbank.org/en/country/ghana/overview>.

companies and 36 newly built, employing 150,975 people) As part of 1D1F, the IFAD-supported Rural Enterprises Programme (REP) established 58 ENABLE Youth factories as a vehicle for employment creation for tertiary level graduates. In 2020, an MSME and Entrepreneurship Policy was approved, which led to the transformation of the NBSSI into the Ghana Enterprises Agency (GEA). A network of 166 Business Advisory Centres (BACs) and 57 Business Resource Centres (BRCs) has been established across the country under an arrangement between REP, GEA and participating District Assemblies, to provide high-value business development services to the business community.

b. Rationale for IFAD involvement

The development challenge and prognosis. The underlying issue flagged is the persistence of intractable poverty in many rural communities dependent on agriculture in the drier Northern parts of the country. The prevailing low input-low output rainfed farming systems in the north and middle zones are suboptimal and neither financially nor environmentally sustainable. Additionally, with a long history of over-exploitation, the economic carrying capacity of the heavily depleted productive NR base is declining whilst the number of dependents increasing. The negative effects of rapid climate change are making bad conditions worse. The remedy is to uplift rural economies by transforming the bedrock of small-scale farming from predominantly subsistence to financially and environmentally sustainable systems tied into functioning markets. This rationale focuses on both the supply side – the scale and technical transformation of production – and a marked increase in the real demand for the produce, whilst ensuring that the most vulnerable people are not left behind in poverty.

For the producers, individually and in groups, the imperative is the technical and organisational skills needed to progress to “farming as a profitable business” and to transition to agricultural and land management practices that reverse the depletion in the NR base, both on- and off-farm, crucially soil, water and trees. A key mindset change is to engage proactively with other private sector operators to build collaborations that are mutually beneficial and with balanced bargaining power. To this end, the critical linkage in the VC is the first, between producers and agribusinesses. On the demand side, the agricultural market prospects in the North and Middle Belts are promising, with strong global demand for maize, shea and cashew and rapidly increasing domestic demand and import substitution possibilities for rice, soya and poultry. GoG is investing heavily in the scale and capacity of “upstream” VC actors through 1D1F and other programmes. However, the mass of rural producers is not able to capitalise on the growth in demand, being effectively outside the mainstream economy. The development challenge for PROSPER is to broaden, deepen and extend the reach of these commodity VCs to engage with significant numbers of primary producer groups. The resulting “demand pull” is much stronger than “supply push” in driving local medium-term economic growth. The increased volume of business is expected to create opportunities for enterprises in agro-processing and value addition at all scales, fuel employment and incomes within local economies through a multiplier effect, and thereby raise the food security and nutrition security of whole communities.

IFAD's comparative advantage. The Fund has a wealth of technical expertise to partner countries in addressing rural poverty combined with the capacity to mobilise resources at a scale that can make a lasting impact on the lives of vulnerable people. IFAD has a strong record in Ghana in working with poor rural communities in the food and agriculture sector in the Northern and Middle Belts. A portfolio of projects has focused on various closely related aspects directly relevant to the design of PROSPER. *Roots and Tubers Improvement & Marketing Programme* (RTIMP) took an integrated commodity chain approach. *Northern Rural Growth Programme* (NRGP) combined commodity chain and rural infrastructure development with access to financial services. *Rural and Agricultural Finance Programme* (RAFIP) followed by *Rural Financial Services Project* (RFSP) have built up the microfinance subsector. *Ghana Agricultural Sector Investment Programme* (GASIP) is concentrated on agribusiness linkages and VC development, with measures to promote climate change resilience. *Rural Enterprises Programme* (REP) seeks to promote rural business, many of which are based on

agriculture and NRs. Most recently, *Affordable Agricultural Financing for Resilient Rural Development Project* (AAFORD) is focused on smallholder access to formal credit. *Emergency Support to Rural Livelihoods and Food Systems exposed to COVID 19* (ESRF) was a rapid response to support smallholders coping with the pandemic.

PROSPER will scale up and build on this broad and deep experience, lessons learned, fruitful partnerships and cumulative development achievements of the above discussed IFAD projects in Ghana. Corporate knowledge of areas of direct relevance to the new initiative include: capacity, membership and sustainability of RIs and MSMEs; resilience building and the sustainable use of NRs; capacity of extension services to support VC producers and actors; creation of market linkages; capacity of BACs and BRCs to provide training to RIs and MSMEs; affordable loans in a market segment where FIs do not operate; partnerships with Apex Bank and other FIs to promote inclusive rural financial services; innovative cashless credit model¹⁰; and one-time Matching Grants (MGs) for beneficiary groups ensuring subsequent access to affordable credit to sustain their marketing partnerships

1.2 Project Environmental, Climate and Social Risk Rating and Category

1.2.1 Environment and social category

The initial screening of proposed PROSPER activities reveals that the potential environmental and social risks rating is medium/moderate to low. The main risks relate to (i) value chains activities (rainfed and/or irrigated agriculture, cashew and shea trees cultivation, harvesting and processing, horticulture, rain/stormwater harvesting, nutrition, health and income generation related poultry: and (ii) basic socioeconomic infrastructure including NRM remediation works, feeder road rehabilitation and farm access tracks, and shared social infrastructure including human water supply systems, green energy and sanitation facilities. Most of these impacts are small in scale, very limited, mostly site-specific and readily avoidable if not considerably reduced with appropriate mitigation plans (ESMP), as stated in the project's ESMF.

From a social safeguards standpoint, because all agricultural lands are community owned there will be no new land acquisition aside from those land left as fallows so the project will not have any foreseen negative social and environmental impacts such as the involuntary taking of lands or restriction on access to and/or use of assets resulting in the physical and/or economic displacement of project affected persons (PAP). PROSPER is not foreseen to affect negatively local pastoral communities or sites of historic, religious or cultural significance, land development beyond 100 ha¹¹, feeder roads with a length of lesser than 10 km linking communities or farm tracks. PROSPER is rated as a 'Category B' project and its social and environmental risks is assessed to be Medium/Moderate to Low.

As a **Category B** operation¹², a formal Environmental and Social Impact Assessment (ESIA) is required during project implementation. Sub-project screening will then reveal the depth of the site-specific instrument to prepare for compliance purpose. Further analysis of the conflict dimensions and site-specific Environmental and Social Management Plans (ESMP) will be mainstreamed throughout PROSPER implementation lifecycle. Moreover, to ensure safeguards compliance and project sustainability, a Safeguards and Climate Change Specialist and a Gender, social inclusion and Vulnerability Specialist (GBV/EASH/VAC) will be part of the PCU. Quarterly safeguards and climate compliance reports summarizing the level of compliance and performance of project activities implementation will be prepared and shared to inform IFAD and stakeholders.

1.2.2 Climate Risk classification

¹⁰ Eligible farmers receive inputs and services from vendors and providers; rural banks pay the sellers; after harvest and sale of the produce, farmers repay the loan.

¹¹ The project will not invest on land development beyond 100 ha contiguous. Most of the beneficiaries have on average less than 2 ha and even combined per site, it is less than 50 ha contiguous.

¹² The project will not invest in any **category A** subproject activities.

From a Climate Change Risk Assessment standpoint, the project is classified as **High**. The target communities are substantially dependent on climate-sensitive natural resources, especially rainfed agricultural plots and tree crops such as shea and cashew. Large parts of the project area are increasingly exposed to droughts and flash-flooding. GHG emissions through increased production and processing and climate variability, including unexpected dry spells, unpredictable rainfall and low/high temperatures, can affect the project risks, impacts, sustainability and returns on investments. However, as part of its Business Plans under Component 2.1 the project has the potential to integrate climate resilience measures, such as improved techniques of growing and processing of tree crops (cashew and shea) and in the fight against deforestation through the systematic use of integrated agroforestry systems, solar panels and/or biogas using efficient and usable friendly biodigesters, as well as the usage of biofertilizer. Such mitigation measure will be introduced through awareness raising campaigns and capacity building programmes in climate smart agricultural strategies, climate finance and strong collaboration with extension services, weather, and climate monitoring agencies to receive regular and timely agro-climatic information, and the adoption of appropriate unmechanized cultivation technologies, crops varieties, and climate resilient and low emissions practices. Systematic climate risk analysis will be undertaken by the project throughout implementation to ensure adequate and timely monitoring and management of climate change risks.

1.3 Special aspects relating to IFAD's corporate mainstreaming priorities

Gender. Women constitute 58% of the rural labour force. Despite Ghana ranking second in the ECOWAS Gender Inequality Index, the country is ranked 117 out of 156 countries in the WEF Global Gender Gap Report. Traditional culture and entrenched gender inequality limit women's access to education, healthcare, good nutrition, credit, extension services, new technologies, inputs and output markets participation in the public sphere and community decision-making. Female-headed households have less access to land for farming and are more likely to be smallholders (87% compared with 60% of male-headed households). The GoG adopted the National Gender Policy (2015) to mainstream gender, women's empowerment and social protection concerns into national development processes, NRs and agriculture. A Gender and Agricultural Development Strategy (GAD II) was developed in 2015 by the MoFA Women in Agriculture Directorate to support mainstreaming gender.

Youth. The country has a youth bulge (15-35 years of age¹³) with 57% of the total population being below the age of 25. The rural community consists of 56% youth, compared to 44% in urban contexts. Youth contribute to family labour for agricultural production and engage in other activities such as processing, warehousing and transportation but are unable to pursue farming independently due to limited access to land, credit, quality inputs and sustainable profitable output markets. Due to limited access to jobs, inadequate training and illiteracy, youth unemployment and underemployment in Ghana reached 12% and 50% respectively¹⁴ resulting in growing youth migration from rural areas to urban centres.

Initiatives to provide jobs, building capacities and opportunities for youth include the Medium-term National Development Policy Framework (2018-2021); the PFJ in agriculture and related sectors, the Initiative for Sustainability, Stability and Security (3S) under the IFAD managed Rural Resilience Trust fund and focusing on the Northern Belt; the IFAD-supported REP; and the Youth Agripreneurship Development Programme, jointly run by AGRA and Nestle. Despite these initiatives from GoG and development partners, the outreach to youth from semi-subsistence smallholder families remains limited.

People Living with Disabilities (PLWD). Statistically, people with disabilities make up

¹³ The National Youth Policy in Ghana (2010).

¹⁴ Youth Employment Programmes in Ghana: Options for Effective Policy Making and Implementation, World Bank, 2020.

3% of the population. Disability in Ghana is considered both a human rights concern and a developmental issue due to its strong links to exclusion, discrimination and poverty. In 2006, the Parliament of Ghana passed the Persons leaving with Disability Act, 2006 (Act 715). The Act protects the rights of PLWDs and makes specific provisions to guarantee the right to education, healthcare, employment and movement of PLWDs. The Act also established the National Council on Persons with Disability. The Council is charged with the responsibility of proposing and evolving policies and strategies to enable PLWDs to integrate and participate fully in national development.

However, despite efforts being made educating the public, PWDs are still stigmatized, discriminated against and socially excluded. There is strong correlation between disability and poverty. Poor health, limited schooling and employment opportunities are impacting negatively on the socioeconomic status of affected households. Households with disabled members may be vulnerable to poverty due to extra costs of living with a disability.

Nutrition. Ghana is 'on course' to meet two targets for maternal, infant, and young child nutrition (MIYCN) reducing anaemia among women of reproductive age (46.4% of women aged 15 to 49 years still affected) and achieving the low-birth-weight target (14.2% of infants having a low weight at birth). No progress has been made towards achieving the exclusive breastfeeding target, with 42.9% of infants aged 0 to 5 months exclusively breastfed. Ghana is 'on course' to meet the target for stunting (chronic undernutrition), with 17.5% of children under 5 years of age affected but rises to 33% in the Northern Region. Some progress has been made towards achieving the target for wasting (acute undernutrition) but 6.8% of children under 5 years of age are still affected. The prevalence of overweight children under 5 years of age is 1.4% and the country is 'on course' to prevent the figure from increasing.¹⁵ Ghana has shown limited progress towards achieving the diet-related non-communicable disease (NCD) targets. The country has shown no progress towards achieving the target for obesity, with an estimated 16.6% of adult women and 4.5% of adult men living with obesity. Diabetes is estimated to affect 6.6% of adult women and 6.4% of adult men. The diet mainly relies on starchy roots, fruit and cereals. The diversity of diets remains low with limited intake of protein and a general reluctance to consume fruits and vegetables, causing stunting in preschool-aged children and anaemia amongst pregnant women. A long-term Food and Nutrition Security (FNS) Strategy has been developed which was used to review the National Nutrition Policy (NNP).

The NNP aims to address nutrition related challenges of feeding practices for infants and young children and nutrition among women of reproductive age, as well as the promotion of nutritionally adequate safe diets among other nutrition services. Ghana joined the Scaling Up Nutrition (SUN) Movement in 2011 and has established national, regional and district level multi-sectoral nutrition coordination mechanisms. Ghana's multi-stakeholder platform (MSP), the Nutrition Cross-Sectoral Planning Group (CSPG), continues to expand, bringing together ten sectors today. The five northern regions have regional nutrition MSPs.

Climate and environment. Climate change is projected to affect vital water resources, energy supplies, crop production and food security, with the Northern zone the most vulnerable. Ghana is already experiencing increased extreme weather conditions with higher incidences and prolonged periods of flooding and droughts. The country's dependence on the production of crops that are sensitive to climate change (cassava, cocoa, and shea) and lack of agricultural diversification exacerbate Ghana's vulnerability. Energy production meets demand, but rural communities continue to rely on fuelwood, resulting in forest depletion estimated at a 2% loss per annum.

Agriculture is estimated to be the second largest contributor (10.05 MtCO₂e) to Ghana's greenhouse gas emissions after the energy sector (15.02 MtCO₂e). Ghana is committed to implementing its National Climate Adaptation Policy, as highlighted in the National Climate Change Communication to the United Nations Framework Convention on Climate Change (UNFCCC) and its Nationally Determined Contribution (NDC) to the Paris

¹⁵ <https://globalnutritionreport.org/resources/nutrition-profiles/africa/western-africa/ghana/>.

Agreement.

In line with IFAD11 mainstreaming commitments, PROSPER qualifies as:

- ☒ *Climate finance*: PROSPER will integrate adaptation and mitigation measures in the value chain packages, supported by special financial mechanisms adopted by the project.
- ☒ *Nutrition sensitive*: PROSPER will select nutrition sensitive value chains, increase production of highly nutritious crops and animal sourced foods, promote food conservation, post-harvest processing and value addition, and promote better dietary patterns by providing nutrition education and Social Behaviour Change Communication (SBCC).
- ☒ *Youth sensitive*: PROSPER will target male and female youth (50% each), adding their access to land as a precondition for community participation in the project. PROSPER will support the establishment of youth group-led enterprises along the selected value chains and will provide targeted financial inclusion, skills development, and capacity building.

1.4 Rationale and Objectives of the ESMF

Like its neighbouring countries, especially from the northern and southern (east and west) parts, Ghana is one of the world's most vulnerable countries to adverse climate change impact, ranking 109th out of 181 countries according to the 2020 ND-GAIN index. Ghana is facing pronounced risks of higher temperatures, lower and more erratic rainfall, increased frequency of droughts and floods, significant loss of soil fertility and potential for submersion of large land areas given rising sea levels on its whole costal area. Land degradation, salinization, coastal erosion, land quality reduction, and low agricultural productivity are serious threats to national food security. Mean annual temperature has increased by 1.0°C since 1960. Linear trends indicate that wet season rainfall has decreased significantly between 1960 and 2006. Climate change projections predict an increase by 1.1 to 3.1°C by the 2060s, and 1.8 to 5.0°C by the 2090s (UNFCCC,2016). The country is likely to experience increased incidence of drought and lengthened dry spells, particularly in the northern belt region (*Upper West & Upper East*). Combined, these factors are serious threats to agricultural productivity and national food security. By its nature, the project will contribute to meeting IFAD's corporate commitment on mainstreaming areas which are environment and climate (*25% of investment climate focused*); nutrition (*50% PLG nutrition sensitive*), gender (*25% gender sensitive*), youth (*50% youth focused*).

In line with IFAD's Social, Environmental and Climate Change Assessment Procedures (SECAP), PROSPER is classified as a Category B Program and fall under category B and with 'High' Climate Risk. The most vulnerable areas from a climate change perspective will be the Northern region of the country where rain shortage and droughts are seriously affecting communities' productivity and self-sufficiency on freshwater, the balance of which is determined by rainfall conditions and, increasingly, sea level rise from the southern region that will have tangible effect on watercourses in the middle and northern belt regions.

The PDR and SECAP note have classified PROSPER as an environmental and social **Category 'B'** operation based on the adverse environmental and social effects, small in scale, mostly site specific and thus readily manageable by appropriate mitigation measures; and a 'High' Climate risk classification indicating the need for an in-depth climate risk analysis to be conducted during and throughout project implementation stages. The SECAP noted environmental and social risks mainly from: productive infrastructures and socioeconomic infrastructure, conflict and lack of ownership, unsustainable agricultural practices, land development. The SECAP recommended an ESMF be developed to inform the design of PROSPER.

The main objectives of the ESMF, as per the terms of reference of this study, are to define the principles, rules, guidelines, and procedures to develop the Environment and Social Management Framework (ESMF, inclusive of an ESMP) with adequate budgets to satisfactory guide PROSPER implementation team.

The objectives of this ESMF are:

- To establish clear procedures and methodologies for the E&S and climate planning, review, approval, and implementation of sub-projects to be financed under the loan facility;
- To specify appropriate roles and responsibilities and outline the necessary reporting procedures, for managing and monitoring E&S and climate concerns related to sub-projects;
- To provide practical resources for implementing the ESMF, including general guidance on the development of E&S Management Plans (ESMPs) and their implementation

1.5 Stakeholders Consultation Approach and Methodology:

This ESMF builds on the Social Environment and Climate Assessment Procedure (SECAP) note prepared for the concept note stage of the project and field work during design stage with the objectives to: evaluate the impact of current and future trends of climate change and environment on the programme's objective to reduce rural poverty and build the resilience of target groups; and propose adaptation/mitigation options for climate and natural resources management (NRM) issues with positive outcomes on project targeted groups in the northern and middle belt regions.

In terms of the technical scope, the ESMF reviewed environmental, climate and social impacts, focusing on unsustainable agricultural practices, land development, likely impacts from land development (including irrigation infrastructure) climate change, and human conflicts and insecurity issues. It also reviewed several institutional, legal and policy documents and frameworks related to agriculture, environment, climate, access to land, and gender issues in Ghana. The IFAD's Social, Environment and Climate Assessment Procedures (SECAP), IFAD's new environment and climate strategy 2019-2025, the Gender Equality and Women's Empowerment, Targeting and Sexual Exploitation and Abuse policies were also consulted in developing this ESMF document. Consultations were made with stakeholders in the project targeted 2 regions/zones of the country during the design of the project. The field visit targeted the Northern and Upper East Regions, as well as in the middle Belt and Kumasi region, from **10th to 15th August 2021**. The purpose of the field visit is to consult with stakeholders to collect relevant data and information to support the design of PROSPER. The consultations were participatory, inclusive, and proactive as they involved a broad range of stakeholders, farmers, RIs/CBO, academia, research institutes, GoG agencies (*MOFA, DDA, EPA, MOW, MOI, ...*) as well as private sector (RCB, SMEs, FIs).

1.6 Information and Public Disclosure of ESMF

IFAD's Policy on the public Disclosure of Documents (2010) requires full disclosure to the public and includes information notes on projects being developed for Board presentation, agreements for approved loans and grants, and project/program design documents. This ESMF will therefore be publicly disclosed on both IFAD's official website (<http://www.ifad.org>) and on the Government of Ghana's website.

1.7 Outline of the ESMF Report

The ESMF report is structured as follows:

- Introduction
- Project Description
- Environmental, Climate and Socioeconomic Profile of the PROSPER Project Targeted Areas
- Political, Strategic, Legal, and Institutional Framework Governing Environmental, Social and Climate Risk, Impacts and Opportunity Management
- Identification and Assessment of Potential Environmental, Social and Climate Risks, Impacts and Opportunities of PROSPER
- Environmental and Social Management Plan (ESMP)
- Stakeholders Consultation, Participation and Engagement
- Grievance Redress Mechanism
- Conclusion

- Bibliography
- Annexes

2- PROJECT DESCRIPTION

2.1 Project Development Objectives

The PROSPER Project Development Objective is: ***Strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority VCs in the Northern and Middle Ecological Belts taking advantage of the increased demand created by the national agro-processing strategy.*** PROSPER aims to provide a framework for the long-term engagement with and financing for private sector-led, pro-poor agricultural VC development tailored to the specific needs and potential of small-scale producers and operators in targeted regions of Ghana.

In line with IFAD11 mainstreaming commitments, PROSPER qualifies as:

Climate finance: PROSPER will integrate adaptation and mitigation measures in the value chain packages, supported by special financial mechanisms promoted by the project.

Nutrition sensitive: PROSPER will select nutrition sensitive VCs, increase production of highly nutritious crops and animal sourced foods, promote food conservation, post-harvest processing and value addition, and promote better dietary patterns by providing nutrition education and Social Behaviour Change Communication (SBCC).

Youth sensitive: PROSPER will target male and female youth (each group with a minimum of 50% eligible youth), adding their access to land as a precondition for community participation in the project. PROSPER will support the establishment of youth-led enterprises along the selected VCs and will provide targeted financial inclusion, skills development and capacity building.

Geographical targeting. The geographical targeting strategy of PROSPER considers (i) high rural population, (ii) high poverty prevalence, (iii) high rate of food and nutrition insecurity, (iv) strong concentration of female and male youth, (v) presence of economic opportunities relevant to the project, (vi) the level of cumulative degradation of the productive NR base (particularly soil, water and trees) and (vii) indicators of climate vulnerability including evidence on the historical and projected impact of changes in temperature and precipitation.

The geographic area of intervention extends to eight regions in the North of the country. All five regions in the Northern Belt, (Upper West, Upper East, North East, Savannah and Northern), have a high poverty head count, the highest being 92% for Wa West District, Upper West. The three neighbouring regions in the Middle Belt (Bono East, Bono and Oti) are relatively less poverty stricken on average than those in the Northern Belt but contain pockets with a markedly high poverty head count peaking at 78% for Kintampo South District, Bono East. The number of regions in Ghana has risen from five at Independence to the present 16, but the administrative divisions do not coincide with the environmental and socioeconomic conditions. Broadly, poverty is progressively deeper from South to North given the drier climate and increasingly challenging setting for agriculture with the negative impact of climate change. The poverty analysis underpinning the geographical targeting of PROSPER is presented in the PIM.

Food insecurity prevalence as reported is not necessarily corresponding to the poverty head count. WFP food security and nutrition monitoring updates (June 2020) show high levels of moderate and severe food insecurity in the target regions, including the worst-off districts in the nation in terms of food insecure households. Main barriers to food security are food availability and accessibility. This affects access to micronutrients, especially for women and children.

There are significant regional disparities concerning nutrition security in Ghana. Northern

Region is worst off when it comes to rural (extreme) poverty, rural child stunting (chronic undernutrition) and the prevalence of anaemia among women and children. The national child wasting (acute undernutrition) rate stands at 7%, with the highest prevalence reported for Northern Region (10.9%). The presence of persons with disabilities also has marked regional differences. The Ghana Micronutrient Survey (2017) reports that the proportion of women (15 to 49 years) not meeting the Minimum Dietary Diversity for Women (MDDW) score ranged from 37.9% to 42.4% in the target regions, with a high national average of 40.2%¹⁶. The prevalence of PWDs by district ranges from 3.0% to 8.3% in the Northern Belt and from 7.3% to 12.4% in the Middle Belt.

This will be achieved through the implementation of three complementary components, two of them mutually supportive as described below.

2.2 Theory of Change

→ **Developmental challenges.** The main development challenges in the project area are high levels of rural poverty, youth and women unemployment, food insecurity, malnutrition in all forms, climate change and accelerating environmental degradation. Most poor farmers are engaged in low input-low output production in the small-scale rainfed field-crop sector, which is neither financially nor environmentally sustainable. In the absence of linkages to VCs, marketing tends to be haphazard even in good years. There are significant numbers of vulnerable people – women, youth, people with disabilities –excluded from the rural agricultural economy.

These challenges are compounded by accelerating NR scarcity and degradation exacerbated by climate change and a growing rural population. Traditional farming systems and diminishing access to energy in rural areas leads to soil erosion, deforestation and loss of command over water; the productive land becomes progressively less fertile, and yields decrease. These factors expose rural livelihoods to external shocks, limiting the ability of households to meet their basic needs. The lack of access to healthy and diversified diets leads to compromised diets, particularly for pregnant/lactating women and children under two years.

On the demand side, VCs are suboptimal with progressively less market offtake in remote areas. Farmers sell any surplus produce in local markets or to traders and middlemen straight after harvest when prices are low. In these circumstances, there are few opportunities for individual households and whole communities to accumulate the human, physical and financial resources needed to modernize production and progress from subsistence. Women and youth are most affected due to many factors including socio-cultural exclusion. The absence of public investment over many years has resulted in a lack of basic infrastructure, such as reliable potable water supplies, which places constraints on both livelihoods and living standards.

→ **Opportunities.** PROSPER will tackle these formidable challenges with a market approach. On the supply side, the project will invest not only in the technical capabilities of primary producers and processors but also in the organisational and business skills required to enter lasting commercial arrangements. Climate change has drawn attention to the cumulative depletion of the NR base, with much formerly productive land and forest already beyond the point of no return. The aim of the work with farmers will be to increase productivity and profitability rather than short-term production, in ways that slow and then reverse the rapid deterioration of the productive land, both on- and off-farm. Advice and demonstrations of climate-resilient farming practices such Conservation Agriculture will be supported by purposeful remediation works in the wider landscape after years of neglect. The key success factor in this regard is progress towards proactive NR management arrangements, with acceptance of community responsibility for the fragile land. Environmental sustainability is a necessary condition for successful “farming as a business”. Even limited additional profit coming into a poor community can trigger growth in the local economy, including opportunities for new

¹⁶ Minimum Dietary Diversity for Women (MDDW) is an indicator for the adequacy of the diet in a household

enterprises to provide support services to the farmers. This requires access to rural climate finance to incentivize the sector to adopt best adaptation and mitigation practices.

The project recognises fully that stimulating field and tree crop production alone, however well the agronomy is adjusted to the environment, will not benefit the target population without a substantial increase in the real demand for the produce, in terms of volume, prices that at least cover production costs and access to the multi-step markets. The argument hinges on the efficacy of demand pull rather than supply push. PROSPER takes a VC approach for the selected commodities, in which the smallholders are linked into the existing private sector VCs. The key link for a primary producer group is a contract arrangement with an agribusiness or aggregator. PROSPER is oriented to facilitate such private sector arrangements by guiding and coaching the emergent RIs and MSMEs, developing business plans as appropriate for groups with differing levels of maturity, engaging with larger-scale VC actors ("drivers") and arranging access to affordable financial services as needed. These mainstream business interventions are complemented with measures to include marginalised and vulnerable people and to invest in shared public socioeconomic infrastructure to improve the living conditions of whole communities.

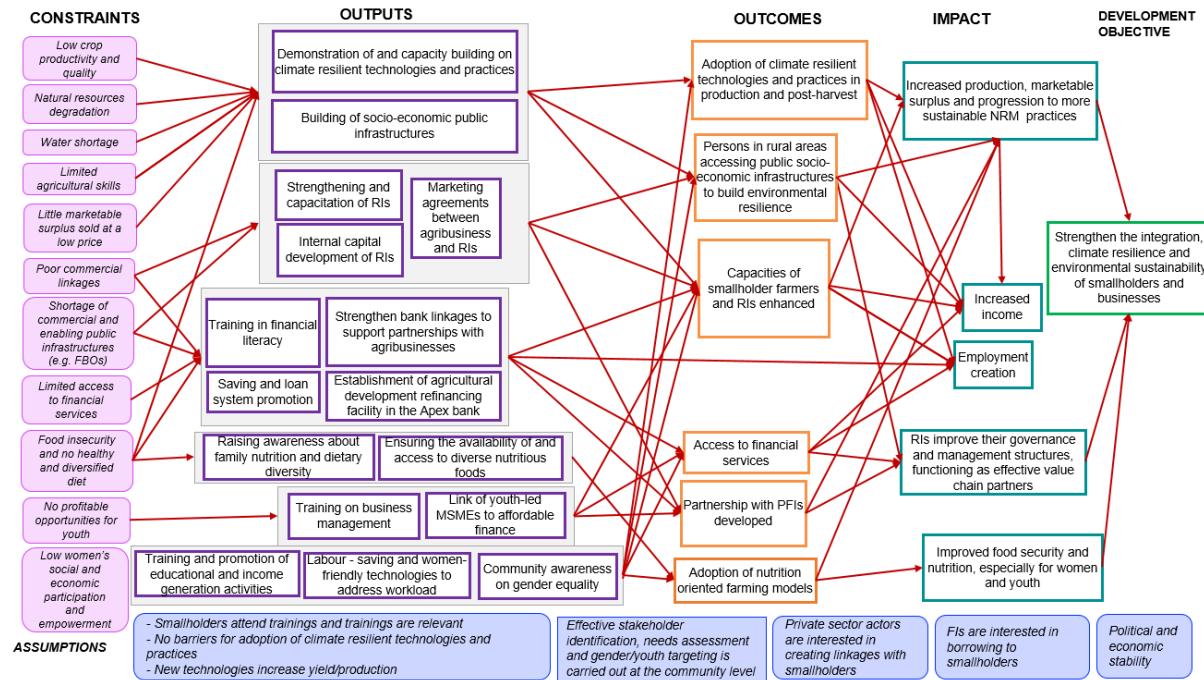
Success with the growth in agricultural production in the framework of rapidly expanded value chains will drive up the incomes of the whole economy in the target rural communities and stimulate local demand for increased and additional support services both in the sector and in the wider population. It is this secondary demand that will provide opportunities for youth to escape from the under- and unemployment prevalent in the project area. PROSPER is designed to help youth along an authentic pathway from poverty by providing general training on running a business, helping to set up micro-enterprises of all types (related to the six PROSPER value chains) and linking the emergent MSMEs to affordable finance. The new enterprises then contribute themselves to the recovery of the local economy.

PROSPER will promote women's participation and empowerment by addressing barriers prevalent in the geographical context of the project. Major constraints are represented by low level of education among poor women, already existing workload, and lack of willingness of spouses and other family members to support full participation of women in project activities. PROSPER will mitigate these constraints by increased participation in training (e.g. Financial Literacy) and promotion of educational and income generation activities; labour - saving and women-friendly technologies to address workload; community awareness on gender equality as a vehicle for prosperity and the introduction of GALS approach. PROSPER will advocate for different male role models by encouraging men to support women's participation through guarantee of land and other resources required. Gender targeting in PROSPER will include the inclusion of young women (youth) and women with disabilities (PWDs).

Training and meetings with PWDs will be organized in close-by locations in the communities, in sensitive teaching and learning environments. To cater to the special needs of the PWDs with visual, hearing, physical and speech impairments, PROSPER will train them in braille, sign and audio languages.

In PROSPER nutrition and health will be promoted through several pathways, including selection of value chains that are nutrition- and climate sensitive or that will make a high contribution to nutrition; food conservation, post-harvest processing and value addition; promotion of vegetable gardens; and nutrition education. Specific trainings and a Social Behaviour Change Communication (SBCC) strategy will be developed to promote non-discriminatory intra-household food distribution, adequate diets for adolescent girls, consumption of diversified diets, food hygiene and safety, and improved WASH practices as well as the discrimination of negative socio-cultural habits like teenage marriages and early pregnancies resulting in low-birth weight babies as major risk factors for malnutrition.

Figure 1: Theory of Change



The project recognises fully that stimulating field and tree crop production alone, however well the agronomy is adjusted to the environment, will not benefit the target population without a substantial increase in the real demand for the produce, in terms of volume, prices that at least cover production costs and access to the multi-step markets. The argument hinges on the efficacy of demand pull rather than supply push. PROSPER takes a value chain approach for the selected commodities, in which the smallholders are linked into the existing private sector VCs. The key link for a primary producer group is a contract arrangement with an agribusiness or aggregator. PROSPER is oriented to facilitate such private sector arrangements by guiding and coaching the emergent groups and enterprises, developing business plans as appropriate for groups with differing levels of maturity, engaging with larger-scale VC actors ("drivers"), and arranging access to affordable financial services as needed. These mainstream business interventions are complemented with measures to include marginalised and vulnerable people and to invest in shared public socioeconomic infrastructure to improve the living conditions of whole communities.

2.3 Project Components, Outcomes and Activities

PROSPER comprises two mutually supportive components concentrated on increasing the real demand for sustainably grown produce by significant numbers of people living in poor rural communities while enhancing their capacity to meet this demand through more efficient climate-resilient agricultural practices and natural resource management to mitigate the negative impact of climate change. The intended outcomes are increased incomes, greater food and nutrition security, and improved health status.

Component 1: Development of rural institutions and socioeconomic infrastructure.

The expected component outcome is: *Improved and sustainable livelihoods in target areas supported by strengthened rural institutions and improved socioeconomic infrastructures*. These actions are concentrated on investing in “public goods” within and for the benefit of the targeted 100,000 beneficiaries in the project areas.

Subcomponent 1.1 Capacity building of rural institutions, enterprises and households comprises a range of institution-building and skills development activities to enable target communities to take ownership of and accountability for their own development initiatives, to promote sustainable community-based NR management, to strengthen their ability to implement modern sustainable and climate resilient farming, and to adopt healthier diets.

Community mobilisation, cluster identification and planning. The project will seek to secure community interest in PROSPER and the approaches it is promoting with a series of interactive workshops and consultations at regional and district levels, starting with three regions in the first phase. The list of districts for project engagement will be finalized in discussions with local and national authorities. In each selected district, the project will identify and form clusters of neighbouring communities through a screening of NRM and socioeconomic conditions and mobilisation meetings at village level.¹⁷ Where interest is strong, the community leadership decides to commit to PROSPER and opportunities exist around the target value chains, a Cluster Committee will be established to interact with the project and manage implementation.

Cluster Planning. For each participating cluster, PROSPER will facilitate the collaborative development of a bespoke community-driven Cluster Plan (CP). Each CP will set out local priorities for communal socioeconomic investments and identify potential production and related business opportunities that may be realized by RIs and MSMEs under Component 2 and/or with community resources. The CP will inform the agenda for PROSPER action in each location, concentrating on investments responding directly to climate change mitigation and adaptation, and supplementing any existing development plans of local authorities or other development partners. The CP will underpin the local three-year PROSPER-community partnership and remain with the cluster leaders and Local Authorities as a live document to guide development planning during and after implementation.

Capacitation of rural institutions and enterprises. This action entails bolstering both the governance and management structures and the technical capacities of active rural bodies, (including farmer/producer-based organisations and other economic interest groups such as VSLAs and MSMEs), and thereby their capacity to function as effective VC partners. It is envisaged as a purposeful major investment in human resource capital to develop a more conducive environment for the economic activities of the rural population. Within this drive to grow the rural economies by expanding business activity for groups, the poverty focus of PROSPER entails extending the group-based opportunities to substantial numbers of vulnerable and economically marginalised people.

The programme of training, skills development and related demonstrations will be

¹⁷ In this document, a “cluster” is a term for several neighbouring settlements sharing natural resources. It has no administrative significance but locates the combined population in the specific land area upon which they depend and provides the project with a convenient unit for planning and operational purposes. Each cluster will include various common economic interest groups, such as Farmer Based Organisations and VSLAs, alongside non-profit community structures. To avoid confusion and excessive use of acronyms, the term Rural Institution (RI) is used here for a production-related group and Micro-, Small- and Medium-Enterprise (MSME) for any business set up for other purposes.

delivered by district extension services backed up by MoFA technical departments and other line ministries as well as PROSPER technical assistance. In preparation for the work, the project will reinforce the technical skills of public service frontline field staff, reorientated to a modern business approach to farming including the adoption of climate-friendly agronomic practices and natural resource remediation. The action will be launched with an awareness-raising workshop in each district on opportunities for Youth in and around the smallholder agriculture sector and the PROSPER value chains. Cluster-level surveys will identify groups and MSMEs, both pre-existing and potential, interested in and likely to benefit from capacity building. The group identification process will be gender sensitive with a special focus on women, youth and PWD.

The District Department of Agriculture (DDA) will lead an extension campaign organised around group organisational skills, climate-smart demonstrations and practical training sessions on topics such as conservation agriculture, agronomical practices and “farming as a business” tailored to the local agroecological conditions and main VCs in the cluster. Financial literacy, orderly record keeping and the basics of business conduct will be addressed to complement instruction on the technical aspects of sustainable production. Emphasis will be placed on the need for a marketing plan for every planting: “production with a purpose”. An estimated 4,500 RIs and 800 MSMEs will be trained over the life of PROSPER. Off-farm, the training will centre on the remediation and proper management of the depleted shared NRs which are key to the livelihoods of farming communities. Best practices in soil and water conservation, tree planting and NRM, (to be supported in many target clusters with remedial works under subcomponent 1.2 below), will be shown to be beneficial to all the present and future users of the landscape. The capacity-building campaign will extend to non-producer economic interest groups who will be given training on enterprise development, particularly value addition and support services. Many will be Youth-based and start-ups stimulated by the project.

Household nutrition and healthy diet. Alongside the measures to capacitate target groups to generate and sustain income and to manage and remediate their NRs, PROSPER will deliver an inclusive community-wide nutrition and healthy diet agenda to benefit all households, in synergy with the promotion of nutrition-sensitive farming and vegetable cultivation. This initiative serves as a counterbalance to the drive to produce food for sale, shifting attention to the nutritional value of the food consumed. The action will start with a Participatory Needs Assessment in each target community and entail training on household methodologies (HHM) and domestic financial literacy for up to 2,400 selected households. The Gender Action Learning System (GALS) as part of HHM will be introduced to enhance Gender Equality and Women’s Empowerment (GEWE) in PROSPER. GALS will create the togetherness in self-selected families to develop a vision and strategy to get themselves out of poverty. A Knowledge, Attitude and Practice (KAP) study will be conducted to understand better local issues around nutrition and diet, and to serve as a baseline for the Social Behaviour Change Communication (SBCC) strategy. At the centre of nutrition activities will be a household education programme delivered through care groups by peers comprising demonstration nutrition gardens for healthy diversified diets, dedicated training on post-harvest management, nutrition education and SBCC for communities.

Subcomponent 1.2 Development of socioeconomic infrastructure. This development activity seeks to realize some of the “public goods” investments prioritized and chosen by local communities through the Cluster Planning process. Three complementary types of climate-resilient infrastructure will be eligible: *Off-farm/watershed works and hazard mitigation measures*; *Feeder roads and farm tracks*; and *Communal social infrastructure*. These investments aim to improve the sustainability of NR-related livelihoods and to stimulate socioeconomic advancements in the participating clusters.

The NR remediation infrastructures may comprise soil and water conservation structures, such as contour bunds, reforestation and shelterbelts, bench terraces, tied ridges, water harvesting and storage ponds, as well as climate change mitigation measures in line with local conditions. The District Assembly will undertake all procedures as appropriate to acquire/lease any land needed for construction. PROSPER envisages expanding and

rehabilitating strategic road networks (feeder roads and farm tracks, culverts and small bridges), as well as shared domestic water supply structures (boreholes with hand or solar pumps), sanitation facilities and waste management systems, and alternative/green energy schemes (including resource and energy recovery from waste). Each capital investment plan will include appropriate management, operation, maintenance and ongoing financing arrangements, with overall responsibility resting with the community where relevant. In each case, agreement will be reached between the District Assembly and the community leadership on the post-construction asset management by various community gender-balanced committees, building on previous local norms and the organisational training delivered under Subcomponent 1.1. The off-farm/watershed works and hazard mitigation infrastructure and the Feeder roads/Farm tracks will be funded 100% by the project. For water supply, the current national practice is for communities to make a cash contribution equivalent to one-year facility maintenance costs that shall be deposited in a bank account to demonstrate commitment towards long-term sustainability of the installation. For household toilet systems, the project will pay for the core element of the facility, such as the concrete slab or digni-loo unit, while the beneficiaries excavate the pit and build the superstructure with their own resources.

Off-farm/watershed works and hazard mitigation infrastructure will be community-managed. The infrastructure for NR remediation and environmental protection will be maintained by a Natural Resources and Environmental Management Committee to be established under the project. Feeder roads and farm tracks will be maintained by the Department of Feeder Roads, who will be involved in implementation to enable them to take over post-construction maintenance. Water harvesting, water supply and waste systems will be managed by a Water and Sanitation Management Team (WSMT), a statutorily recognised body operating under the auspices of the District Assembly Works Department. Water will be sold at the tap and revenue raised used to maintain the supply systems. Sanitation and waste management systems will be maintained by the concerned households. Environmental sanitation and waste disposal and recovery systems will be coordinated by the WSMT and supervised by the District Assembly Works Department. An Environmental and Social Management Framework (ESMF), which is prepared as part of the PROSPER design, will identify potential impacts of the infrastructure elements under the subcomponent and will integrate measures for addressing them.

Component 2: Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains. The expected outcome is: *Smallholders and small businesses draw greater benefits from the increasing market outlets for agricultural produce through comprehensive financial, capacity and marketing support.*¹⁸

Whereas the first component will invest in the human, physical and natural resources of the target communities, the second component is concentrated on investing in the “private goods” of the population to bring about a sustained uplift in the earning capacity of agricultural producer groups and related enterprises. The aim is to expand business activity both within the target communities and in lasting agreements with other actors in the selected VCs. The project is realistic in recognising the differing prospects of the targeted beneficiary groups and the extent to which access to finance is the main constraint they face. In this context, the PROSPER emphasis on climate-friendly business development must be balanced with social and welfare considerations for the most-disadvantaged households.

The distinction between smallholders and small operators in this analysis is important. The project’s drive to modernise agriculture in and extend the reach of the key value chains to economically marginalised communities is centred on the small-scale farmers but intended to reduce the poverty of the whole population. Alongside the capacity

¹⁸ Small businesses comprise enterprises and organised groups engaged in income generating activities other than primary production. The members are drawn from the same population.

building of smallholders, PROSPER is geared to promote real economic opportunities for the substantial numbers of underutilised people in the same population, particularly the youth, not all of whom want to be in farming anyway. PROSPER is not intended to create jobs directly, but it is capacitated to help entrepreneurs to set up enterprises and facilitate access to appropriate finance, providing regular income for the “small operators”, the growing number of rural people not directly dependent on primary production. The project will make existing smallholders better off but will create new jobs and enduring earning opportunities for presently unemployed youth.

Subcomponent 2.1 Sustainable marketing linkages and business development.

This subcomponent comprises three activities. In the first, *Value chain analysis*, PROSPER will build on the preliminary value chain analysis conducted during project design. It will examine in depth the status and characteristics of each selected national value chain – soya, rice maize, cashew, shea and poultry – and map the VC actors located close to the target communities, particularly the first stage market linkages between producers and others in the chains. The general presumption is that most smallholder farmers and their groups in remote areas have no established marketing arrangements and interact opportunistically with buyers and middlemen only as and when they harvest a surplus. The number and location of private sector operators, including larger agribusinesses working with contracted outgrowers, is not well documented. PROSPER will commission a detailed structural examination of each VC, including an estimation of the value added at each link, to provide a sound platform for project interventions.

The practical and intensive developmental activity *Promotion of linkages between producers and value chain actors* is aimed at generating enduring partnerships between producers engaged in climate-resilient farming and larger-scale agribusinesses within locally appropriate forms of robust and equitable contract relationships in the private sector. PROSPER itself will not enter business relations with the parties at any stage. This second activity will concentrate on those eligible RIs and MSMEs that demonstrated interest and potential in the Component 1 capacity building interventions. Group eligibility for PROSPER support centres on meeting membership criteria regarding the minimum proportion of specified disadvantaged groups: women, female and male youth, PWDs and landless or near-landless households. These criteria allow for and, for practical reasons, encourage a minority of non-eligible members with productive land holdings of up to 10 ha in each group.

With the support of the Business Advisory Centres (BACs)/Business Resource Centres (BRCs) and DDAs, the project will engage with VC actors in each participating district with an information-gathering and analysis exercise. An initial assessment will be conducted of the organisational status and maturity of the targeted groups (RIs and MSME), building on the cluster profiling at project inception, (Component 1.1). Groups will be evaluated in terms of their organisational proficiency, level of capitalization, acquired skills in financial management and potential to establish business agreements with VC actors such as traders and processors. The producer groups will be categorized broadly into two streams going forward: those deemed ready to advance to formal business arrangements with larger VC actors and external financial services; and those needing more time and coaching to consolidate their organisational and financial capacity to engage in business. This objective evaluation will be instrumental in proper targeting and sequencing to access further project support and appropriate financial services.

It is expected that 50% of those disadvantaged individuals targeted under Component 1 (50,000 people) by PROSPER will qualify for assistance under this subcomponent. The marginalised, poorer and most vulnerable RIs (composed of more than 50% members with access to land of 1 ha or less and 40% women, 30% youth and 15% people with disability) and smaller MSMEs (fewer than 9 employees) progressing from Component 1 will be offered training sessions backed up by demonstrations and events at the cluster level on climate risk mitigation, resilience and integration into business plans and on VC linkages and green bankable propositions, with particular attention to potential MSMEs dedicated to women, youth and PWDs. Meetings will raise awareness, share information,

bring together potential partners, and seek to conclude RI and MSME agreements with VC actors. These beneficiaries will be assisted in the preparation of a basic Business Plan (BP) to aid the consolidation of their income-generating activities and consideration for financing, (see below).

The relatively better-off RIs that: (i) have a larger proportion of well-off beneficiaries (less than 50% of the members have access to an area of 1 ha of land and no more than 10% have access to 5-10 ha of land) and a lesser proportion of vulnerable people (40% women, 30% youth and 5% PWDs); and (ii) meet the organisational and financial literacy requirements will be offered a more advanced version of the trainings and demonstrations leading towards the establishment of business partnerships in each target district. MSMEs (with up to 29 employees) will be engaged in the same developmental processes if their business can be shown to contribute to increasing the offtake from the primary target group and extending the reach of the VCs in remote locations. These beneficiaries will be assisted in the preparation of a more advanced version of an orthodox Business Plan to support an application for external commercial credit. Those poorer RIs and MSMEs that perform well in the entry level scheme are able and encouraged to progress to this advanced level activity.

The centrepiece of the third activity, *Development of business plans*, is the generation of a sound, achievable and fully costed plan appropriate to the resources and prospects of each concerned entity. For the less mature RIs and MSMEs referred to above, a simple but realistic BP will be prepared with the support of BRCs, BACs, DDAs and PFIs as available. The Cluster Committees from Component 1.1 will be strengthened and upgraded to include PFIs and other VC actors to participate in BP development and realisation. Each basic BP should include inputs, simple tools and equipment, and whatever other cost items are required, set against a realistic estimate of returns. It should be green in design and address effectively climate and NR degradation risks and impacts. BPs could be developed by individual or multiple RIs and standalone MSMEs with the prerequisites of potential formal market linkages (supported by the project or pre-existing), proper organisational skills and an adequate level of internal capital. The BPs will be evaluated by an independent agent/service provider (to avoid elite capture or any risk of political interference) and, if acceptable, used to support a request for financial support.

For stronger RIs and MSMEs, the project will provide the opportunity for professional support by technical assistance and the BACs/BRCs in close collaboration with the PFIs in preparing a fully fledged BP and facilitating access to affordable finance, (see Subcomponent 2.2 below).¹⁹ The strengthened Cluster Committees will participate in devising workable local collaborative arrangements to implement the BPs. The PFIs themselves will be receiving capacity building and mentoring support from PROSPER to extend their outreach and are expected to engage fully with their potential customers early in the business planning stage. An advanced BP may include working capital as well as capital items such as inputs, mills, machinery, vehicles, tools, equipment and minor infrastructure. Each BP should be green in design and address effectively the climate change adaptation and mitigation challenges and NR degradation risks.

For PROSPER, the imperative is to promote and expand businesses operating an aggregator-primary producer model that is prepared to engage with the IFAD target RIs and related enterprises to become their interface with the market. This VC chain development is key to moving the sector on from the failing unsustainable smallholder farming systems. Such businesses are likely to comprise a substantial VC actor led by an entrepreneur “driver” and multiple producer groups under contract, all active in the private sector. The project is also geared to preparing and facilitating the BPs of larger standalone MSMEs (up to 29 employees).

Subcomponent 2.2 Access to rural financial services. The objective is to promote a savings culture among PROSPER’s beneficiaries, facilitate realization of the cluster-level Business Plans and improve enduring access to suitable financial resources for the

¹⁹ The concept of supporting “flexibility to achieve sustainability” in financing rural poor people is central to IFAD’s new Inclusive Rural Finance Policy, with less emphasis on commercial (market-priced) finance at the entry level.

beneficiaries to engage in profitable agribusiness. *Expected outcomes:* farmers through RIs and related local MSMEs are integrated step-by-step into the formal financial system and have lasting access to adapted and affordable financial services to develop their agribusinesses, including green investments. Such access is a necessary though not sufficient condition for rapid sectoral development.

PROSPER financial services are structured around three instruments appropriate to the various situations prevailing in rural areas as regard capacities and professionalization: (1) *Saving and Loan Groups* (VSLA model) for sparking the saving habit within communities; (2) a *Matching Grants* fund for capitalizing emergent RIs to engage in commercial agriculture and smaller MSMEs around the selected VCs and supporting food and nutrition security promotion schemes for the most vulnerable groups; and (3) a *Blended Finance Facility* operated as a refinancing facility (RF) by PFIs to ensure sustainable access to financial services for growing FIs and MSMEs, (see details in respective sections below). These instruments form a global graduation process by which beneficiaries will be able to increase their access to financing solutions over time as they build their financial and management capacities and develop their business relationships with other VC actors.

Savings mobilisation/Saving and Loan Groups. Within the array of institution building activities under Component 1 concentrated on promoting income generating activities for RIs and MSMEs, the project will emphasise the need for savings mobilisation and internal capital formation by all beneficiary groups as a prerequisite for forming sustainable businesses and, as and when appropriate, accessing external financial services.

In that context, PROSPER will support the creation and strengthening of savings and credit groups, based on the VSLA model that various IFAD-funded projects have been using with success.²⁰ The objectives are: to promote the saving habit and culture as a way to increase self-financing capacities for farmers and other VC actors, thus reducing their dependency on external resources; and to build internal capital in order to reduce the need for and cost of credit in the longer term. Savings and credit groups will be identified through the initial profiling process, preferably with all members engaged in the same activity, such as trading or processing.

As they form the group and start transactions, members will be trained in financial literacy and banking activity management. Savings deposited will constitute initial capital that will be leveraged in subsequent investment in equipment or credit with project support. Through the financial education programme, PROSPER will encourage groups to save for future needs, such as raising their counterpart contribution to access Matching Grant funding. Participating PFIs will be trained in product development to incentivise saving. The project will help to create or strengthen 5,300 VSLAs in the targeted regions. MSMEs will be targeted by the same programme. After one year in operation, groups will be assessed on their level of savings, member participation and commitment to developing business activities. The best rated groups will qualify to apply for and benefit from the Matching Grant (MG) fund or Blended Finance Facility (BFF).

Matching Grants. As a second stage, PROSPER will operate a MG fund to capitalize less mature FIs and MSMEs toward raising their production and value addition capacities as part of a business agreement with VC actors, including nucleus farmers, offtakers, processors, traders, aggregators and agroindustry.²¹ Eligibility for a MG will entail more demanding performance criteria. It is expected that participating groups will enhance their business proficiency and become more reliable in the eyes of potential VC partners. PROSPER will promote the adoption of innovative, climate smart and resilient technologies and practices to achieve financial and environmental sustainability in the context of climate change and NR depletion. The MG as a one-off support will help RIs to finance the investments described in their BP.

Three MG funding channels are proposed, for RIs, MSMEs and *Nutrition and other*

²⁰ CARE has also had successful experience in developing the concept for women in Ghana.

²¹ This systematic objective selection approach and self-targeting mitigate potential elite capture of the MG fund.

poverty initiatives. The level of grant/contribution required will vary according to the VC and the profile of the beneficiaries targeted. For women groups, youth groups and PWD eligible for the *Nutrition and other poverty initiatives* funding channel, no BP will be required for small income-generating schemes focused on promoting diversification towards nutrition and food security, (for example, year-round vegetable production schemes). RIs will be assessed against the realization of their BPs and capacity to expand business with their offtaker partner. Similarly, stand-alone MSMEs will be rated on their performance against their BP. The best rated RIs and MSMEs will qualify to prepare an advanced BP with project assistance (under Subcomponent 2.1) and to access an affordable loan from PFIs through the BFF. It is expected that 30% of MG recipients will graduate to BFF financing during the project timeline.

Blended Finance Facility (BFF). The BFF will develop, test and rollout green financial products to finance advanced BPs by the more developed RIs and MSMEs that have the potential to undertake commercial agriculture with climate mitigation and adaptation interventions in partnership with other VC actors.²² The Facility is set up to contribute to the opening up of the climate finance market in Ghana.²³ The BFF will be made available as the third financial product for eligible groups some of whom may not have accessed an MG. BFF will direct the financing only to qualified PROSPER RIs and MSMEs who present bankable BPs with climate mitigation and adaptation interventions. Under the condition of being linked formally with VC actors under contract arrangements, qualified RIs and MSMEs will gain access to BFF credit at a blended on-lending rate for financing a more sophisticated BP that has a strong focus on adaptation and mitigation in the face of climate change impacts on small-scale agriculture. Selected RIs within the same cluster and along the same VC will be helped to come together to develop and finance an advanced BP, which could include support to the VC actor as needed, provided that the BP show clear benefits of such support to the IFAD target group taking part. Another BFF funding channel will be made available to BPs developed by small enterprises, (up to 20 employees).

The project will provide this affordable financing solution to the best RIs and MSMEs capacitated to invest on a larger scale (heavy equipment, working capital, inputs, TA) and to grasp other business opportunities. The BFF will operate as a refinancing facility (RF) beyond PROSPER closure to continue providing sustainable access to affordable finance for groups to maintain and develop their business activities with focus on climate mitigation and adaptation.

The BFF will be developed through combining/blending at least five different loanable resources with the objective to foster the development of a climate lending market.²⁴ The BFF will mix concessional funds from development institutions with commercial private resources. The five resources are: (i) two lines of credit from the Green Climate Fund (GCF)/IGREENFIN Phase I, with both lines at highly concessional cost of funds (0% for climate mitigation and 1% for climate adaptation activities); (ii) one line of credit from IFAD resources at a concessional cost of funds of 2%; (iii) the Association of Rural Banks (ARB) Apex Bank of Ghana and its Rural Commercial Bank (RCB) members, who will engage their own resources at a treasury bond rate (reference cost of funds) of 12%; and (iv) resources from other private sector investors and/or other development agencies, at a market cost of funds of at least 20%.²⁵

²² Only for the six main VCs: rice, maize, soya, poultry, cashew and shea.

²³ Currently, there is almost no demand for climate finance in Ghana because uptake of climate mitigation and adaptation technologies is still in its very early stages. BFF will be one of the very first funds set up by IFAD in Ghana to contribute to climate finance market development.

²⁴ A dedicated technical team of IFAD experts, private sector independent consultants and Apex Bank bankers and economists carried out a joint exercise to determine the blended affordable on-lending rate. Details of the adopted approach to the interest rate determination are documented in a “Technical guidance note on determining the on-lending rate from blending and structuring a mixture of highly concessional and commercially-priced loans”.

²⁵ The ARB Apex Bank in collaboration with PROSPER will look for investors and other development partners. A technical guidance note (in the PIM) shows that the average cost (wholesale rate) of the blended funds will be in the single digits (less than 10%) and the average structured interest rate applied to the clients (on-lending or retail rate) will also be in single digits. This latter is compared to the current market rate of between 26% and 28% applied by Apex Bank’s network of RCBs.

PROSPER will support access by the above-mentioned groups to credit lines for green agricultural investments, leveraging the Inclusive Green Finance Initiative (IGREENFIN-I) under the GCF Great Green Wall Umbrella Programme (GGWUP). IGREENFIN-I will support (i) Mitigation measures for reducing/mitigating GHG emissions and (ii) Adaptation activities to strengthen climate resilience of the Project beneficiaries. Through IGREENFIN-II, PROSPER will build RIs and MSMEs' capacities to understand climate threats, identify and implement adaptation and mitigation solutions, design viable/profitable business plans, improve financial education, business management and development, and access green loans from banks and MFIs. IGREENFIN-II will also: strengthen the commitment to green and inclusive financing by financial intermediaries, MSMEs and others; contribute to climate resilience-strengthening activities in production and processing in addition to those activities required by SECAP for climate proofing; and support adaptation and mitigation activities included in beneficiaries' BPs through IGREENFIN-II adaptation Window I and IGREENFIN-I mitigation Window II respectively. The BFF will be established at and managed by the ARB Apex Bank. The Apex Bank, as the Investment Fund Manager, will provide wholesale liquidity on blended terms to its RCB members and other interested retail financial institutions operating with reasonable outreach in the PROSPER project area, for on-lending for smallholder agricultural production and MSMEs development.²⁶ The Apex Bank relies on its due diligence processes to select its partner retail RCBs and other qualified FIs. This blended financing arrangement will leverage existing derisking tools, including GIRSAL's partial credit guarantee scheme, GAIP's smallholder insurance scheme and GCX market access and warehouse receipt systems.

To contribute to mitigating the risk averseness of participating RCBs and other FIs, PROSPER will contribute 50% of the premium to be paid by these FIs to the GIRSAL partial credit guarantee fund for a coverage of up to 70% loss.²⁷ In addition, to encourage beneficiaries to take up high value but risky climate mitigation and adaptation interventions, PROSPER will contribute 50% of the insurance premium paid by clients to GAIP.²⁸ To ensure optimal participation from the clients, the agricultural insurance product solicited (weather index insurance and/or area yield index insurance) will be bundled with the credit requested from the PFIs. Among the multiple uses of the TA associated with the BFF, part will be used to address key bottlenecks, including the risk averse nature of FIs in Ghana to finance smallholder agriculture, lack of affordable liquidity in the banks and unaffordable interest rates for smallholder producers. The BFF will be developed and set up at the Apex Bank by an external expert sourced by PROSPER. At inception, BFF PROSPER will be linked with BFF AAFORD.

Partner RCBs and other retail FIs selected to channel BFF financing to beneficiaries will have to commit to offering the predetermined single digit on-lending interest rate negotiated between the Apex Bank and the project, while ensuring a reasonable return and sustainability to the participating RCBs and FIs. In addition to contributing to the credit guarantee fund and the agricultural insurance, a cash contribution of around 25% of the cost of the BP will be required from the RIs, including a contribution from the partner offtaker, the loan being limited to the remaining amount. IGREENFIN technical assistance to RCB staff will be deployed towards climate change capacity building and financial product development. The BFF will have a dedicated unit in the ARB Apex Bank to run the day-to-day activities of the BFF in coordination with PROSPER. The BFF will be supported by the project's M&E core team.

Component 3. Project management and Policy engagement.

The expected outcome of the support component: *Efficient and timely delivery of*

²⁶ For purposes of flexibility to achieve sustainability (IRF Policy 2021), the evolution and performance of the innovative blended fund will be closely monitored by a dedicated GCF/IGREENFIN TA-supported M&E Unit lodged at the Apex Bank. The dedicated M&E team will collect and analyse data that will be used to inform recommendations and/or decisions to be taken at midterm (MTR) on whether to make any adjustments to the blended fund and its operations.

²⁷ The premium is currently estimated at 1% of loan portfolio to PROSPER clients.

²⁸ Details of the premium determination will be worked out with GAIP in time for the beneficiaries to access BFF.

PROSPER development results and support to evidence-based sectoral policy formulation.

Subcomponent 3.1 Project management. PROSPER will be facilitated by an implementation support structure embedded in the host GoG agency providing liaison, physical and financial project management, reporting and accounting, proactive knowledge management and learning activities, and monitoring and evaluation functions. Details are set out in section Ka below and in the PIM.

Subcomponent 3.2 Policy engagement. PROSPER will support developing an enabling policy environment that will help achieve the project's goals and objectives through the provision of technical assistance, organising high-level round table discussions, establishing policy dialogue fora, holding conferences and advocacy as appropriate. This will be underpinned by analytical work and KM products from PROSPER, IFAD and other development partners.

Top of the agenda are the policy ramifications of the large-scale trial of the new financial sector product "climate/green finance" as a potentially important development instrument in Ghana in coping with climate change. Without substantial incentives, the private sector is unlikely to borrow at scale to remediate NRs at landscape level that have long been neglected, under-invested, over-exploited and regarded as "free goods" by traditional agriculturalists and pastoralists. However, there are potential policy alternatives for public-private partnerships to invest in an ambitious NR recovery and reconstruction programme. Properly managed with appropriate technology, such an approach could provide employment for large numbers of people. Climate/green finance could leverage massive public investment in adaptation and mitigation if a conducive policy framework were devised.

Other areas of policy engagement include (i) focus on creating an enabling environment for investment in agriculture, including access to productive land and improving effectiveness of public expenditure in agriculture, and (ii) financial policies to enhance smallholders' access to financial services and formalize MSMEs, strengthening their role along different value chains. Salient sectoral policy issues identified during implementation will be supported as well. The project will commission *ad hoc* studies on policy issues related to the IFAD Ghana COSOP and the scope of PROSPER.

2.4 Project geographic area of intervention and target groups

2.4.1 Geographical targeting. The geographical targeting strategy of PROSPER considers (i) high rural population, (ii) high poverty prevalence, (iii) high rate of food and nutrition insecurity, (iv) strong concentration of female and male youth and (v) presence of economic opportunities relevant to the project in each district, combined with indicators of climate vulnerability and the level of cumulative degradation of the productive NR base (particularly soil, water and trees).

The geographic area of intervention extends to eight regions in the above-mentioned Belts. All five regions in the Northern Belt, (Upper West, Upper East, Northeast, Savannah and Northern), have a high poverty head count, the highest 92% (Wa West District, Upper West). The three neighbouring regions in the Middle Belt (Bono East, Bono and Oti) have significant poverty levels and contain pockets with a markedly high poverty head count peaking at 78% Kintampo South District, Bono East. The number of regions has risen from five at Independence to the present 16, but the administrative divisions do not coincide with the environmental and socioeconomic conditions. Broadly, poverty is progressively deeper from South to North with the drier climate and increasingly challenging setting for agriculture with the negative impact of climate change. The poverty analysis underpinning the geographical targeting of PROSPER is presented in the PIM.

Food insecurity prevalence as reported is not necessarily corresponding to the poverty head count. However, the latest food security and nutrition monitoring updates of WFP (June 2020) show high level of food insecurity (moderately and severe) in the target regions, including the worst-off districts in the whole nation in terms of food insecure households. Main barriers to food security are food availability and accessibility. This affects access to micronutrients, especially for women and children.

There are significant regional disparities concerning nutrition security in Ghana. The Northern region is worst off when it comes to rural (extreme) poverty, rural child stunting (chronic undernutrition) and the prevalence of anaemia among women and children. The national child wasting (acute undernutrition) rate stands at 7%, with the highest prevalence reported for Northern region (10.9%). The presence of persons with disabilities also has regional differences. Minimum Dietary Diversity for Women (MDDW) is an indicator for the adequacy of the diet in a household. The Ghana Micronutrient Survey (2017) reports that the proportion of women (15-49 years) not meeting the MDDW score ranged from 37.9% to 42.4% in the target regions, with a high national average of 40.2%. The prevalence of PWDs by district ranges from 3.0% to 8.3% in the Northern Zone and from 7.3% to 12.4% in the Middle Belt.

Figure 2: PROSPER Intervention Areas



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 20-09-2021

2.4.2 Target groups. PROSPER's primary target groups will be: (1) the poorest and

poor households, identified at inception through participatory methodologies appropriate to their circumstances; and (2) vulnerable people who have little access to assets and economic opportunities due to social exclusion, marginalization and the negative impact of climate change, targeted for participation in economic groups (RIs and MSMEs) promoted by the project.²⁹

The poorest households hold not more than 1 ha cultivable land or are landless whilst poor households comprise smallholders with less than 2 ha cultivable land whose livelihoods are vulnerable to NR degradation and climate change risks. Vulnerable people within the poor rural population include women (40%), unemployed female and male youth between 18-35 years (30%) and persons with disability who are economically active (5%), many being part of the poor/poorest households. Market-oriented farmers with 2-10 ha cultivable land will also benefit from project support as minority members of the eligible groups and enterprises. The combined total number is estimated at 100,000 beneficiaries. Market-oriented-farming households with more than 10 ha of arable land and larger private sector entities may participate in project activities such as capacity-building only if they offer employment or business opportunities to the primary target group.

PROSPER is highly gender sensitive. Overall, 40% women outreach will be targeted. PROSPER will address the barriers to women's participation and empowerment prevalent in the geographical context of the project. Involvement in training, educational and income generating activities will be promoted by ensuring there is enough time to reach everybody through community meetings and that activities are arranged in a way convenient to women's lives. PROSPER will include activities expected to attract women's participation, such as shea and savings and credit groups. The project will work with local media and trusted local NGOs. Gender targeting in PROSPER includes the inclusion of young women (youth) and women with disabilities (PWDs).

Both male and female unemployed youth (18-35 years) will be targeted, particularly for off-farm opportunities in MSMEs related to primary production along the selected value chains, such as the provision of mechanised land preparation services, the use of by-products for animal feed, and crop aggregation. Each MSME would have a 60% minimum membership requirement of eligible youth. PROSPER will concentrate on potential vulnerabilities affecting specific sections within the youth category, for example: ensuring that young women have the same opportunities as their male counterparts to participate in and benefit from the project; and inclusion of female and male youth with disabilities. The steady migration of youth from the rural areas to towns, observed in many countries, is a rationale response to the lack of earning opportunities. The country cannot afford to waste the resource of unemployed young people. A key part of the remedy is supporting individual entrepreneurs in setting up any business they choose with their own resources, thereby creating authentic local employment. PROSPER is designed to be as flexible as possible in responding to the energy and aspirations of youth in setting up enterprises from the bottom up.

In sensitizing communities about the project, PROSPER will create awareness about PWDs and the differing nature of impairments. The participatory identification of households with PWDs will be carried out while developing Cluster Plans. The needs assessment of the PWDs will follow tailored approaches for capacity building, economic engagement and social protection depending on the nature of impairment. PROSPER will aim to mainstream women, youth and PWDs through their inclusion in the project-supported RIs, MSMEs and other activities.

2.4.3 Phased approach. Selection of all eight proposed PROSPER regions is based on exhaustive analysis of available poverty, food insecurity and socioeconomic data in the Northern and Middle Belts. The plan is to start with three of the poorest regions to conduct the various project-wide inception activities without over-extending Government and management resources and to align with the pattern of project financing. The

²⁹ The socially sensitive household methodologies to be employed, as recommended strongly by GASIP supervision missions, are mentioned in the *Household nutrition and healthy diet campaign* section under Subcomponent 1.1 below and in detail in the PIM.

project will start implementation in three adjacent regions in the Northern Belt (Calibration Phase): Northern, Upper West and either Savannah or North East. The original concept envisaged this cautious approach, with all project activities tried from inception and scaled up when modalities are shown to be effective. The project structure is flexible and phasing can and should be adjusted in the light of experience gained in the first years, particularly with lessons learned from piloting the innovative Blended Finance Facility (BFF).

The project will be scaled up to the remaining five target regions, (Replication and Scalability Phase), by the middle of the third year of implementation according to four trigger conditions: (i) filling the financing gap (currently estimated at USD 38.4 million), in part or in full from IFAD-12 (IFAD); (ii) Government meeting its PROSPER cofinancing commitments during the Calibration Phase (GoG); (iii) MoUs with implementing partners established and progressing well (PROSPER management); and (iv) satisfactory arrangements in place with regard to the operation of the Matching Grants and Blended Finance Facility (PROSPER management). The worst-case scenario if the financing gap is not filled by year three is a reduction in project scope for the remaining period. If other triggers related to overall performance are not met, this could lead to restructuring of the project to or any other possible remedies to address the underlying issues.

3 ENVIRONMENTAL, CLIMATE AND SOCIAL PROFILE OF PROSPER TARGET AREAS

3.1 Physical Environment

Topography and Relief

The Ghana landscape topography is predominantly undulating and of low relief with slopes of less than 1%. Despite the gentle slopes, about 70 % of the country is subject to moderate to severe sheet and gully erosion. The highest elevation in Ghana, Mount Afadjato in the Akwapim-Togo Ranges, rises 880m above sea level. There are five distinct geographical regions:

- The low plains, stretching across the southern part of the country.
- The Ashanti Uplands, stretching from the Côte d'Ivoire border in the west to the elevated edge of the Volta Basin in the east.
- The Akwapim-Togo Ranges in the eastern part of the country consist of a generally rugged complex of folded strata, with many prominent heights composed of volcanic rock. The ranges begin west of Accra and continue in a north-easterly direction, finally crossing the border into Togo.
- The Volta Basin occupies the central part of Ghana and covers about 45 percent of the nation's total area. The basin is characterized by poor soil, generally of Voltaian sandstone.
- The high plains in the northern and north-western part of Ghana, outside the Volta Basin, consist of a dissected plateau. Soils in the high plains are more arable than those in the Volta Basin

The relief of Ghana has been influenced considerably by its geological history. The land is generally below 600m. A ridge and furrow topography is evident on Pre-Cambrian rocks reflecting the fold trends. The lowest lying areas occur in the middle Volta Basin and in a broad belt along the coast. Physiographic regions include the coastal plains, the Buem-Togo ranges, the forest dissected plateau, the southern Voltaian Plateau, the Savanna High Plains and the Gambaga scarp. The topography will largely inform the design of physical component of the Project, especially the likely small earth dams, dugouts to harvest storm waters.



Figure3: Topography and elevation for Ghana

Ghana, located along the south-central coast of West Africa, shares borders with the Republic of Togo to the east, Burkina Faso to the north and Cote d'Ivoire to the west. Ghana has an area of 239,460 km² and its territorial coastal waters extends 200 nautical miles off the coast. Ghana's territory has many water bodies, which include the Lakes

Volta and Bosomtwe, which occupy 3,275 km², as well as other seasonally flooded lakes that occupy another 23,350 km²³⁰. The country has two broad ecological zones: forest zone, which cover 30% of the southern region and the Northern Savannah Ecological Zone, which covers the remaining, drier, 70%. More than 70% of the country's land area is dedicated to agriculture³¹. Figure 2 shows the topography and elevation for Ghana.

Ghana is a lower middle-income, developing country with a stable and democratic government. In 2019, the country's population was 30.4 million people with an annual population growth rate of 2.2%. Projections suggest that the population will increase to 37.3 million people by 2030 and 51.2 million people by 2050³².

Over 55% of Ghanaians reside in urban areas, which are expected to experience considerable growth, with 63% and 73% of the population residing in urban areas by 2030 and 2050³³. The country has a Gross Domestic Product (GDP) of US\$66.9 billion (2019) and had an annual growth rate of 6.5%³⁴. The impacts of climate change on Ghana's overall economic growth are predominantly negative (Table 1). Since 2010, economic growth has been fueled by high commodity prices and newly developed offshore oil resources. Despite a recent transition to an industry and services-oriented economy, 45% of the workforce still relies on work dependent upon rainfed agriculture.

The fisheries sector contributes 4.5% to GDP and is another important source of income and nutrition, providing livelihoods for as many as 2.2 million people. Ghana's Northern Savannah Ecological Zone, where agricultural production is centered and where poverty rates are most severe, will see increasing risks as the climate changes³⁵. The risks posed by climate change in Ghana include risks for the health and agriculture sectors, primarily due to altered rainfall patterns and coastal area flooding³⁶.

Table 1. Data snapshot: Key development indicators

Indicators

Life Expectancy at Birth, Total (Years) (2019)	
64.1	
Population Density (People per sq. km Land Area) (2018)	
130.8	
% of Population with Access to Electricity (2018)	82.4%
GDP per Capita (Current US\$) (2019)	\$2,202.10

Source: Ghana Country Profile, The World Bank Group, 2021

☞ Drainage and Water Resources

Ghana's water resources potential is divided into surface and groundwater sources. Surface water resources are mainly from three river systems that drain Ghana, namely: the Volta, Southwestern and Coastal River systems. The Volta system is made up of the Red, Black and White Volta Rivers as well as the Oti River. The Southwestern River system is made up of the Bia Tano, Ankobra and Pra Rivers. The Tordzie/Aka, Densu, Ayensu, Ochi-Nakwa and Ochi-Amissah comprise the Coastal River systems. These river systems make up 70%, 22% and 8% respectively of Ghana's total land area of about 240,000 km². In addition to these, the only significant natural freshwater lake in Ghana

³⁰ -UNDP (2019). Climate Change Adaptation Profile – Ghana. URL: <https://www.adaptation-undp.org/explore/western-africa/ghana>

³¹ -Republic of Ghana (2015). Ghana's Third National Communication to the UNFCCC. URL: <https://unfccc.int/resource/docs/natc/ghanac3.pdf>

³² -World Bank (2019). Internal Climate Migration Profile – Ghana.

³³ -World Bank Open Data, Data Retrieved March 2021. Data Bank: Population Estimates and Projections, Ghana. URL: <https://databank.worldbank.org/data/reports.aspx?source=health-nutrition-and-population-statistics-population-estimates-and-projections>

³⁴ -World Bank Open Data, Data Retrieved March 2021. Data Bank: World Development Indicators, Ghana. URL: <https://databank.worldbank.org/data/reports.aspx?source=2&country>

³⁵ -USAID (2017). Climate Change Risk Profile – Ghana. URL: https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile%20-%20Ghana.pdf

³⁶ -UNDP (2019). Climate Change Adaptation Profile – Ghana. URL: <https://www.adaptation-undp.org/explore/western-africa/ghana>

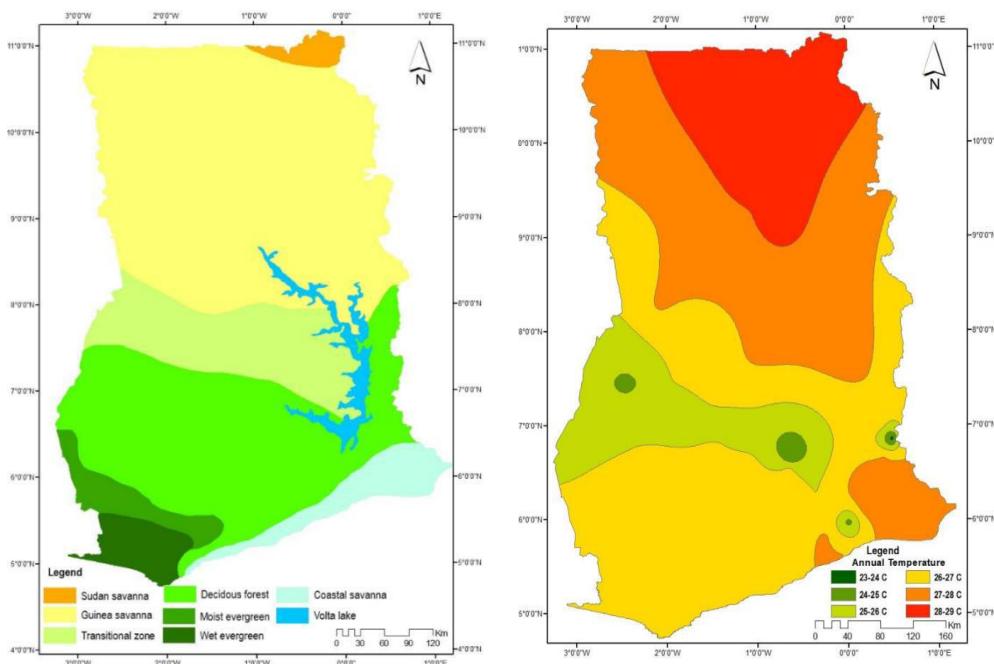
is Lake Bosomtwi. This is a meteoritic crater lake located in the forest zone, with a surface area of 50 km², and a maximum depth of 78m (*i.e. Ministry of Water Resources, Works and Housing, 2007*).

Climate and³⁷ Vegetation

Ghana has a warm, humid climate. Mean annual rainfall of the country is estimated at 1,187 mm. Mean annual temperatures range from 26.1 °C near the coast to 28.9 °C in the extreme north (*Figure 3A*). Annual potential open water evaporation has been estimated as ranging between 1,350 mm in the south to about 2,000 mm in the north. The actual amount of evaporation depends on several factors including water availability, vegetation cover and prevailing weather conditions among others.

There are six agro-ecological zones defined based on climate, reflected by the natural vegetation, and influenced by the soils (*Figure 3B*). Rainfall distribution is bimodal in the forest, transitional in coastal zones, giving rise to a major and a minor growing season. In the remaining two agro-ecological zones, the unimodal rainfall distribution gives rise to only one growing season. Only in some parts of the country is the climate favourable for non-irrigated agriculture. Rainfall exceeds potential evaporation during relatively short periods. Even in the southern forest zone where rainfall is at its highest, irrigation is essential for short season crops during the dry period. The unreliability of rainfall is a cause of concern. Complete crop failures can be expected in most northern areas in about one in every five years. This risk can rise to one in every three years during low rainfall periods. The lean season would be targeted by the Project to engage the poor in the public works component.

Figure 4. Typical vegetation zones (left) and average temperatures (right) in Ghana



The ND-GAIN Index³⁸ ranks 181 countries using a score which calculates a country's vulnerability to climate change and other global challenges as well as their readiness to improve resilience. This Index aims to help businesses and the public sector better identify vulnerability and readiness in order to better prioritize investments for more

³⁷ -World Bank (2021). DataBank – World Development Indicators. URL: <https://databank.worldbank.org/source/world-developmentindicators>

³⁸ -University of Notre Dame (2020). Notre Dame Global Adaptation Initiative. URL: <https://gain.nd.edu/our-work/country-index/>

efficient responses to global challenges. Due to a combination of political, geographic, and social factors, Ghana is recognized as vulnerable to climate change impacts, ranked **109** out of **181** countries in the 2020 ND-GAIN Index. The more vulnerable a country is the lower their score, while the more ready a country is to improve its resilience the higher it will be. Norway has the highest score and is ranked 1st. Figure 2 is a time-series plot of the ND-GAIN Index showing Ghana's progress.

Ghana submitted its Nationally Determined Contribution to the UNFCCC in 2016, in support of the country's efforts to realize its development goals and increase its resilience to climate change. Ghana also published its Fourth National Communication to the UNCCC in 2020. Ghana is particularly focused on increasing its resilience through the development of sustainable land use practices, including food security, climate-proof infrastructure, energy security, sustainable forest management and urban waste management. Key sectoral focus is on energy, industry, agriculture, waste, and forestry sectors to reduce the country's carbon footprint³⁹.

Ghana's generally tropical climate is strongly influenced by the West African monsoon winds, which varies slightly along with the country's varied topography. Across Ghana, annual rainfall ranges from 1,100mm in the north to approximately 2,100 mm in the southwest. The northern part of the country has one rainy season, which extends from May to September; the south has two rainy seasons: the first from April to July and the second from September to November. The dry season (December to March) brings the arid and dusty harmattan winds that blow from the Sahara Desert, and is marked by low humidity, hot days ($T > 25^{\circ}\text{C}$) and cool nights ($T < 20^{\circ}\text{C}$). Average annual temperatures are approximately 27°C , with higher temperatures generally exhibited in the north and during the country's dry season. The area between the forest in the southwest and the savannah in the north is vital for domestic food production, due to more reliable rains and an extended growing season⁴⁰.

Ghana is highly vulnerable to climate variability and change, which continues to pose a threat to future growth and development. Rising sea levels, drought, higher temperatures, and erratic rainfall negatively impacts infrastructure, hydropower production, food security and coastal and agricultural livelihoods. Approximately $\frac{1}{4}$ of the population lives along the coast in rapidly expanding urban areas like Accra and are especially vulnerable to flooding and waterborne diseases. Drought and reduced rainfall threaten access to reliable power sources, already erratic and insufficient. The climate and socio-economic environment in semi-arid, coastal and wetland areas across Ghana make communities vulnerable to food insecurity and unstable livelihoods as well as leading to unsustainable agroecological systems, crop failure and unproductive rangelands⁴¹.

Analysis of data from the World Bank Group's Climate Change Knowledge Portal (CCKP) (*Table 3*) shows historical information for 1901–2020. Mean annual mean temperature for Ghana is 27.3°C , with average monthly temperatures ranging between 25°C – 26°C (June to September) and 28°C – 29°C (February to April). Mean annual precipitation is 1,189.9 mm, with highest rainfall occurring May to September, with extremely low precipitation falling between November to January, for the most recent climatology, 1991–2020⁴².

³⁹ -Republic of Ghana (2016). Nationally-Determined Contributions. URL: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Ghana%20First/GH_INDC_2392015.pdf

⁴⁰ -USAID (2017). Climate Change Risk Profile – Ghana. URL: https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile%20-%20Ghana.pdf

⁴¹ -USAID (2017). Climate Change Risk Profile – Ghana. URL: https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile%20-%20Ghana.pdf

⁴² -WBG Climate Change Knowledge Portal (CCKP, 2021). Ghana URL: <https://climateknowledgeportal.worldbank.org/country/ghana/climate-data-historical>

Table 2. Data snapshot: Summary statistics⁴³

Climate Variables:	1901–2020
Mean Annual Temperature (°C)	27.3°C
Mean Annual Precipitation (mm) mm	1,189.9
Mean Maximum Annual Temperature (°C)	32.5°C
Mean Minimum Annual Temperature (°C)	22.1°C

Table 3. Data snapshot: Coupled Inter-comparison Project No.5 (CMIP5) ensemble projection

Cmip5 Ensemble Projection	2020–2039		
2040–2059	2060–2079	2080–2099	
Annual Temperature Anomaly (°C) to +2.7 (+1.7°C)	+1.7 to +3.8 (+2.7°C)	+2.3 to +5.3 (+3.6°C)	+0.6 to +1.5 (+0.9°C)
Annual Precipitation Anomaly (mm) 22.2 to +30.4 (+0.3 mm)	-22.9 to +38.9 (+2.9 mm)	-29.7 to +45.2 (+1.6 mm)	-16.7 to +22.0 (+0.9 mm)
			-

Note: The table shows CMIP5 ensemble projection under Representative Concentration Pathways (RCP8.5). Bold value is the range (10th–90th Percentile) and values in parentheses show the median (or 50th Percentile).

Figure 5. Map of average annual temperature (°C) (left); annual precipitation (mm) (right) of Ghana, 1991–2020⁴⁴

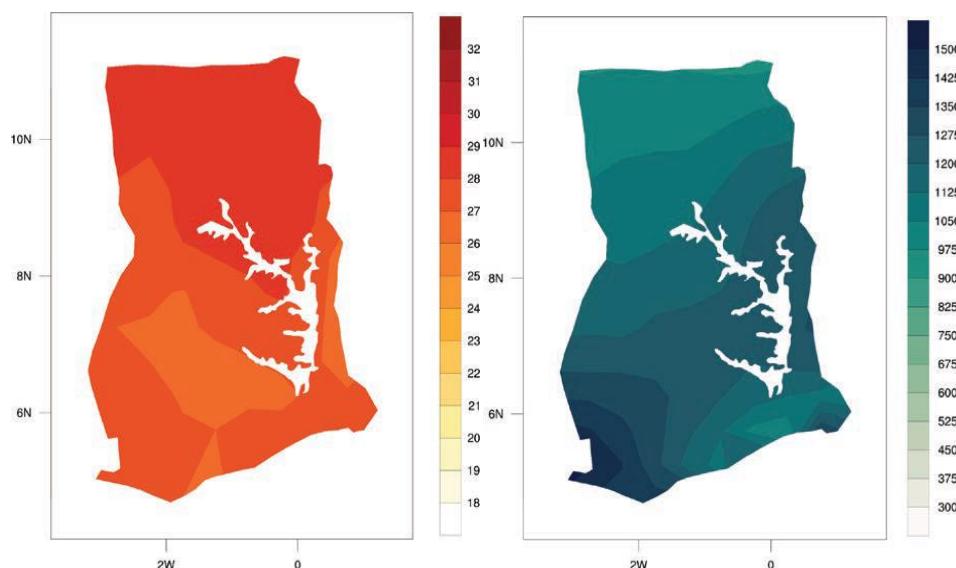


Figure 6. Annual Rainfall Patterns

⁴³ -WBG Climate Change Knowledge Portal (CCKP, 2021). Ghana URL: <https://climateknowledgeportal.worldbank.org/country/ghana/climate-data-historical>

⁴⁴ -WBG Climate Change Knowledge Portal (CCKP, 2021). Ghana. URL: <https://climateknowledgeportal.worldbank.org/country/ghana>



Temperature

Temperatures in Ghana have risen by approximately 1°C since the 1960s (an average increase of 0.21°C per decade) (Figure 5). The number of very hot days ($T_{max} > 35^{\circ}\text{C}$) have increased by over 13% per year, and hot nights ($T_{min} > 26^{\circ}\text{C}$) increasing by 20% per year; with the most pronounced increase occurring between September and November⁴⁵. Overall, the rates of increase have been more rapid in the north of the country, and minimum temperatures in the southern regions (rainforest and coastal, agro-ecological areas) have increased. However, the rate of temperature rise for the middle and northern parts of Ghana (savannah zones) were +37%⁴⁶.

Precipitation

Precipitation in Ghana, and the West Africa region, experience a high degree of interannual and interdecadal variability. However, since the 1960s, an overall reduction in cumulative rainfall of 2.4% per decade was observed⁴⁷. Changes in decadal rainfall declined in the middle of the country, with more intense rainfall events occurring in both the north and south of the country, indicating an increase in the intensity of rainfall

⁴⁵ -USAID (2017). Climate Change Risk Profile – Ghana. URL: https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile%20-%20Ghana.pdf

⁴⁶ -Republic of Ghana (2015). Ghana's Third National Communication to the UNFCCC. URL: <https://unfccc.int/resource/docs/natc/ghan3.pdf>

⁴⁷ -USAID (2017). Climate Change Risk Profile – Ghana. URL: https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile%20-%20Ghana.pdf

events and possibility of increased dry spell durations⁴⁸.

3.2 Biological Environment

☞ Ecology

There are six broad ecological divisions in Ghana that are rich and varied. The project area has savanna ecology, which extends into the neighboring countries. It is classified into the Guinea savanna and the Sudan savanna ecological zones.

☞ Flora

The Guinea savanna covers more than 90% of the land surface area of the Northern Savanna

Zone but not restricted to it. It stretches from the upper regions down south to the forest fringes. The zone includes the grassland of the north and the derived savanna on the fringes of the forests.

The interior savanna contains 1,519 vascular species known to be native or naturalised to the savanna zones of Ghana. Six species including *Ceropergia gemmifera*, *Commiphora dalzielii*, *Ptleopsis habensis* and *Eugenia coronta* are rare in Ghana and internationally. The Guinea Savanna consists generally of fire tolerant, deciduous, broad-leaved trees interspersed in a ground flora of mainly grass, sometimes more than 1.5m high. The more important grasses of grazing value include *Andropogon gayanus* and in densely populated areas, *Diectomis fastigiata*, *Pennisetum pedicellatum* and *Loudetia togoensis* are common. Other species that occur are *Heteropogon contortus*, *Schoenfeldia gracilis* and *Aristida hordeacea*. The common trees include *Vitellaria paradoxa* (shea), *Parkia biglobosa* (dawadawa), *Piliostigma thonningli*, *Combretum glutinosum*, *Anogeissus sp.*, *Detarium p.*, *Afzelia sp.*, *Prosopis p.*, *Pterocarpus p.*, *Butyrospermum p.*, *Antiaris sp.*, *Vitex sp.*, *Pilosstigmas p.*, *Lonchocarpus p.* and *Acacias p.*

The Sudan Savanna occurs mainly in the Bawku East, Bawku West and Bolgatanga districts at the extreme northeastern corner of the Northern Savanna Zone. Its total coverage is less than 10% of the zone. The vegetation is made up generally of open savanna with short grass interspersed with relatively short low branching deciduous, broad, and thin- leave trees. The common trees include species of *Adansonia Digitata*, *Butyrospermum*, *Acacia Albida* and *Parkia Biglobosa*. The vegetation in most of the project area is characterized by a mosaic of forest, savanna, marshes and grassland. The ecology is for the most part severely altered. This is a reflection of prolonged unregulated grazing, burning, and intensive cultivation.

There are 72 forest reserves in the northern savanna made up of 23, 33 and 16 in the Northern, Upper East and Upper West in that order. They range in size from 0.4km² to 1,116 km². However, many of these areas are under pressure from subsistence farmers, livestock herders and others who engage in illegal activities in the reserves (Acheampong, 2001).

☞ Fauna

Many of the large wildlife species, which are common to tropical Africa, are also found in Ghana. They live mostly in the savanna eco-system and include *Panthera leo* (lions), *Panthera pardus* (leopards), *Loxodonta africana* (elephants), *Syncerus caffer* (buffalo), *Neotragus pygmaeus* (royal antelope) and *Colobus* and *Cercopithecus sp* (monkeys), *Hippopotamus amphibius* and *Crocodilus sp*. Snakes include pythons and poisonous ones such as *Naja nelanoleuca* (cobra), *Bitis gabonica* (gaboon viper), Lizards, e.g. *Veranus niloticus*, often of striking colours are common, as are large snails, spiders and scorpions which are found in large numbers. The insect fauna is also very rich. The bird species include *Francolinus sp* (bush fowl) *Falconidae sp* (falcons, hawks, and eagles) *Psittacus erithacus* (grey parrot), *Neophron sp.* (vultures), *Guttera edouardi* (guinea fowl) and many more.

⁴⁸ -Republic of Ghana (2015). Ghana's Third National Communication to the UNFCCC. URL: <https://unfccc.int/resource/docs/natc/ghanc3.pdf>

Savanna fauna comprises at least 93 mammal species, about half of which can be considered to be large ones, over 350 bird species, 9 amphibians and 33 reptiles. About 13% of the 860 recorded butterfly species in Ghana are associated with the savanna. The Wildlife Conservation Regulations of 1971, (LI. 685) has schedules which contain lists of wild animals found in Ghana. Fifty-five of these are completely protected (Acheampong, 2001).

☞ Rare or Endangered Species

Populations of many wildlife species found in the savanna have dwindled as a result of human-induced interventions, mainly through over hunting, inappropriate agricultural practices and expansion of agricultural land, road construction and bush burning (Appendix IV). The demand for wild animal meat (popularly called bushmeat in Ghana) is ever increasing, resulting in widespread hunting. As human populations in the northern parts of the country increases, exerting enormous pressure on the finite good "land" and creating land hunger among mostly the rural people, intact savanna woodlands and secondary groves which provide wild animals refuge and source of food become fragmented and unable to hold large populations of animals (Acheampong, 2001).

☞ Wild Animal Migration

Wild animal movement between reserves, groves and sanctuaries in the northern savanna may be limited because these are either fragmented or interspersed with farmlands. Studies have shown that wild animals move from Togo into Ghana and vice versa, using gallery forests along the Red Volta River. It is also on record that wild animals move from the GEF supported Nazinga Game Ranch in Burkina Faso to farms on the Ghana side of the Ghana-Burkina Faso border. Communities outlying protected areas have occasionally had their farms and property destroyed by wild animals mainly elephants that move outside the reserves, particularly in the dry season, in search for water and food. In 1997 elephants invaded some villages including Widinaba, Zongoiri, Nangodi, Sekoti and Datoko, all at the fringes of the Red Volta Forest Reserve, which is a natural trail for elephants moving from Togo into Ghana. Where villages received no help from the staff of Wildlife Division in driving these animals back into the reserves (or gallery forests) they resorted to killing the rampaging animals (Acheampong, 2001).

3.3 Socio-Economic Environment

☞ Demographic Characteristics

As stated above, Ghana is a lower middle-income, developing country with a stable and democratic government. Ghana's population as at 2010 stood at 24,658,823, comprising 12,024,845 (48.8%) males and 12,633,978 (51.2%) females, culminating into a sex ratio of 95.2. In 2018, the county's population is estimated at 30,000,000. On regional basis, Ashanti Region is the most populous, with a population of 4,780,280, representing 19.4 percent of the country's total population followed by Greater Accra, with a population of 4,010,054 (16.3%). The least populous regions are Upper West with 702,110 persons constituting 2.8 percent of the total population and Upper East with 1,046,545 persons or 4.2 percent of Ghana's population. Population density stood at 103 persons per square kilometer in 2010. Average household size also stood at 4.4 (Ghana Statistical Service, 2012).

Most recent data show that in 2019, the country's population was 30.4 million people with an annual population growth rate of 2.2%. If this trend continues, projections suggest that the population will increase to 37.3 million people by 2030 and 51.2 million people by 2050⁴⁹.

Ghana has a youthful population, thus consisting of a large proportion of children under 15 years, and a small proportion of elderly persons (65 years and older). The proportion of the population living in urban areas in 2010 was 50.9%, with the level of urbanization

⁴⁹ -World Bank (2019). Internal Climate Migration Profile – Ghana.

varies from region to region. Nowadays, it is estimated that over 55% of Ghanaians reside in urban areas, which are expected to experience considerable growth, with 63% and 73% of the population residing in urban areas by 2030 and 2050⁵⁰.

In terms of ethnicity, Akans are the predominant ethnic group in Ghana (47.5%), followed by the Mole Dagbani (16.6%), the Ewe (13.9%), Ga-Dangme (7.4), Gurma (5.7%), Guang (3.7 %), Grusi (2.5%). The Mandes (1.1%) and other groups (1.4%) form the smallest ethnic group in Ghana. For religion, 71.2 percent of the population profess the Christian faith, followed by Islam (17.6%). Only a small proportion of the population either adhere to traditional religion (5.2%) or are not affiliated to any religion (5.3%).

Literacy in Ghana is quite high, with majority (74.1%) of the population 11 years and older being literate. A large proportion (67.1%) of the population can read and write in English. About one-fifth (20.1%) can read and write in the English language only while 53.7 percent of the population can read and write in at least one Ghanaian language (Ghana Statistical Service, 2012).

☞ Indigenous Groups

Indigenous peoples, also known as first peoples, aboriginal peoples or native peoples, are ethnic groups who are the original settlers of a given region, in contrast to groups that have settled, occupied or colonized the area more recently. According to the World directory of minority and indigenous people in Ghana published by the Minority Group International, there are no groups in Ghana identified as indigenous people⁵¹.

In relation to DFI requirements such as IFAD, there are no groups in Ghana that will meet the definition of 'indigenous groups'⁵². As part of the implementation of PROSPER activities, it is not therefore foreseen to be any risk associated with indigenous groups that may trigger the requirement for the preparation of an Indigenous Peoples Plan (IPP) for compliance purposes.

☞ Economic Characteristics

Of population aged 15 years and older, 71.1% are economically active and of these, most are employed (94.7%). Only 5.3% are unemployed. Females in this age group are more likely to be unemployed (5.8%) than males (4.8%). Most of the regions have relatively high proportions of economically active persons. However, the highest proportion of economically active persons is in the Brong-Ahafo Region (74.4%) and the lowest is in the Ashanti region (69.4%). The proportion of unemployed population is highest in Greater Accra (7.8%) and lowest in Upper East (2.8%).

About two-fifth (41.2%) of the economically active population aged 15 years and older are skilled agricultural, forestry and fishery workers. About 21% is also engaged as service and sales workers while 15.2% is craft and related trade workers. Skilled agricultural, forestry and fishery work remains the dominant occupation for both males (44.9%) and females (37.7%). However, a much higher proportion of females (31.7%) than males (10.2%) is engaged as service and sales work. In Ghana, this pattern is generally the same for most of the regions, with the three northern regions (Northern, 73.3%; Upper West, 72.3%; Upper East, 70.1%) having relatively high proportions of the economically active population engaged as skilled agricultural, forestry and fishery workers.

According to Ghana Statistical Service, 2015, there is a high concentration of poverty in the North-Western part of Ghana. Though incidence in the districts of the South-Western

⁵⁰ -World Bank Open Data, Data Retrieved March 2021. Data Bank: Population Estimates and Projections, Ghana. URL: <https://databank.worldbank.org/data/reports.aspx?source=health-nutrition-and-population-statistics:-population-estimates-and-projections>

⁵¹ - <https://minorityrights.org/>

⁵² - As per the requirements of UN, World Bank Environmental and Social Standard (ESS7) and IFC Performance Standard (PS 7).

parts is very low, there are however few districts with relatively high incidence. The concentration of poor persons is mainly observed in the northern than the southern districts of Ghana. Among the districts in Ghana, East Gonja in the Northern Region stands out as the district with most of the poor persons. Districts in the Southern Ghana on the other hand show very low concentration of poor persons, there are few districts with high number of poor persons, but these numbers cannot be compared to what pertains to districts in the northern and middle belts regions.

Aside poverty incidence rate and number of poor persons, high depth of poverty is marked in districts in the northern half of the country as well. Across the country, inequality exists but follows no pattern. The poverty mapping exercise has revealed a striking pattern that would not have been apparent.

☞ Human Health and Safety

In the Savannah region, the quality of life rests ultimately on the basic conditions which influence health, morbidity and mortality in the population. These factors include the biological make-up of individuals, prevalence and severity of specific diseases, social, economic, and environmental conditions as well as the availability, accessibility, affordability, and utilization of health care facilities. The safety and human health in the area is further determined by the recurrent floods and droughts regularly devastate communities, infrastructure, and livelihoods.

Women are exposed to more dangers concerning safety and health, as a result of the high rate of illiteracy, lack of specialized services (*family planning, reproductive health and maternal care*) that is reflected in the high rate of early marriages and teenage pregnancy, inadequate access to health care due to lack of health facilities (both hard and soft) and greater vulnerability in access to food and nutritional insecurity. The livestock sector poses potential threat to human health due to lack of veterinary services, quarantine Ministry of Food and Agriculture (MoFA) facilities and conflicts emanating from the activities the settler cattle herdsmen popularly. The poor health of animals has significant adverse implications for human health.

☞ Cultural Diversity

Members of the same ethnic group share certain beliefs, values and norms that relate to a common cultural background. The majority of the heads of households within the savannah zone are Mole-Dagbani (14.2 %) followed by Ewe (13. 3%) whilst the Mande (1.1%) constitute the smallest ethnic group. The GLSS6 show that the majority of the household heads in Upper East (67.2%), Northern (67.1%) and Upper West (65.0%) are Mole-Dagbani and in Volta, Ewe (71.7%). Most of the household heads that belong to the Gurma ethnic group are located in the Northern (17.9%) and Volta (11.8%) regions. There is close relationship between family and household formation with regard to the type of socio-cultural practices that are prevalent in a particular society. The family system in any human society, whether it is the nuclear or extended type, depicts the type of kinship ties that hold the people together. Labour in the agriculture sector is influenced by cultural diversity among landowners, commercial famers and settler farmers. The agricultural sector is intrinsically associated with cultural practices, especially, the inland fishing, where in most communities is practiced at only specific times by the community as a group. The cultural aspect of people in the Savannah regions play part in the processing and preservation of traditional seeds and some plant species. Most agricultural activities are based on the cultural practices that prevent biotic and climatic hazards and contribute to food security. Cultural practices are further associated with the processing of food such as the shea butter, cassava flour, starch paste, "dawadawa" among others.

4 APPLICABLE POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK GOVERNING THE SOCIAL, ENVIRONMENTAL AND CLIMATE RISKS, IMPACTS AND BENEFITS MANAGEMENT OF PROSPER ACTIVITIES

This section provides a review of the applicable policy, legal, and regulatory (PLR) framework related to the potential risks, impacts, and benefits of the implementation of PROSPER proposed activities. The PLR framework underpins how social and environmental safeguards, but also climate change issues will be gradually addressed and respected. It also compares national PLRs to applicable international law and, as appropriate, indicate institutional and operational weaknesses and capacities strengthening with recommendations to address identified gaps or weaknesses where appropriate and where indicated.

In keeping with Ghanaian law, the Environment Protection Agency (EPA) is statutorily mandated to ensure that the implementation of all undertakings do not harm the environment and/or people and the ESMF and sites specific instruments to be prepared during project implementation will be in conformity with these core requirements. IFAD will work in tandem with the EPA and associated government agencies to ensure due compliance, although nature and level of impacts and risks will be managed in a manner consistent enough with IFAD's SECAP requirements.

Overall, the legal and institutional framework for environmental and social management, as well as climate change issues in Ghana includes, among many others, all of the below:

4.1 National Framework

Table 4. National Applicable Law and Institutional Framework

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
The 1992 Constitution of Ghana	Article 36 (9): Safeguarding the national environment for posterity	Parliament is yet to enact law to regulate the property rights of spouses as provided in article 22 (2). To avoid gender discrimination against women, benefit sharing arrangements will need to be formulated in detail, especially between husbands/wives or between partners.
	Article 258: Lands and Natural Resources	
	Article 270(1): Chieftaincy	
	Article 22: Property rights of spouses	
Ghana Shared Growth and Development Agenda (GSGDA)	Vision for the Environment and Natural Resource Sector in Section 4.2.2	The GSGDA is consistent with REDD+, GCF principles and IFAD's SECAP, and objectives and goes further to acknowledge the use of strategic environmental assessment to inform decision-making and mainstreaming environment into all sectors of the economy.
Land Policies	National Land Policy, 1999	The 1999 land policy does not appear to give support to off-reserve afforestation or reforestation programs as provided under Section 4.4 (d) of ensuring sustainable land use. A review of the 1999 Land Policy to encompass off-reserve afforestation/reforestation
	Administration of Lands Act of 1962 (Act 123)	
	Lands Commission (LC) Act 2008, Act 767	
	Office of the	

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
	<p>Administrator of Stool Lands Act 1994, Act 481</p> <p>Land Use and Spatial Planning Bill, draft October 2011</p>	<p>programs, e.g. community forestry/dedicated forest etc. was recommended for REDD+ work.</p> <p>LVD Crop Compensation Rate: Current crop compensation rates do not cover timber tree species or naturally occurring trees or trees grown to provide ecosystem/environmental services.</p> <p>The Land Use and Spatial Planning Bill provides a comprehensive coverage of land use planning at national, regional and district levels relevant to REDD+, and agricultural and forestry lands. This Bill should be pushed to law.</p>
Forest Policies and Regulations	<p>1994 Forest and Wildlife Policy</p> <p>2012 Forest and Wildlife Policy</p> <p>Forestry Commission Act of 1999 (Act 571)</p> <p>Forest Ordinance of 1927 (Cap 157)</p> <p>Trees and Timber Decree of 1974 (NRCD 273)</p> <p>Trees and Timber (Amendment) Law of 1983 (PNDCL 70)</p> <p>Trees and Timber Amendment Act of 1994 (Act 493)</p> <p>Forest Protection Decree of 1974 (NRCD 243)</p> <p>Forest Protection (Amendment) Act of 1986 (PNDCL 142)</p> <p>Forest Protection Amendment Act of 2002 (Act 624)</p> <p>Concessions Act of 1962 (Act 124)</p> <p>Timber Resources Management Act of 1997 (Act 547)</p> <p>Economic Plant Protection Act of 1979</p> <p>Interim Measures for Controlling Illegal Harvesting Outside Forest Reserves of 1995</p>	<p>The 1994 Forest and Wildlife policy promotes collaborative management of forest resources with rural or forest-based communities in Ghana. The Collaborative Wildlife Management Policy (2000), gave rise to CREMAS, devolving management authority to representative community institutions to create incentives for sustainable management of natural resources at the community level. The CREMA mechanism, is an innovative natural resource governance and landscape-level planning tool that authorizes communities to manage their natural resources for economic and livelihood benefits. The aim was to encourage local people to integrate wildlife management into their farming and land management systems as a legitimate land-use option.</p> <p>The Timber Resources Management Act made it illegal for farmers and other users of off reserve lands to harvest any naturally growing trees for commercial or domestic purposes, even if it is growing on their land. It also prohibited logging without prior authorisation from concerned groups or individuals.</p> <p>Under the Timber Resources Act, farmers, and land owners have legal rights to planted trees. When Timber Utilization Contracts are granted off-reserve, the contract holder is obliged to engage in a Social Responsibility Agreement (SRA) with the concerned</p>

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
	<p>Forest Plantation Development Fund Act of 2000 (Act 583)</p> <p>Wildlife Conservation Regulations of 1971</p>	<p>communities in the proposed area of logging. According to the SRA, 5% of the stumpage fees should be directed to the community as compensation for damaged crops. However, this fee is often captured during the process and the SRAs have not been sufficiently effective in rewarding the farmers and communities for trees on their lands.</p> <p>In terms of legislation on off-reserve tree (both naturally-occurring and planted) harvesting and benefits to CREMAs, Timber Concessions Act of 1962 (Act 124) and Article 267(6) of the 1992 Constitution. Per these, the following are true for CREMAs, which are off-reserve:</p> <ul style="list-style-type: none"> •All naturally-occurring timber on any other land is vested in the President and belongs to him. •Revenue from the exploitation of naturally-occurring trees is shared between the beneficiaries in the manner and proportion outlined in Article 267(6) of the 1992 Constitution. <p>Presently, in the off-reserves, the revenue accruing from naturally-occurring trees is split 50%-50% between the State and the following (<i>i. the Stool through the Traditional Authority ii. the Traditional Authority and iii. the District Assembly</i>). One of the implications for CREMAs is that in the off-reserve areas, the farmers are currently only expected to be consulted by the Stool whenever concessions or timber rights are being given out in respect of naturally-occurring trees on their farms but are not beneficiaries of sale proceeds. If they are to benefit, it will most likely lie largely on the Stool. This is currently being reviewed by the MLNR and the Forestry Commission.</p> <p>For planted trees (in off-reserves), in theory, plantations are currently the easiest for CREMAs to benefit from: 100% for farmers who are also landowners and 66% (two-thirds) for tenant farmers. Planted trees which are on farms is a little complicated as the farmers (or CREMA members) would still have to register individual trees in order to benefit.</p> <p>On the Wildlife Bill, the last update, as</p>

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
Mining and Mineral Policies	National Mining Policy Minerals Commission Act 1993, Act 450 Mining and Minerals Act of 2006 (Act 703)	of December 2019, was that it was at the Cabinet level and is still not at Parliament. There are 3 ways timber can be harvested; i.e. by being issued a Timber Utilization Contract (TUC), Timber Utilization permit (TUP) and a Salvage permit. TUPs are given for large-scale harvests whilsts TUC are for community/district/group harvests meant for social development. Timber harvested using a TUC (which happens to be given to community groups), cannot be sold. The best approach is to have community plantations/woodlots where they have a much better chance of profiting directly from its sale. Section 3 reveals that unless there is a law preventing the use of a land for some specified purpose, any land in the country may be the subject of application for a mineral right. Section 72 (1) gives the holder of a mining lease the upper hand with regard to the surface right. It is a source of conflict between mining firms and numerous farmers/farming communities with some surface rights within mining concessions. Current crop compensation rates cover known food/cash crops and some economic trees such as teak. There are no rates for naturally grown trees or timber species. Shade trees in cocoa farms are usually not counted as crops and so do not attract compensation. Forestry officials salvage or harvest such timber trees in cocoa farms prior to destruction by mining companies.
Environmental Protection & Assessment Policies and Regulations	Environmental Protection Agency Act, 1994 Act 490 National Environment Policy, 2013 Environmental Assessment Regulations 1999, LI 1652 National Climate Change Policy, 2013	The environmental protection/climate change policies and regulations are consistent with the IFAD SECAP and the REDD+ principles and objectives.
Energy Policies	Strategic National Energy Plan National Energy Policy, 2010	Most of the rivers identified for small and medium scale hydro power projects (Ankobra, Tano and Pra) have forests or forest reserves along sections of the river banks. Careful planning and choice

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
	Energy Commission Act 1997, Act 541 Renewable Energy Act, 2011, Act 832	of technology is required during the development of any hydro-electric dam in order to minimize inundation of forest along these water bodies. The charcoal export license manual does not indicate clearly which offences warrant suspension and which offences warrant cancellation of licence. It is silent on how long a person can be suspended and if one's licence is cancelled whether he/she is eligible for re-application.
Water Policy	Water Resources Commission Act, 1996 Act 522 National Water Policy, 2007 Buffer Zone Policy, 2014	The Water Policy factors climate change issues into consideration and is generally consistent
Agricultural Policy	Food and Agriculture Sector Development Policy (FASDEP) Ghana Irrigation Policy, June 2010 Tree Crops Policy, 2012	
Investment, Employment, Labour, Gender, Local government,	National Employment Policy National Gender and Children Policy Ghana Investment Promotion Centre Act 1994, Act 478 Local Government Act 1993, Act 462 Local Government Service Act, 2003, Act 656 Chieftaincy Act 759 of 2008 National Pensions Act,	The National Labour Act of 2003 provides information on public and private employment and sets out the objectives and procedures as well as the rights of workers. This Act will be followed by the CREMA Community Executive Management Committee for hire of a forester, community mobiliser, accountant and clerk under the Community Trust Fund; and the Forestry Commission in the hiring of labour for plantations through their co-financing. The National Employment Act is skewed towards industrial or manufacturing or processing companies and does not provide health and safety coverage for afforestation/ tree plantation activities. There is need for a separate health and safety policy for the forestry sector. The ADR Act does not apply to matters on the environment as indicated in Section 1b. REDD+ type of project should push for amendment or inclusion of some environmental matters in the scope of application under ADR with regard to REDD+ related issues where

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
	2008, Act 766 The Labour Act 2003, Act 651 Workmen's Compensation Law 1987 Intestate Succession Law, PNDC Law 111 (1985) The Children's Act 1998, act 560 Factories Offices and Shop Act, 1970, Act 328 Ghana National Fire Service Act 1997, Control of Bush Fires Law of 1983 (PNDCL 46) Control and Prevention of Bush Fires Act 1990 Ghana Meteorological Agency Act, 2004, Act 682 Alternative Dispute Resolution Act 2010, Act 798	necessary

4.2.: International Framework

Ghana is a signatory to several binding international agreements on the environment and social. Among the international commitments, conventions and agreements, the following protocols interfere with the PROSPER project's activities.

Table 5: International Regulations and Conventions

INTERNATIONAL INSTRUMENTS
International Covenant on Civil and Political Rights
International Covenant on Economic, Cultural and Social
International Convention on the Elimination of all Forms of Racial Discrimination
Convention on the Elimination of Discrimination Against Women
Convention on the Political Rights of Women
Convention on the Rights of the Child
Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment
Convention on the Rights of the Child on the involvement of children in armed conflict
Convention on the Rights of the Child on the sale of children, child prostitution and child pornography
African Charter on Human and Peoples' Rights of 1981
International Labour Organization (ILO) Convention No. 169
Convention concerning Forced or Compulsory Labour
Convention on Equal Remuneration Convention
Convention on Abolition of Forced Labour Convention
Convention Concerning Discrimination in Respect of Employment and Occupation
Right to Organise and Collective Bargaining Convention
Convention on the Rights of Persons with Disabilities

Universal Declaration of Human Rights
United Nations Declaration on the Rights of Indigenous Peoples (with clarification on indigenous peoples)
United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)
Convention on Biological Diversity
United Nations Framework Convention on Climate Change - Decision 1/CP.16-Paris Agreement
Convention on the Protection of World Cultural and Natural Heritage
Convention on the International Trade of Endangered Species of Wild Fauna and Flora (CITES)
Ramsar Convention (the Convention on Wetlands of International Importance as Waterfowl Habitant)
Montreal Protocol on Substances that Deplete the Ozone Layer and its amendments
United-Nations Framework Convention on Climate Change (UNFCC)
Vienna Convention for the Protection of the Ozone Layer
Kyoto Protocol to the UNFCC
Convention on the Conservation of Migratory Species of Wild Animals (CMS)
African convention on the protection of nature and natural resources

4.3 IFAD policies/strategies/procedures

SECAP

The IFAD'S ten Environmental and Social Values and Principles are relevant to the PROSPER project.⁵³ These social, environmental and climate values and principles are:

- Address the vulnerability and adaptation needs for the rural poor;
- Promote the sustainable use of natural resources and protection of key ecosystems;
- Focus on partnership-oriented initiatives for improved social and environmental quality;
- Address environmental and social impact assessments of agricultural and non-agricultural activities in an integrated manner;
- Incorporate externalities and minimize social costs;
- Implement participatory and inclusive approaches, with special emphasis on the role of women and youth;
- Promote the development of Indigenous Peoples and other marginalized groups (pastoralists, hunters and gatherers);
- Promote environmentally sound agricultural and manufacturing processes;
- Ensure systematic environmental, social and climate monitoring;
- Undertake Strategic Environmental, Social and Climate Assessments.
- IFAD has a Complaints Procedure to receive and facilitate resolution of concerns and complaints with respect to alleged non-compliance of its environmental, social and climate policies and the mandatory aspects of its Social, Environmental and Climate Assessment Procedures. For more information, visit the IFAD webpage: <https://www.ifad.org/web/guest/accountability-and-complaints-procedure>"; and IFAD SECAP Procedure⁵⁴.

The very objectives of the Environment, Social and Climate Impact Assessment in the IFAD's SECAP procedure are to:

- identify key linkages between rural poverty and social climate and environmental management, and assess the potential environmental, climate and social impacts of the proposed project on the natural resource base and livelihoods of communities in the project targeted areas;

⁵³ <https://www.ifad.org/documents/10180/a5e3ffcc-0ed7-4bc6-b523-39c25dc1edd8>

⁵⁴ <https://www.ifad.org/documents/10180/a36f992c-5e31-4fac-8771-404bea02796b>

- explore and identify key options for advancing environmental, climate and social sustainability; and
- recommend key opportunities to influence IFAD support towards environmental and social sustainability and climate smart development.

This ESMF is intended to provide options that would inform and thus improve decision making of PROSPER project design. The key environmental, climate change and social issues to be addressed include:

- ☞ challenges faced to meet its rural development and food security goals;
- ☞ the major environmental, climate change and social issues that have a bearing on IFAD operations in the country;
- ☞ the direct impact and multiplier effect the mentioned issues have on the resilience of ecosystems and productivity of land and crops, natural resource management and rural livelihoods;
- ☞ the scale of volatility and risks resulting from climate variability and change; and
- ☞ regulatory frameworks which are related to rural development and environmental issues.

The results of the ESMF and subprojects site specific ESMPs are:

- ☞ an assessment of the environmental (and social/economic/institutional) issues particularly in the agricultural and rural development sector;
- ☞ the identification of links with relevant ongoing initiatives;
- ☞ the provision of specific measures, recommendations including opportunities to optimize adaptation, environmental and social management, and resource use; in the project area.

These results will shed light on the important opportunities available to build resilience and adaptive capacity in the project under development.

The Key Principles to guide the ESMF and the future subproject site specific ESMPs are to:

- ☞ Look beyond the traditional 'do no harm' safeguards approach to mitigating environmental, climate change and social risks towards 'doing good' through greater focus on sustainability and management of environmental (rehabilitating degraded lands, seizing adaptation/mitigation opportunities and transforming the underlying inequalities that undermine inclusive development, etc.) and social impacts and risks;
- ☞ Begin the environmental, social and climate impact assessment (ESCIA) with a scoping exercise with the objectives of identifying as much as possible the relevant social, environmental, and climate change issues, so that baseline data collection and impact assessment can focus on them;
- ☞ Place strong emphasis on identifying opportunities and develop an appropriate management plan to enhance results and impacts;
- ☞ Identify and compare alternative scenarios to recommend realistic proposals for design mission consideration;
- ☞ identify capacity needs required to effectively implement the environmental and social management plan;
- ☞ Produce a realistic monitoring plan, including appropriate change management processes;
- ☞ Engage affected communities and other interested stakeholders throughout the ESCIA process, from scoping to review and comment on the final draft report prior to decision-making.

4.4 The IFAD Climate Change Strategy (2010)⁵⁵

The IFAD's climate change strategy calls for IFAD to systematically respond to increasing demands from clients for technical support and innovation to better respond to climate

⁵⁵ https://www.ifad.org/topic/tags/climate_change/2154532

change. This means analyzing and addressing climate change challenges during the early stages of program and project design to build resilience and adaptive capacity. The strategy goal and purpose are to:

- ☞ Support innovative approaches to helping smallholder farmers build their resilience to climate change
- ☞ Help smallholder farmers take advantage of available mitigation incentives and funding
- ☞ Inform a more coherent dialogue on climate change, rural development agriculture and food security

The main strategy output is a more 'climate-smart' IFAD, where climate change – alongside other risks, opportunities and themes – is systematically integrated into core programmes, policies and activities:

- ☞ On operations, climate change can be – and in many cases already is – factored into IFAD's operating model. This means incorporating it into our toolkit for the early stages of country programme and project design and for implementation.
- ☞ On knowledge, innovation, and advocacy- IFAD will explore new arrangements for sourcing climate-related expertise, share ground-level experiences to ensure their application throughout IFAD-supported programmes, and continue our work to shape the global dialogue on climate change for smallholders.
- ☞ On resource mobilization, the focus is to make IFAD's expanding overall portfolio climate-smart. Increased supplementary climate funds will continue to be sought to deepen the integration of climate change into IFAD's core programmes and to cover the increased cost this implies.
- ☞ On internal organization, IFAD will make greater use of existing in-house skills and people and will implement a new organizational structure that brings together and increases its staff capacity on climate and the environment. It will also continue to demonstrate the values of environmental awareness internally.

4.5 The IFAD Environment and Natural Resource Management (ENRM, 2011) Policy⁵⁶

Sustainable environment and natural resource management (ENRM) lies at the heart of delivering poverty reduction for rural people. Poor rural people face a series of interconnected natural resource management challenges. They are in the front line of climate change impacts; the ecosystems and biodiversity on which they rely are increasingly degraded; their access to suitable agricultural land is declining in both quantity and quality; their forest resources are increasingly restricted and degraded; they produce on typically marginal rain fed land, with increased water scarcity; energy and agricultural input prices are on a rising long-term trend; and declining fish and marine resources threaten essential sources of income and nutrition.

Environmentally damaging agricultural practices are a major driver of these challenges. There is growing concern over inappropriate approaches that drive excessive use of fertilizers and pesticides, pollution of waterways and aquifers, build-up of salt in the soil, water scarcity in major river basins, declining levels of groundwater and loss of crop biodiversity. Large parts of Africa rely on rainfed agriculture with little or non-existent use of organic or inorganic fertilizers, soil erosion and poor access to seed varieties. Weak governance, damaging policies and changing consumption patterns lie at the heart of this environmental degradation: poor rural people, including smallholders, are often disempowered and thus unable to sustainably manage natural resources; a lack of clear land access and tenure rights removes incentives to maintain natural assets; distorting trade policies and fossil-fuel and other subsidies are key drivers. The response requires an 'evergreen revolution', powered by sustainable agriculture that balances crop/livestock, fisheries and agroforestry systems, so that surplus inputs are avoided, and soil fertility and ecosystem services are not compromised, while production and

⁵⁶ https://www.ifad.org/topic/resource/tags/climate_change/2096936

income are increased. Building on a growing body of evidence of the success of sustainable agriculture investments, there is a huge opportunity to further scale up multiple benefits.

IFAD's ENRM stresses that project designs present new opportunities to improve systematic integration and scaling up of ENRM of the portfolio. Such integration can help IFAD to engage in new and strengthened partnerships with specialized entities for enhanced and effective responses to issues associated with natural resources and, climate variability and change. ENRM is at the core of delivering IFAD's poverty reduction and sustainable agriculture mandate because its target groups rely directly on the environment and natural resources for their livelihoods, and client demand for support for ENRM is increasing.

Sexual Exploitation, Abuse and Harassment (SEAH) Policy: IFAD prioritises no tolerance for SEAH in its supported operations. Ensure that appropriate precautionary and remedial measures to identify/receive/remedy/report (*proportionate to level of risks and impacts*) any occurrences of potential SH/SEA risks/complaints are incorporated in both the project design and PIM (see *IFAD policy on SEAH*).

4.6 IFAD Strategy and Action Plan on Environment and Climate Change 2019-2025

This 2019-2025 Environment and Climate Change Strategy consolidates and updates IFAD's strategy and policy frameworks on environment and climate change. It aligns with [IFAD's Strategic Framework \(2016-2025\)](#) and responds to commitments to the Eleventh Replenishment of IFAD's Resources (IFAD11). This strategy consolidates and updates IFAD's strategy and policy frameworks on environment⁴ and climate change⁵ in light of internal and global policy changes over the last several years. Its preparation was led by IFAD's Environment, Climate, Gender and Social Inclusion Division.

The consultative process involved staff, Board members and partners through interviews, a survey, workshops and meetings. The process also included benchmarking IFAD's policies and practices against those of selected organizations. The strategy's purpose is to guide IFAD in addressing environment and climate change across all its policies, strategies and operations (see figure 1 below). The strategy aims to achieve the following:

The main objective underlying this strategy is enhanced resilience of smallholder farmers and rural communities to environmental degradation and climate change impacts. This will ultimately provide the foundation for more prosperous livelihoods today and in the future. IFAD will contribute to meeting this objective through the following outcomes:

- Governments are increasingly effective in integrating environment and climate change objectives and considerations into smallholder agriculture and other rural development policies and programmes.
- IFAD has the skills, capacity, partnerships, systems and resources needed to fully support governments in integrating environment and climate change into rural development policies and programmes.
- IFAD investments contribute to the generation of environmental assets and services, and global public goods that make the livelihoods of poor rural people more prosperous and resilient, and IFAD's own operations more environmentally sustainable.
- IFAD becomes a global leader in generating knowledge on managing sustainable rural livelihoods – enabling IFAD to play a greater advocacy role in supporting global efforts to build a healthy planet

5. POTENTIAL SOCIAL, ENVIRONMENTAL AND CLIMATE RISKS, IMPACTS AND PROCEDURES IN ADDRESSING PROSPER COMPLIANCE

5.1 Overview of PROSPER Environmental, Climate and Social Risks, Impacts and Opportunities

As stated earlier above, the screening of the foreseen project activities in each of the participating 8 regions, using IFAD's Environmental, Climate and Social Screening Form (see Annexes X), revealed a rather moderate environmental and social risk rating, because of the low, site-specific nature, type and magnitude of the risks which are mostly reversible and easily manageable. The Project has been rated as a **moderate risk** and classified as a **category B** operation; however, given the level of greenhouse gas emission and the likely impacts of climate on both the physical (*households, RIs, Livestock*) and biological environment (*fauna, flora, ecosystem, etc.*), the climate risks was rated as **High**. Because at this very juncture the detailed footprints of foreseen projects sub-activities mainly in component 1 (precisely subcomponent 1.2) are not yet fully defined and known, and, will definitely not so be prior to project approval or during project implementation , therefore, as respectively prescribed by the IFAD's SECAP and the applicable Ghanaian policies, standards and regulations, this **environmental and social management framework (ESMF)**⁵⁷ is elaborated for due diligence in addressing identified impacts, risks and opportunities/benefits.

Overall, the environmental, climate and social impacts of the PROSPER project will be positive, as well as generate series of opportunities for beneficiary communities, especially women, youth and disableds. Besides the inequality in the labour market and presence of landless farmers in the project area who will be included in project activities; the project is expected to improve agricultural land, Community ecosystem, and the natural resources upon which Ghanaian farmers work is based, and on improved climate-resilient agricultural practices as well as improved natural resources management, specifically water management technics across the northern and middle belts regions. More specifically, better functioning ecosystems, controlled transhumance practices, and a greater and collaborative stakeholders' engagement and participation, will positively affect human health, nutrition, and well-being in the long run.

Socially, the project will engage women, youth, disableds and broader vulnerable communities through a Gender Action Plan (GAP), with a great emphasis on the proactivity and diversity of RIss and MSMEs that ensures proactive mainstreaming of women, youth, and vulnerable groups into all activities, empowering them with community-driven agricultural skills and knowledge (i.e. multiplication of multifunctional kitchen gardens, maintenance of farm tracks and/or feeder roads, etc.). Livelihoods are expected to improve greatly, based on increased adaptive and climate resilient capacities and practices within the target communities of each of the participating districts. Investments in better and more adaptable machinery, equipment, technology, and high-quality agricultural inputs used on-farm and off-farm, as well as learning-by-doing technics through farmer-field schools/field demonstration practices, are expected to reduce impacts of climate change on agricultural productivity and production and yield better and more sustainable results in the northern and middle belts regions.

Furthermore, the project is expected to positively impact government ministries and departments, facilitating improved coordination and planning of natural resources and agricultural extension services with a climate adaptation and mitigation focus. In addition to these positive impacts, the project incorporates special participatory training sessions and activities in farmer field demonstration and awareness raising campaigns, and similar formats under Component 1 to ensure that farmers are able to proactively enhance their livelihoods in ways that would not have occurred in a "without project"

⁵⁷- As mentioned earlier, the ESMF will serve to further guide project implementing agencies and stakeholders on environmental and social assessment, mitigation of impacts, and monitoring and reporting procedures during project implementation, including grievance redress mechanisms (GRM) and other corporate institutional requirements, such as gender-based violence, sexual exploitation and abuse, child labor, workers influx, citizen engagement, etc.

scenario. Under component 2, the Business Plans (subcomponent 2.1) will be encouraged to include measures to build resilience to climate impacts (supplementary irrigation, climate resilient inputs, conservation agriculture, etc) and mitigate emissions (use of renewables, solar panels, tree cultivation, regenerative agricultural approaches, reuse of crop residues and by-products as bio-fertilizer, livestock feed, biofuels, etc). Positive impacts of the project, namely increased indirect use of pesticides or incremental usage of biofertilizers will be mitigated and/or encouraged through gradual and sporadic training on Integrated Pest Management (IPM) practices to promote climate-smart and sustainable pest and pesticide management that reduces reliance on and overall use of pesticides on IFAD financed activities.

In instances where pesticide use is unavoidable, training on the safe handling of pesticides will be provided and bio-pesticides and/or bio-fertilizers will be encouraged and promoted over other more hazardous and toxic varieties; with the end-view of protecting communities livelihoods resources (water bodies and forest and multifunctional kitchen gardens, etc.). The more people will be trained on the safe and secure usages of pesticides, the greater communities will be better off and the best for reconvening such knowledge sharing. As enforced by IFAD's protocols, there will be no pesticides procurement under PROSPER project, and highly hazardous pesticides will not be used in the project areas. The project is not focused on complex construction activities, though minor construction activities may be pursued for the sake of rehabilitating/constructing short distances feeder and/or track roads (7-9.5km of length), preparation of agricultural lands (mostly 2ha), constructing small earth dams to harvest stormwaters for the purpose of developing community-driven livelihood support activities (*i.e. fish-farming, apiculture, tree nurseries, livestock drinking points, etc.*), establishing new agro-met systems or some selected agriculture silos and/or warehouses; use of biodigesters and/or solar panel as green energy. Due to the small size of such water stations and/or community-driven infrastructures, potential negative impacts are expected to be minor and can be easily mitigated. For example, biophysical environment risks (*i.e. noise pollution during installation, air pollution due to dust, and health/safety risks, natural waste management, ...*) during installation of agro-met stations, warehouses, biodigesters, feeder and track-road, etc. are envisaged to be low-to-moderate, localized, and temporary.

5.2 Breakdown of Impacts per Component

Complementary to what is stated here above, the key findings on the screening and field assessment of PROSPER project foreseen activities' positive and negative risks and impacts in the participating districts of the project intervention areas could be summarized as follows:

5.2.1 Positive Impacts: The project is expected to improve the natural resources and agricultural land upon which farmers work, based on improved, climate-smart and resilient agricultural practices and integrated natural resources management (*specifically water, arable land use management across the 2 belts*).

→ **Environmentally and climate change**, improved farming and poultry practices will support better functioning ecosystems, especially in these fragile and climate-weakened regions (*i.e. Upper West and Upper East regions, Savannah region, etc.*) which, in turn, can positively affect human health, nutrition and social well-being in the long run. Investments in machinery and equipment, technology, and high-quality agricultural inputs (seed, trees, etc.), poultry productivity, both in terms of white meat and dunks for biofertilizer used on-farm and off-farm are expected to reduce impacts of climate change on and increase agricultural productivity and production in the PROSPER intervention areas. Special field demonstration sessions and activities under Component 1 will ensure that farmers are able to proactively "**do better**" than they would have done under the without-project scenario. For example, Integrated Pest Management (IPM) will be used

under the project to promote sustainable pest and pesticides management that reduces reliance on (and overall use of) pesticides, and rather promote the efficient and sustainable usage of bio-pesticides, and bio-fertilizers, that are climate sensitive and smart and respectful of both human and biological environments.

Overall, the greatest positive benefits from the Value-chain crops (*i.e., Rice, Maize, Soybeans poultry, Shea and Cashew*) production perhaps lies in the ability to convert their diverse wastes to somewhat useful products. Rice wastes are excellent for charcoal briquette making which can serve as alternative source of fuel for heating in rural households. The same goes also for the animal dunks for propane gas production via biodigesters. Available literature proves to show that this will reduce the pressure on firewood and forest resources degradation, especially in the climate affected PROSPER intervention areas. The harvested rice, maize, soybean straws, as well as shea and cashew shells could also be excellent for hay/silage to feed animals, especially during the dry-season and drought periods. Poultry production not only contributes to enhance nutrition quality, generate more income for households, but the dunks used are biofertilizer/manure contributes to increase agriculture bioproduction. However, without the transformation and conversion knowhow and both technical and material resources, the waste from the abovementioned PROSPER's VC crops will most likely become a nuisance with their concomitant effects on human and environmental health.

→ **Socially** speaking, livelihoods are expected to improve based on increased adaptive capacities within the target communities. Aside from considerably/gradually improving the nutrition diet intake and conversely the health conditions, especially for under-5 years children, lactating new mothers and/or pregnant women, or malnourished and ill people; the project may also improve the living conditions of rural farmers, especially women and youth, both in terms of improved and affordable accessibility, but also in terms of climate smart usage of green energies (*solar panels, solar pumps for water harvesting, and biodigesters through the usage of animal dunks, and biofertilizers, etc.*). Demonstrations under sub-component 1-1 will be designed to include such technologies. The project may also positively reduce levels of migrant labor, given that increased productivity of land may reduce the need for farmers to migrate in search of work elsewhere, be it in nearby Kumasi or Accra (*rural exodus*) or to the nearby neighboring countries (*immigration*). The drive to implement climate resilient agriculture and to establish climate smart water and natural resources management information portal is expected to positively impact government ministries and departments, facilitating improved coordination and planning of natural resources and agricultural extension services with a climate resilience and adaptation focus. The project also engages women and youth through a highly participatory and inclusive Gender Action Plan that ensures proactive mainstreaming of women into all activities, empowering women with agricultural skills and knowledge, as well as facilitating their access to local markets and financing institutions (*i.e income generation activities, etc.*).

5.2.2 Negative Impacts: Potential negative impacts are minor, mitigatable, and forecast only for the implementation stages.

→ From the **social perspective**, the project's inclusion of landless farmers and tenants means that there is a potential risk of changes in tenant/landlord relationships due to increase in land value resulting from increased agricultural productivity. In addition to this, and as part of the wholehearted cultural induction/education of children, in Ghana, as in many other African countries, youth often assist their respective families with farming works, and there is therefore, a risk that those youth may work beyond what is age-appropriate, unless closely monitored. Likewise, given the climate impacts on the scarce natural resources, particularly animal/livestock feeding resources, there is a high potential of conflicts between farmers and herders due to animal divagation during transhumance periods; and as a worst scenario, which occurred not longtime ago given the proximity of the two major natural parks in both the Upper West and Upper East

regions, wild animal divagation into parks-adjacent farming plots may result in a deadly conflict between farmers/villagers and Elephants, Hippos and other wild-ruminants; henceforth causing more food shortage and famine in the affected regions.

→ From an **environmental and climate perspective** however, increased agricultural production may result in the generation of new environmental waste from, for instance, slow-release fertilizers that do not fully breakdown/decompose. Thus, increased production is also often a trigger for increased pesticides use, even if the pesticide use is indirect and not promoted under this PROSPER project. Provision of environmentally friendly seed and planting materials for the RIs and introduction of climate-resilient crop varieties also increases the project to medium risk, even though the inputs used, and varieties recommended would be registered/certified and already in use within the country (albeit on a smaller scale). Furthermore, the social issues described here above could also result in the increased usage of bush-meat hunting for survival purpose, which down the road may result in partially if not totally depleting the stock of wildlife in the project regions. Last of all, while the project is not focused on major construction activities, minor construction activities may however be pursued for the sake of establishing small water retention infrastructure (*i.e. earth dams, boreholes, wells, etc.*), agricultural warehouses (*i.e. seed-banks, agricultural inputs, family-size silos, etc.*) or feeder and/or track roads, other community-driven infrastructure (biogigesters, improved stoves, multifunctional kitchen gardens, etc.). Due to the small size of such infrastructures, potential negative impacts are expected to be minor, mostly site-specific and easily mitigatable, for example: noise pollution during installation, air pollution due to dust, and health/safety risks during installation and/or operationalization, etc.). All these negative impacts – most of which are linked to Component 1 – are envisaged to be low-to-moderate, localized, temporary, and thus mitigatable.

5.2.3 Potential negative environmental impacts in the agricultural sector

Despite being rated as a **category B** operation with limited environmental and social impacts, current available data reveal that a few potential negative environmental impacts have been experienced in Ghana and the subregion lately. Consequently, PROSPER has already planned some interventions that may benefit to other projects and country environmental, climate and social management.

Some of the other issues are the low productivity, limited access to markets; limited access to financial services and products especially for young people and women, inefficient and limited farming technologies and unsustainable practices (*i.e., deforestation, shifting cultivation, slash and burn technics, poor rain-waters harvesting, etc.*) ; lack of gainful employment opportunities, off-season and off-farm, which spurs youth migration and decreases labour availability during the production season; local land access and user rights that require official recognition and results in gender disparities; unclear systems of succession which discourage on-farm investments; climate shocks, high rural illiteracy rates that impede adoption of improved technologies low availability of financing for family farming; and lack of capacity to efficiently deliver essential rural services such as extension advice and land registration and management.

A breakdown of the expected positive and potential negative impacts, by output (all risks being linked to solely Component 1), is provided in the following charts, based on components description from the available Project Development Report (PDR)⁵⁸:

5.2.4 Climate Change Issues

Overall, Ghana is vulnerable to increasing aridity, droughts and extreme rainfall events and flooding⁵⁹, and faces significant challenges from a changing climate change to its

⁵⁸ -As of September 9, 2021.

⁵⁹ -Republic of Ghana (2015). Ghana's Third National Communication to the UNFCCC. URL: <https://unfccc.int/resource/docs/natc/ghan3.pdf>

ecology, economy, and society. In addition, Ghana has a high degree of risk to natural hazards and disasters. The country is exposed to risks from multiple weather-related hazards, particularly those due to floods and droughts in the Northern Savannah belt. There are also risks related to coastal resources, including storm surges and coastal erosion as well as landslides, earthquakes, pest infestations, locusts' invasion, and wildfires. Between 1991 and 2011 the country experienced seven major floods. In 2010, floods in the White Volta River Basin affected hundreds of thousands of people and destroyed many of their livelihoods. Urban floods also regularly impact major cities. Current development dynamics and demographic changes in Ghana further compound the risk of disasters. These dynamics are related to rural poverty, rapid urbanization, and environmental degradation. Agriculture and livestock, two sectors most impacted by weather-related hazards, constitute the foundation of Ghana's economy and employ 55% of the economically active population⁶⁰. Climate change and variability are already affecting Ghana's water resources damage and flood exposure is projected to result in \$160 million annually, due to flooding⁶¹. Nevertheless, in Ghana there are already farming systems practices being undertaken by smallholder farmers that conform to the principles and strategies of sustainable agriculture (*i.e. soil and nutrient management, water harvesting and use, pest and disease control, resilient ecosystems, genetic resources, multi-crops farming, etc.*).

- a. *Overview of risks, impacts and mitigation measures per component, and ways for improvements*

Table 6: Breakdown of risks, impacts and mitigation measures per Component

⁶⁰ -GFDRR (2019). Ghana, Country Context. URL: <https://www.gfdrr.org/en/ghana>

⁶¹ -UNISDR (2018). Disaster Risk Profile – Ghana. URL: <http://africa.cimafoundation.org/documents/869>

Risk identified	Possible negative impacts	Possible positive impacts	Mitigation measures	Responsibility
Component 1 : Development of rural institutions and socioeconomic infrastructure				
<p>The project will underline the use of water by promoting small irrigation projets (<i>the "drop by drop" system, for instance, and other small-scale earth dams, boreholes, wells, etc.</i>) in the lowlands, which are traditionally aimed at setting up small-scale family farming.</p>				
	<ul style="list-style-type: none"> - Increased risk of COVID-19 contamination (<i>gathering at RIs demos plots, warehouse, workshops</i>) -Increased usage of pesticides (<i>i.e. risk of contamination at a much larger scale if not contained</i>); - soil salinisation - conflicts over the sharing of water -Poor quality maintenance of water infrastructure and waterworks (<i>leakages, floods and pollution of waterbodies, ...</i>) -Likely risk of increase degradation of deforestation and natural resources - decrease in the quantities of water available downstream 	<ul style="list-style-type: none"> - Social discrimination (<i>risk of non-selection and/or inclusion of gender aspects during the selection process of TOT, as well as during the certification of TOT. Even so, risk of them, not being respected when leading a group of male farmers, etc.</i>) -Poor knowledge transfer (<i>inconsistency, incomplete with local women (cultural barriers, etc.)</i>), -more effective water management - longer period during which water is available. -Unforeseen land acquisition (<i>i.e. fallow lands, increased land grab, further slash and burn and deforestation</i>) -Increased violent conflicts partly due to (i) increased transhumance trends; (ii) rapid acquisition of new lands; or as a consequence of food shortage (iii) animal divagation 	<ul style="list-style-type: none"> - Target smallholders in the lowland areas - Involve local water services in charge of water (not only extension workers) - Adopt plans to share and distribute water at the platform level - Training and awareness-raising for producers on water-saving methods available (Integrated Water Resource Management, IWRM) 	<ul style="list-style-type: none"> - EPA - DWS (District Water Services) - District and traditional authorities - Project coordination - DDA services - DWA (District Women Affairs)

Risk identified	Possible negative impacts	Possible positive impacts	Mitigation measures	Responsibility
Component 1 : Development of rural institutions and socioeconomic infrastructure				
The project will regenerate or equip lowland areas for Multifunctional kitchen gardening or rice, maize, cow pea farming				
	<ul style="list-style-type: none"> - increase in anthropogenic pressure on these areas - risks of conflicts arising between producers and new arrivals (agric. Migrants, etc.) - risk of conflict between crop farmers and livestock farmers; -Risks of poor maintenance of community infrastructure 	<ul style="list-style-type: none"> - crop diversification - increase in production and income - improvement in employment -improvement in farm field accessibility and transfer of harvested crops 	<ul style="list-style-type: none"> - Encourage dialogue between different parties - Support the operation of a land governance organization involving local communities and authorities; -promotion of climate-smart technics & tools 	<ul style="list-style-type: none"> - Local MOFA/DDA services - Local platforms (RI, RCB, other FIs, - Project coordination - District and traditional authorities ; - Accessibility to local markets & support services,

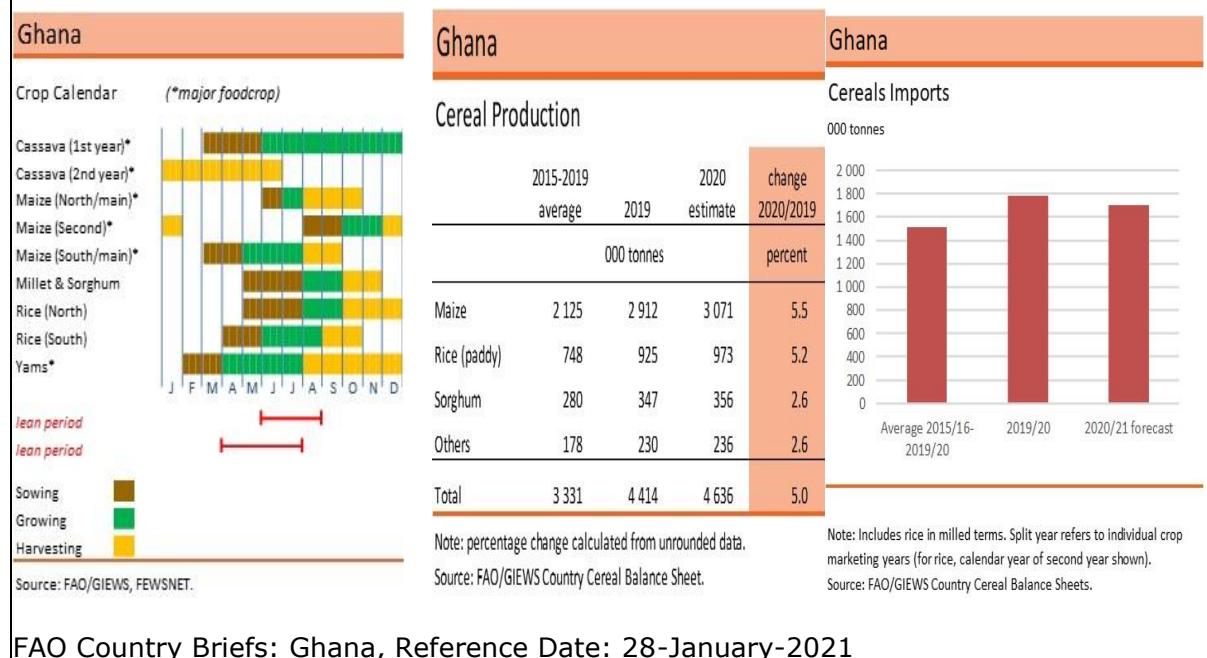
Risk identified	Possible negative impacts	Possible positive impacts	Mitigation measures	Responsibility
Component 1 : Development of rural institutions and socioeconomic infrastructure				
The project plans to promote the use of multifunctional kitchen gardening seeds as well as forest plants and fruit trees (nurseries, banks/silos, ...)				
	<ul style="list-style-type: none"> -Moving new, unsuitable, or invasive species from one area to another -Poor water infrastructure and civil works quality; -Pollution risk (<i>biophysical & human environment</i>) Accident risks during civil works (COVID-19, Ebola, physical, ...) -Risk of broader contamination of the surrounding watersheds, lands properties, air and atmosphere due to an excessive usage of uncontrolled pesticides. -Increased deforestation during water and/or road/tracks infrastructures construction/rehabilitation,... -Risk of destruction of tree nurseries and/or agricultural crops prior to project appraisal due partially to (i) animal divagation, and (ii) transporting harvested crop out from the farm fields to the villages. 	<ul style="list-style-type: none"> - Agricultural diversification -Encourage native vegetables and tree species that are rural and of economic interest -Jobs creation for women, youth and vulnerable groups; -Gender Discrimination (due to frustrations generated from lack of transparency in the selection process of who the key beneficiaries could be for trainings and/or field visits or access to FIs, ...), -Risk of persistent conflict between transhuman herders and farmers due to the poor visualization of existing/proposed transhumance corridors boundaries and schedules) - lack of transparency in 	<ul style="list-style-type: none"> - Promote local varieties and those adapted to the environment (<i>those with short life cycles and/or drought/disease-resistant</i>) - Set up a programme to improve local species and varieties 	<ul style="list-style-type: none"> - MOFA/DDA/MOW/EPA technical services - RIs/RCBs and al. - Project coordination (Safeguards & Climate & Gender team) - University/Academia/Local institutes or training centers

Risk identified	Possible negative impacts	Possible positive impacts	Mitigation measures	Responsibility
Component 1 : Development of rural institutions and socioeconomic infrastructure				
The project will make sufficient amounts of seeds and local plants available	-Introduction of untested plants and seeds	-Seed issues would no longer be a problem (endogenous and sustainable)	- Ensure that specifications are strictly adhered to as regards seed and plant purchases - Involve seed and plant testing service + farming water services	- MOFA/MOW/EPA technical services - Project coordination (SCT) - RIIs/Grower associations - RCB/FIs services - Private Sector/Market

b. Potential Impacts and Recommended Mitigation for Agriculture public and private enterprise Projects

PROSPER selected value-chain crops such as Rice, Maize, Cowpea, Horticulture (Vegetables) and tree crops (Shea and Cashew) production, processing and marketing/commercialization are supported by the program with additional value chains including transportation, agrochemical applications, waste conversion and reuse.

Figure 7: Cereal production in 2020 estimated at above - average levels



→ Rice, Maize, Soybean Cultivation and Processing

Rice is fast becoming the most important staple food in Ghanaian homes. Rice paddies are becoming a common sight across the Ghanaian regions and especially in the selected PROSPER regions with floodplains and major inland valleys. Lowland and highland rice is extensively cultivated along the tidal swamps along the riverbanks, which flood during the high tide in most of the regions or just irrigated.

Although wetland rice is naturally suited to the flood plains and major river valleys, flood

and drought are the major environmental and climate impact on rice. In recent past, several rice farms in Ghana, such as in southern/coastal and middle belts have been lost to floods across the regions. In some cases, such as in the northern belt regions, droughts and dry spells have also been responsible for additional replanting costs as the plant wilted from low water and high temperature. Both floods and dry spells effects are often aggravated by lack of agro-climatic information on key parameters including onset and cessation of the rains and duration and time of dry spells. These impacts can be mitigated through strong collaboration with the The Ghanaian Meteorological Agency (GMA) to prepare and disseminate place-specific forecasts for farmers.

Besides being specific and most fragile amongst the selected crops, the same goes also for Maize and soybeans, and tree plants crops (Shea and Cashew) and poultry. Their cultivation also requires clearing of lands and removal of virtually all the trees and wetland plants to provide enough sunshine for the rice paddy or others crops. Rice and other VC crops production may also impact on biodiversity, especially birds and rodents' population that feed on these chosen crops' grains. These technics also lead to forest and woodland degradation through selective cutting of trees for rice parboiling by local rice processors. Particularly rice waste, which can constitute a nuisance to the environment, it has the potential of being converted into charcoal briquettes for rice parboiling and household cooking and heating purposes. Local farmers that cultivate tubercles (*Yam, Cassava, Cocoa Yam, etc.*) and other tuber crops have also found a use for rice waste in mulching. The harvested rice stems can also be used for feeding cattle. Rice, Maize, Soybean cultivation require agrochemicals and pesticides that can easily pollute surface and ground water bodies and environment. These are also vulnerable to pest infestations including stem borers which may lead to considerable loss of investment if not checked on time. The planted seeds are also important to the expected yield per hectare. Bad seeds can lead to substantial loss of investments. Thus, seeds quality control is imperative to lead to good productivity and maintain the expected return on investment.

Emission of greenhouse gases (GHG - especially methane) from rice paddies remains a strong impact on climate. Although GHG emissions from rice, maize and/or soybean fields can be reduced by periodically draining for instance the rice paddies, farmers need to be trained in so doing. Furthermore, higher temperatures can make rice sterile with low productivity. Resource conflicts between farmers and pastoralists driven by climate change and poor land governance regimes poses significant threats to investments and human security in some of the project area. Most of the regions are tackling this by building mutual understanding and confidence between the two social groups – farmers and pastoralists. This is done through expanded community security and traditional committee that include representatives from the Farmers and pastoralists communities. However, mitigation measures including avoid farming on grazing routes and fencing of farms with crops that are repellent to grazing livestock are critically important. Poultry activities are seen not so as nutrition enhancement means, but also as both an income generation activity as well as climate-friendly resource for agricultural inputs. In fact, the use of poultry waste as biofertilizer/manure greatly contribute to reduce the use of chemical fertilizer, reduce GHG emission and increase agricultural productivity and yield ; which is beneficial to farmers, especially in the horticulture sector.

Some of the recommended mitigation measures for rice farming include:

- Encourage the farmers to take risk transfer as loss mitigation measures – encourage and assist farmers to sign on to climate risk (including flood and drought) insurance with competent Agricultural Insurance institutions.
- This will also mitigate possible losses from farm destruction occasioned by grazing livestock. A number of the projects implemented by some development partners in the regions are currently experimenting with this, but at limited scale.

- Improve collaboration with the Ghanaian Meteorological Agency to ensure production and dissemination (using existing extension vehicles and on smartphones devices) of key agroclimatic information to farmers in local languages and at frequent intervals. The agency may be empowered through setting up at least one mini-meteorological (Ag-Met) station in each participating District Department of Agriculture to improve the density of their climate stations and forecasts. Such climate stations may be set-up to include flood gauge and monitoring systems in the critical DDAs along the waterbodies.
- As much as is possible, discourage cultivation in areas that are very close to the major river systems to minimize overflow during normal flow seasons. Avoid deforestation and cultivation in areas of high biodiversity/critical habitats/wetlands significance as well as in dry highlands;
- Improve collaboration with research institutes (such as IITA, Cereal Research Institutes, etc.) to introduce early maturing/short duration rice varieties to the farmers. This may make the peak flooding or drought season coincides with post-harvest season rather than pre-harvest season as have witnessed in recent times.
- Support for Seed lab – Equip and Strengthen seed labs to be able to carry out rigorous tests on seeds to ensure that only genuine foundation seeds are used by farmers to reduce loss or poor return on investment.
- Ensure training and certification of 'spraying gangs' on what to apply, at what stage, and in what density, and human impacts (including need to wear personal protection gears) to safeguard the health of crops, soils, water and both the people and animals.
- Collaborate with chemicals regulatory agencies to ensure that agrochemicals are genuine (eliminate expired and banned chemicals) and in training of spraying gangs and farmers
- Encourage the use of organic manure in farms as much as possible
- Make provision for conversion of rice wastes to briquette in all the rice processing units
- Train-of trainers (TOT) for extension workers to step down training of farmers on methods for draining rice paddies in mid-season to reduce GHG emission;
- Make provision for improved modern bird scaring-equipment on farms to reduce birds impact on rice farms and maintain avian population viability
- Synchronized production timing for efficiency in bird management
- Improve community and neighborhood security arrangements by supporting dialogue and understanding between farmers and pastoralists to reduce resource conflicts
- Avoid farming along recognized grazing routes/corridors and demarcated grazing reserves
- Promote efficient land management as adaptation - Collaborate with other organizations such as USAID, FAO and government committees on Land Reform to support policy dialogue with the Regional Governments and processes to improve on land governance by instituting land regimes that ensures efficient land management and administration with agricultural land cadastration and security of tenure and ensure land capitalism through a systematic land titling and registration process.
- Work diligently with Business Coaches to better plan agricultural activities that yield real revenues,

c. Gender Equality and women and youth empowerment:

Gender inequality remains a challenge that hinders efforts to achieve inclusive human development and economic growth. In the absence of equity and equality, certain project envisioned actions could have some impacts on gender bias/relations in the given communities of the participating districts within the 8 targeted region of the northern and middle belts. Impacts could be the aggravation of tendential disequilibrium both in

terms of economic power between men and women, intellectual resources, and the know-how, and between local communities traditionally established or communally called-labelled “autochthones” and newly establish immigrant communities.

Like everywhere in Africa, women in Ghana form a large proportion of the labour force in the agricultural and non-agricultural sectors (*i.e., economic, business development, etc.*) and are responsible for guaranteeing their family's nutrition and food security. The gender gap in agricultural productivity is linked to unequal access to essential agricultural inputs such as land, labour, techniques, and seeds, but also social, economic, and financial institutions and norms. These gender gaps are still very significant and that traditional gender norms remain tenacious, (*the result being that women and girls are at a disadvantage in both the public and private spheres*), including land ownerships. This limits opportunities for investments.

- ☞ **Youth:** The future of Ghana, as in any developing country around the world, depends heavily in the youth. In Ghana particularly, despite the tangible efforts the Government has been deploying lately, few young people see a future for themselves in agriculture or in the rural areas. Attracted by modernity and digital opportunities, rural Ghanaians millennials from families that are highly dependent on agriculture are migrating from rural areas to cities and abroad at an astounding rate. In most cases, once they reach their destination, they are forced to face unemployment, poor health conditions, social exclusion/inclusion, and inadequate living conditions in poor and unwelcoming slums. They are also highly vulnerable to radicalization by sex tourism, extremist/jihadist groups and human traffickers, especially in the Sahel with Boko Haram in the nearby Nigeria and Niger and Burkina Faso. Rural-urban migration can also be highly gender-biased. However, because of the size of the country, agriculture could be very attractive to the bulge of youth living in cities and working in rural areas or vice versa.
- ☞ **Resource Conflicts:** As stated earlier, climate vulnerability is hitting hard on the available natural resources, especially in the PROSPER targeted areas. Henceforth, clashes between communities and pastoralists leading to heightened human insecurity remains one of the threats that should be considered during and throughout the implementation of PROSPER. This needs to be managed through iterative stakeholder engagement and strengthening of existing informal and formal grievance redress systems to build confidence and understanding and address any complaints raised in a fair, responsive, and timely manner. PROSPER should also pursue land governance and sustainable land management that guarantees land capitalism and security of tenure as a mitigation option to often growing land conflicts.
- ☞ **Unsafe and Non-Healthy Working Conditions:** Working conditions across sectors are generally poor in the rural areas due to relatively weak extension systems, and limited awareness of and non-compliance with health and safety standards. In the agricultural sector, the drudgery faced by most farmers makes them more vulnerable to agro-chemical toxins from wrong methods of handling and overuse of fertilizer and pesticides. In addition, due to the high level of poverty, children often help in the production and/or processing of agricultural commodities. Although cases of water-borne diseases among rice farmers are not common in the project area, concerted efforts should be made to ensure that appropriate Personal Protective Equipment (PPE) are used while engaging in these activities, that PROSPER do not foresee to finance.
- ☞ **Managing expectations and Conflicts resurgence:** Agriculture is now in the front burner of issues discussed in the whole country, more precisely in PROSPER targeted regions. Lately, there has been an increase in the awareness about agriculture and conflicts; and this has increased the expectation levels of local

beneficiaries. In managing expectations, the project should ensure that the beneficiaries are enlightened and sensitized about the various similar projects and their activities in the areas. It is also important that information pertaining the PROSPER is disseminated through credible persons or media, especially reliable community leaders and focal points

- ☞ **Elite and Political Capture:** Weak and non-transparent governance structures as well as exclusionary and divisive politics poses the risks of PROSPER being hijacked or captured by the political and administrative elite to benefit only their cronies with significant impacts on the target beneficiaries. The approach which ensures that prospective beneficiaries are selected based on laid down criteria should be clearly implemented in the selected project districts and regions. Luckily, this has been taken care of in the design of PROSPER, precisely in the approach to targeting and profiling of RIs and beneficiaries
- ☞ PROSPER will not exploit children and will not hire ineligible migrant workers, defined as workers who are not legally authorized to work in the country and / or sector in accordance with national law, and when it does not conflict with other IFAD Standards. All jobs will be governed by contracts signed in accordance with national and international labor conventions. In addition, the project will promote information and sensitization of communities on the risks incurred in the event of child labor, education and training of children, education and awareness on the use of dangerous and toxic products which can have negative effects on children, the use of technologies, mechanization and agricultural and post-harvest practices to increase productivity and reduce the risks of child labor demand, improve access to the water point for avoid the work especially of young girls in collecting water but also for watering livestock, taking into account the prohibition of child labor in procurement procedures. Training and awareness-raising on gender-based violence for communities and local authorities

5.3 Assessment of Cumulative Impacts.

Overall, the cumulative project impacts are expected to be positive, as the overall PROSPER project development objective is to "*Strengthen the integration, climate resilience, social and environmental sustainability of smallholders and businesses in priority value chains in the Northern and Middle Ecological Belts taking advantage of the increased demand created by the national agro-processing strategy*". Even with these expected, major positive impacts, the project has been classified as moderate risk (*i.e. Category B*) largely due to inequality in the labor market and presence of landless farmers in the project area who will be included in project activities.

In its efforts to improve the participating communities' livelihoods and living conditions better off, the PROSPER Project equally carries on some important threats to the sustainability of the Environment (*biophysical and human*) in the northern and middle belts (NMB) areas. These cumulative impacts could be:

- ✓ **Agricultural pressure on the existing natural resources:** land scarcity, loss of habitats, triggered wildfires, impactful climate change effects, the practice/implementation of certain activities that require huge agricultural lands (community wood-forest, nurseries, and plantations, and likely extensive usage of pesticides in the region that will/could further weaken land fertility and affect the overall quality of the NMB areas watershed could further increase the pressure over land in the riparian territories to PROSPER interventions areas. However, the established community-led co-management of certain natural resources and forest platforms and the development of income-generation activities (tree-nurseries, agroforestry, horticulture, honey production, aquaculture, etc. could surely help diversify communities' source of income and safeguards the arable lands; and

- ✓ **Transhumance with its downsize effects:** The NMB regions are ground for a rich livestock capital. Henceforth, recurrent conflicts between herders and farmers that oftentimes leads/results in deadly and socioeconomically detrimental outcomes. The implementation of solution-oriented measures could further exacerbate these restrictions and negatively impact herders. This was extensively discussed during the field consultation and more constructive alternatives ought to be designed and found to ease and satisfactorily facilitate the sustainable implementation of the PROSPER within the NMB regions;

5.4 Potential Impacts and Recommended Mitigation for Socioeconomic Infrastructure Projects

The following are some of the socioeconomic infrastructure projects likely to be embarked upon by the project;

1. Construction and rehabilitation of feeder/track roads, causeways and spillways
2. Construction and rehabilitation of feeder/track roads, causeways and spillways
2. Construction and rehabilitation of culverts and feeder/track roads
3. Construction and rehabilitation of processing facilities
4. Land development activities
5. Construction of small scale (earthen) dams and irrigation schemes

Some of the potential impacts of socioeconomic infrastructure development include:

➤ *Land Access*

Socioeconomic infrastructure will require the availability of land resource for their provision. Given the small scale and nature of construction/rehabilitation of socioeconomic infrastructure no land acquisition is foreseen, as most construction/rehabilitations of feeder road/track road vary between 7 to 9.5 km, agricultural plots are around 2ha and other socioeconomic infrastructure are small in size mostly localize on small portions of community lands, free of any claims⁶². The arrangement made for land will go a long way in determining sustainability of these socioeconomic infrastructure. Agriculture land development, irrigation activities and feeder/track roads construction or rehabilitation all may likely require some expanse of land. Some preconditions for socioeconomic infrastructure include assurance that Government or the community has guaranteed the lease of land to the beneficiaries during PROSPER lifespan, and the development of strategies for the maintenance and sustainability of the socioeconomic infrastructure by the concerned beneficiary/recipient parties.

➤ *Dust, Vibration and Noise*

The degree to which individuals perceive dust to be a nuisance depends on the frequency, intensity, and duration of a dust-generating event. Farmers usually engage in a variety of activities that uses equipment or practices that create dust. Most land clearing equipment generates some dust. Dust may also be generated as fugitive dust when fine particulates are lifted from fields, roads, buildings, and yards via air turbulence. The main mitigation measures recommended for mitigating dust including dust protection masks for machine operators and the spraying of water to reduce the level of dust during construction/rehabilitation, and/or transport activities.

Heavy equipment used for feeder/track roads construction/rehabilitation create ground movement such that cracks can occur in adjacent buildings/facilities. These can also create some form of discomfort to inhabitants of the surroundings. If any an assessment of surrounding buildings around project intervention areas, would be carried out to ascertain the level of susceptibility to cracks because of ground movement. The buildings (warehouses, workshops) are to be strengthened and compensation paid for damages

⁶² - The project will not invest on land development beyond 100 ha contiguous. Most of the beneficiaries have on average less than 2 ha and even combined per site, it is less than 50 ha contiguous.

where it is unavoidable. Noise from the use of equipment is also a major concern. Operators should only use authorized construction equipment that produce a moderate decibel level and consider the times when people will experience less discomfort (i.e., daytime only). Feeder road construction and/or rehabilitation contractors will be expected to produce Contractors Environmental and Social Management Plans (C-ESMP) for road construction and conduct environmental screening for the construction of farm tracks.

➤ *Deforestation*

The removal of vegetation cover and trees during construction/rehabilitation, depending on the scale and amplitude, can lead to deforestation and should therefore be avoided as much as possible. Where tree removal is unavoidable, this should be compensated by tree and vegetation replanting along the constructed roads. Trees removed from farm during land preparations should be equally compensated by planting trees in addition to hedges along the farm boundaries or nearby suitable community plots.

➤ *Surface and Ground Water Contamination*

Unchecked and unmonitored surface and underground exploration, for example during earth dams or dikes construction, can lead to ground water contamination if not properly planned. Appropriate impact studies/assessments should be conducted prior to the construction of such stormwater harvesting dams and/or irrigation structures.

➤ *Flooding/ Erosion/landslides/droughts*

Flooding, erosion, landslides and/or partial droughts can occur because of poor judgment and poor design and construction/rehabilitation practices. This is very evident during the stakeholders' discussion for this ESMF. Adequate drainage should be provided for surface water run-off in all the roads and agriculture plots to be constructed or rehabilitated. Geotextiles and Vegetation cover should be provided for slopes and indigenous grasses and shrubs with proven ability to stop erosion should be planted in areas undergoing erosion. Unnecessary dug- outs and/or excavation of soil from its natural terrain should be avoided to reduce flooding or partial droughts. Replacement of dug out soils should be carried out when necessary.

5.5 Environmental and Socio-Economic Management Framework (ESMF)

Table 9 below provides a framework for managing the likely impacts of the various activities expected to be implemented during the key parts in the agricultural value chain, i.e.; preparation/production, processing, marketing, transport (and supply). It is important to emphasize that these management plans are relevant to the entire PROSPER project, including the MSMEs and related socioeconomic infrastructure

Table 7: Environmental and Social Management Framework (ESMF) for proposed PROSPER Agricultural Value Chain Stages

Part in value chain	Key issue Affecting the Environment	Potential impact (negative) and			Standard Mitigation Measures	Monitoring & indicators			
		Environmental	Social & Institutional	Economic					
Component 1: Development of rural institutions and socioeconomic Subcomponent 1.2 Development of socioeconomic infrastructure.									
Preparation/Production - land clearing, cultivation, & other issues	<input type="checkbox"/> Land preparation - land clearing, cultivation, & other issues <input type="checkbox"/> Use of earth-moving machines, e.g. tractors for clearing <input type="checkbox"/> Use of agro-chemicals <input type="checkbox"/> Use of pesticides	<input type="checkbox"/> Forest and Woodland loss <input type="checkbox"/> Land & soil degradation <input type="checkbox"/> Water and soil pollution <input type="checkbox"/> Flooding <input type="checkbox"/> Erosion <input type="checkbox"/> Bush fire <input type="checkbox"/> Biodiversity loss <input type="checkbox"/> Waste management issues <input type="checkbox"/> GHG emission <input type="checkbox"/> Drought	<input type="checkbox"/> Increased youth, women and men employment directly and indirectly <input type="checkbox"/> Increased sense of pride and responsibility by participating youth and women <input type="checkbox"/> Resource conflicts <input type="checkbox"/> Possible agitation from youth not presently included in the programme <input type="checkbox"/> Social exclusion - women and youth and PLWD <ul style="list-style-type: none"> • Use of child labour ▪ Possible loss of cultural assets 	<ul style="list-style-type: none"> • Increased household income and reduced poverty <input type="checkbox"/> Increased youth employment and social well-being <input type="checkbox"/> Improved nutrition and food security <input type="checkbox"/> Increased ability of women and youth to manage their enterprises in productive and profitable manner, thereby increasing GDP and manpower development <input type="checkbox"/> Increased import substitution especially of rice. Maize, cowpea, but also shea and cashew products. <input type="checkbox"/> But increasing associated environmental and social costs	<input type="checkbox"/> As much as possible, discourage the opening of virgin or pristine forests <input type="checkbox"/> Train farmers in sustainable land use management practices and agrochemical management empowering the use of biotechnologies <input type="checkbox"/> Deliver training and agricultural inputs to farmers on-time to enable them to adjust and adapt their planting and harvesting methods and timing <input type="checkbox"/> Adopt and enforce health, safety and environment rules at production sites <input type="checkbox"/> Encourage full exploration of the value chain including soil testing and agrochemical services <input type="checkbox"/> Develop a clear and simple Stakeholder Engagement Plan (SEP)	<input type="checkbox"/> Number of farmers that received training on sustainable land preparation <input type="checkbox"/> Change in forests area <input type="checkbox"/> Results from periodic soil and water analysis <input type="checkbox"/> Health, safety, social and environment manual <input type="checkbox"/> Number of value chain enterprises around soil testing and agrochemicals management <input type="checkbox"/> Stakeholder Engagement Plan <input type="checkbox"/> Conflict resolution committee meetings <input type="checkbox"/> Lists of approved projects and their beneficiaries <input type="checkbox"/> Agreement on land access for women and youth and PLWD and land			

Part in value chain	Key issue Affecting the Environment	Potential impact (negative) and			Standard Mitigation Measures	Monitoring & indicators
		Environmental	Social & Institutional	Economic		
Component 1: Development of rural institutions and socioeconomic						
Subcomponent 1.2 Development of socioeconomic infrastructure.						
Processing	<p><input type="checkbox"/> Use of processing machine</p> <p>Parboiling of Rice</p> <ul style="list-style-type: none"> • Use of wood for heating/parboiling 	<p><input type="checkbox"/> Waste generation</p> <p><input type="checkbox"/> Air, water and land pollution</p> <p><input type="checkbox"/> GHG emission from machines</p>	<p><input type="checkbox"/> Unsafe and non-healthy working conditions</p> <p><input type="checkbox"/> Possible use of child Labourers</p> <p><input type="checkbox"/> Migration influx to processing sites</p>	<p><input type="checkbox"/> Increased sales and household income</p> <p><input type="checkbox"/> Increased youth employment and social well-being</p> <p><input type="checkbox"/> Improved processing capacity, value additions and value chain development</p> <p><input type="checkbox"/> Improved nutrition and food security</p> <p><input type="checkbox"/> Increased ability of youth to manage their enterprises in productive and profitable manner, thereby increasing GDP and manpower development</p> <p><input type="checkbox"/> Increased import substitution of Rice</p> <p><input type="checkbox"/> But increasing associated environmental and social costs</p>	<p><input type="checkbox"/> Encourage the use of renewable and low-carbon energy sources during processing operations</p> <p><input type="checkbox"/> Adopt health, safety, and environment rules at processing sites</p> <p><input type="checkbox"/> Train farmers in sustainable agro-processing practices to reduce environmental, climate and social risks and impacts</p> <p><input type="checkbox"/> Step up knowledge management and information dissemination to showcase the achievement of the project</p>	<p><input type="checkbox"/> Number of operators adopting renewable low carbon technologies</p> <p><input type="checkbox"/> Number of enterprises established focusing on processing</p> <p><input type="checkbox"/> Number of entrepreneurs adopting sustainable processing operations</p> <p><input type="checkbox"/> Knowledge management /communication plans, stakeholder meeting reports, communication project flyers/leaflets</p>

Part in value chain	Key issue Affecting the Environment	Potential impact (negative) and			Standard Mitigation Measures	Monitoring & indicators
		Environmental	Social & Institutional	Economic		
Component 1: Development of rural institutions and socioeconomic						
Subcomponent 1.2 Development of socioeconomic infrastructure.						
Marketing	<input type="checkbox"/> Construction of socioeconomic infrastructure <ul style="list-style-type: none"> <input type="checkbox"/> Dust, smoke, noise, ground movement / vibration <input type="checkbox"/> Deforestation <input type="checkbox"/> Water pollution <input type="checkbox"/> Flooding and erosion from poorly constructed culverts, roads, etc. 	<input type="checkbox"/> Better access to the Local market and FIs <ul style="list-style-type: none"> <input type="checkbox"/> Better access to production and processing sites by supervisory agencies <input type="checkbox"/> Improved access to rural communities <input type="checkbox"/> Conflict over land and demand for compensation where infrastructure is to be constructed 	<input type="checkbox"/> Improved market penetration <ul style="list-style-type: none"> <input type="checkbox"/> Access to market information and market linkage and support services <input type="checkbox"/> Strengthened market value chain, with more profitable enterprises <input type="checkbox"/> Improved storage and reduced waste and postharvest losses 	<input type="checkbox"/> Use construction equipment with moderate decibel during construction <ul style="list-style-type: none"> <input type="checkbox"/> Develop/adopt and enforce health, safety and environment rules at construction sites <input type="checkbox"/> Lawful and willing consent of community/or individuals on land site for socioeconomic infrastructure Roads must be constructed with drainages Develop contingency plans for dykes/spillways to manage unexpected circumstances. • 	<input type="checkbox"/> Observation of construction equipment for dust, noise, smoke, vibration, etc. <ul style="list-style-type: none"> <input type="checkbox"/> Work inspection report on the environmental quality of market infrastructure <input type="checkbox"/> Health, safety and environment plans <input type="checkbox"/> Copy of consent of community /individuals on market infrastructure land site 	

Part in value chain	Key issue Affecting the Environment	Potential impact (negative) and				Standard Mitigation Measures	Monitoring & indicators
		Environmental	Social & Institutional	Economic			
Component 1: Development of rural institutions and socioeconomic Subcomponent 1.2 Development of socioeconomic infrastructure.							
Transportation	<input type="checkbox"/> Use of motorized and heavy transportation machines	<input type="checkbox"/> GHG emission from transportation	<input type="checkbox"/> Influx of rural Migrant workers to agri- enterprise sites and processing areas <input type="checkbox"/> Increased number of service providers, which boost the economy	<input type="checkbox"/> Increased ownership of motorized and other transport system <input type="checkbox"/> Increased number of service providers <input type="checkbox"/> Increased GDP <input type="checkbox"/> But increasing associated environmental	<input type="checkbox"/> Organize transport entrepreneurs into an association for easy management <input type="checkbox"/> Develop a code of conduct, and health, safety, and environment regulation for transport operators	<input type="checkbox"/> Code of conduct for transport operators <input type="checkbox"/> Minutes of meetings of transport operators' association	

5.6 Analysis of Alternatives

The traditional approach to PROSPER selected VC crops (i.e. *Rice, Maize, Cowpea, Horticulture (Vegetables) and shea and cashew*) in Ghana is to reuse inputs and make use of available cultural technics with little concern for quality control. Based on the analysis of the approach thus far, the outcome has been to focus on high-yielding varieties. Farmers will be encouraged to abandon the predominant agronomic practices to improved, efficient and climate-smart agronomic practices as enumerated on Table 9.

Table8: Commodity Value-Chain + Household Level Activities

Commodity Value chain	Predominant Practice	Climate Smart Agriculture practices
Rice, Maize, Soybeans	<ul style="list-style-type: none"> • Recycling of paddy and use of untested seeds • Wrong application of soil amendments and agrochemicals • Use of low yield and long gestation varieties • Fertilizer spreading • Tillage operations remove all trees • Use of inorganic crop protection chemicals • No risk transfer measures to mitigate losses • No draining at mid-season increases methane emission • Farming activities not guided by agro-climatic information • Waste poorly managed and constitute nuisance • Wood for parboiling causing woodland and forest degradation • Limited to rainy season farming • Use wood for parboiling 	<ul style="list-style-type: none"> • Encourage paddy transplanting and tested seeds from certified seed producers/suppliers • Encourage soil sample analysis and use of biofertilizers instead • Train and certify spraying gangs on the adequate usage of biofertilizer/biopesticides • Encourage the adoption of improved, pest resistant and early maturing varieties • Encourage deep application of bio-urea at 6cm- 10cm depth • Encourage minimum or zero tillage • Encourage the use of organic crop protection solutions like Neem oil and other bionutrients • Encourage carbon sequestration activities • Fence farms with hedges and trees to reduce animal intrusions • Encourage farmers to sign-on to agric insurance for no greats and risk transfer • Strengthen collaboration to ensure Farming activities is guided by agro-climatic information for better timing (i.e. with GAMA) • Train farmers to drain paddies at mid-season to reduce methane emission • Value chain to be created for waste conversion to briquette and greener energy • Parboiling to be done with briquettes and other alternative efficient energy sources such a biogas from animal dunks

Commodity Value chain	Predominant Practice	Climate Smart Agriculture practices
		<ul style="list-style-type: none"> • Construct small earth dams to harvest stormwaters and use of drip irrigation scheme for dry season farming • Train farmers on construction of rainwater harvesting structure to retain water for dry season farming (<i>i.e., fish farming and cattle drinking points</i>) • Encourage farmers to use briquettes and clean cooking stoves, such as biogas from biodigesters supplied by animals.
Vegetables (Not a VC but a HH level Activity)	<ul style="list-style-type: none"> • Use of spent and low-quality stems • Wrong application of soil amendments and agrochemicals • Use of low-yield varieties and long gestation • Fertilizer spreading • Tillage operations remove all trees • Use of inorganic crop protection chemicals • Waste poorly managed and constitute nuisance in environment • No risk transfer mechanism • Production activities not guided by agroclimatic information • Trees and woods on land totally removed • Poor application of technology for erosion and flooding control 	<ul style="list-style-type: none"> • Encourage out grower schemes • Encourage soil sample analysis • Encourage the adoption of improved varieties • Encourage ring application at 6cm-10cm depth • Encourage minimum or zero tillage • the use of organic crop protection solutions like neem oil or bio-nutrients • Encourage carbon sequestration activities • Value chain to be created around waste conversion to animal feed • Wastewater to be properly channelled from to reduce odour • Farmers to be encourage to sign on to agric insurance for no regrets and risk transfer mechanism • Strengthen collaboration to ensure Farming activities is guided by agro-climatic information for better timing • Encourage agroforestry to maintain tree on farms, and replant trees along farm borders • Adopt techniques including terracing, bunding and contouring to control erosion and flooding in inland areas

Commodity Value chain	Predominant Practice	Climate Smart Agriculture practices
		<ul style="list-style-type: none"> • Encourage conservation agriculture to reduce soils erosions and infertility
Shea and Cashew Trees	<ul style="list-style-type: none"> • Use of endemic seed with low productivity • Poor management of plants • Untimely replantation of plants • Poor usage of agrochemicals • Waste poorly managed and constitute nuisance in environment • No risk transfer mechanism • Production activities not guided by agroclimatic information • Unrationalized cutting of tree for wood fuel or de-shelving 	<ul style="list-style-type: none"> • Adoption of climate smart and productive varieties • Bio fertilizer for greater productivity • Climate smart processing of trees and growth monitoring; • Use of shorter productivity cycle • Sustainable waste management • Use of biogas to de-shell and process • Use of shells as animal feeding supplements • Well-rounded VC practices
Poultry	<ul style="list-style-type: none"> • Heat Stress (HS) • Poor management of facilities • Untimely replenishment of stocks/rupture • Poor usage of feeding ratios • Poor waste management and constitute likely nuisance to the environment • Unwelcoming/unbearable smell on site and in the vicinity of poultry farming • GHG production • Production activities not guided by scientific information • Water Pollution • Poor poultry farming with negative impact on the ecosystem 	<ul style="list-style-type: none"> • Provision of quality water services • Good feeding stations and grains • Use of proper stockage system • Good ventilation to reduce HS. <p>Appropriate slaughtering stations Adequate waste management yield to transfer into agriculture fields (bio-fertilizer)</p>

5.7 The Without Project Scenario:

As stated above, the overall vision of this project is to sustainably improve the livelihood and living conditions of Ghanaians farmers active in the participating districts of the NMB regions faced with growing and constraining climate change factors. The project area context speaks volumes of the difficult conditions farmers are currently faced with in the project intervention areas. PROSPER contribution is foreseen to bring way more positive benefits than adverse risks and impacts, which, as determined by its **moderate to low safeguards risk rating** and **category B** stance as mostly site specific and easily manageable, albeit its high-risk climate change vulnerability. Consequently, the without project contribution will most likely further increase the current constraining factors in a context of impactful climate change regime and hinder more the future of these beneficiary farmers livelihoods and living conditions. Moreover, this will add more difficulties on the Government's efforts to alleviate rural poverty, especially in this NMB regions; which altogether will result in more rural exodus and immigration, especially from the working forces (youth); transformational changes from farmers to other more affordable work skills (*mechanics, trader, security agents, porters, informal income generating businessmen/women, etc.*); hence, further and further depleting the Agricultural wide-sector from its main workforce. As for the biophysical environment, available arable land, scattered natural resources, as well as quality of water and grassland will be further shrunk and depleted; thus, adding more burden on remaining rural households; increase land ownership and natural resources co-sharing more problematic with an exponential rise of transhuman-driven conflicts and detrimental consequences (*malnourishment, poor nutrition diet, weak health conditions, etc.*). This is to, simply further justify, the timeliness, and overall relevance of the PROSPER project in supporting Government of Ghana's efforts and recipient communities' vision to foster a better future for their lives and that of their future generations.

6 - ENVIRONMENTAL, CLIMATE AND SOCIAL MANAGEMENT PLAN (ESMP)

For moderate risk projects, IFAD requires the development of an environmental and social management plan (ESMP) to set out the core measures and actions required for the project to manage and effectively mitigate environmental, climate and social risks and achieve compliance with SECAP.

The environmental, climate and social management plans (ESMPs) presented below are relevant to the entire PROSPER project, including the agri-enterprise and related socioeconomic infrastructure sub-projects whose locations are not yet known, and will not be prior to project appraisal. However, for these subprojects, a separate screening as outlined herein is still required. The outcome of this screening and subsequent review may lead to the likely development of more detailed, site-specific ESMPs. In this case, the ESMP will list the commitments and actions PROSPER will undertake to achieve compliance with the relevant SECAP policies/standards throughout the entire project lifecycle.

In case of a change management that leads to a reclassification of the project during the implementation stage of this project, and new risks are identified then, the ESMP will be reviewed accordingly.

6.1 Mitigation Measures Checklist

By design, PROSPER is expected to have far greater environmental, climate and social benefits than its foreseen adverse impacts. These potential adverse impacts from the project are likely to be small in scale and limited in size. Spatial and temporal distribution of impacts that would result from the project activities, as well as the sub-projects requires specific attention particularly during project screening. However, it is recognized that such impacts, if they are not identified early enough during the planning and preparation stages, and their mitigation measures adequately integrated into the project planning and implementation, they can most likely accrue into larger impacts. Given the fact that minimum impact sub-projects are eligible and the level of available fund for each district, such impacts could be easily mitigated using sensible site selection criteria, good construction practices in harmony with the local culture and diligent management practices in the operational phase⁶³.

This section discusses the impacts and mitigation measures for component 1 activities mainly. The following table describes the impacts and mitigation measures from the agricultural production activities, mainly driven from foreseen activities in component 1.

⁶³-As mitigation measures must be taken into account as part of the sub-project design and costs, the ESMP does not need a separate budget allocation. However, it is imperative that activities' costs reflect the resources needed to fully implement the ESMP.

Table 9: Environmental (incl. Climate Change) and Social Management Plan

Parameter (Activity & Significance)	Activity (Proposed Mitigation Means)	Recommended Monitoring Indicator	Responsibility for Implementation monitoring	Indicators and Monitoring means	Recommended frequency of monitoring
Component 1: Development of rural institutions and socioeconomic Subcomponent 1.2 Development of socioeconomic infrastructure.					
ENVIRONMENTAL, CLIMATE & SOCIAL MONITORING					
Socioeconomic Infrastructure (Moderate)	Feasibility study for feeder/track roads and causeways, dykes	Baseline on status of the environmental climate and social conditions in the selected communities	PCU / contractor/ Ministry of infrastructure (MOI)	Site-specific ESMP reports Adherence to laid legal and policy requirements (Category B)	Once, at the beginning of project
Environmental and social baseline (Moderate)	Conduct a baseline assessment to obtain baseline values of key environmental. Climate and social parameters in concerned communities	See environmental, climate and social indicators mentioned below	PCU/ National Environment Agency (EPA)	Field survey	Baseline, once at beginning of project
Land and soil degradation (Moderate)	Monitor quality of soil and other biological conditions	Soil micro-organism count Soil organic matter count Adopt use of climate friendly technics	PCU (<i>Safeguards and climate team</i>)	Field measurement, incl. soil sample analysis	Annual (or after cropping cycle)
Surface and subsurface water quality (Moderate)	Monitor sample quality of surface and subsurface water at random sites	Water quality	PCU	Field measurement and Laboratory test	Annual (or after cropping cycle)
Degradation of Forest and wetland (Moderate)	Monitor quality of forest and wetlands	Changes in forest and wetland area	PCU	Remote sensing and field assessment	Baseline, Mid-Term, End- Term
Erosion and gully (Moderate)	Monitor quality of land	Changes in area of bare surfaces	PCU	Remote sensing and field assessment	Baseline, Mid-Term, End- Term
Bush and pipeline	Monitor quality of	Changes in vegetal cover	PCU	Remote sensing	Annual

Parameter (Activity & Significance)	Activity (Proposed Mitigation Means)	Recommended Monitoring Indicator	Responsibility for Implementation monitoring	Indicators and Monitoring means	Recommended frequency of monitoring	
fire	vegetation			and field assessment		
Loss of biodiversity (Moderate)	Monitor quality of biodiversity	Changes in abundance of biodiversity	PCU	Field survey	Annual	
Waste proliferation (High)	Monitor quality of land, water, and air	Changes in soil, air, and water quality	PCU	Field measurement and laboratory test	Annual	
Use of agrochemicals (Moderate)	Monitor quality of plant, soil, and water	Changes in quality of plant, soil, and water	PCU	Laboratory test	Annual	
Flooding (High)	Monitor quality of land	Extent of land inundation	PCU	Field survey and remote sensing	Quarterly	
GHG emissions (High)	Monitor quality of air	Preponderance of GHG in the air	PCU/ National Environment Agency (EPA)	Field measurement	Annually	
Socio-economic conditions (Moderate)	Conduct a combined sustainable livelihood analysis (SLA) / resilience assessment, providing baseline status of key socio-economic conditions in selected communities	Food security, assets, employment, income, production methods and volumes, access to markets and finance, social inclusion, disaster preparedness	PCU	Field survey Field measurement (update)		
Community conflict (internal) (Moderate)	Monitor the effectiveness of grievance redress mechanism	Occurrence of violent conflicts within selected communities	PCU/ Ministry of social affairs and local development	Community visit		
Youth violence (militancy and cultism)	Monitor youth violence situation	Occurrence of youth violence within selected communities	PCU/Ministry of Justice	Community visit	Quarterly	

Parameter (Activity & Significance)	Activity (Proposed Mitigation Means)	Recommended Monitoring Indicator	Responsibility for Implementation monitoring	Indicators and Monitoring means	Recommended frequency of monitoring	
(Moderate)						
Resource-based conflict (farmers – pastoralists) (High)	Monitor conflict situation	Occurrence of violent conflicts between selected communities and external parties	PCU	Community visit	Quarterly	
Loss of (access to) agricultural land (Moderate)	Monitor land access and ownership	Change in land access and ownership for women and youth	PCU	Community visit	Annually	
Social exclusion (Moderate)	Monitor inclusion of women, PWD, and youth in decision-making	Percentage of women, PWD and youth represented in community-level decision-making committees, associations and meetings	PCU/ Ministry of Justice	Community visit	Annually	
Elite capture (High)	Monitor (political) interference, conflicts of interest, corruption	PCU	PCU/ ministry of agriculture	Community visit	Annually	
Unsafe and non-healthy working conditions (Moderate)	Monitor health impacts and child labour	Number of cases reported and suspected of health impact due to use of agro-chemicals, accidents due to use of production and processing machinery and related faulty wiring and, use of child labour.	PCU/ Ministry of Heath	Community visit	Annually	
Gender-based Violence including Sexual Exploitation, Abuse (High)	raise awareness or interventions on SEA	Percentage of people sensitized	PCU/ Ministry of Justice/ Gender and women	Community visit	Annually	
Financing (Moderate)	Subscribe to the principles of	Number of MFIs partners that have integrated	PCU	Community visit	Annually	

Parameter (Activity & Significance)	Activity (Proposed Mitigation Means)	Recommended Monitoring Indicator	Responsibility for Implementation monitoring	Indicators and Monitoring means	Recommended frequency of monitoring	
	sustainable environmental, climate and social management in the financing of business plans (ESMS of FIs such as RCBs)	sustainability into their financing (ESMS of Fis such as RCBs)				
Socioeconomic Infrastructures (Moderate)	Feasibility studies	Reports	PCU/ Ministry of infrastructures	Community visit	First year	
Business Plan Development per activity (Moderate)	Screening of sub-activity + Site specific E&S impacts Assessment (ESMP)	Reports	PCU	Community visit	At the beginning prior to activity implementation	

Source: CATS-August 2021

Summary of Environmental and Climate Mitigation Measures: Indirect, increased use of pesticides will be mitigated against by proactively offering training on IPM. In instances where pesticides use is unavoidable, training on the safe handling of pesticides will be provided and bio-pesticides and biofertilizer will be promoted in the BPs over other varieties. There will be no pesticides procurement under this project, and highly hazardous pesticides (HHP) would not be used in the project areas. Both the PCU and LPIU Safeguards specialists will work closely with recipient communities to ensure systematic compliance with these safeguards measures.

Summary of Social Mitigation Measures: Risks associated with decent rural employment, GBV/SEAH, occupational health and safety, and land tenure will be mitigated with application of: (i) *the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT)*; (ii) *sensitization training on safe, decent rural employment and age-appropriate work, given that youth often assist with the farming work of their respective families, including GBV and SEAH*; and (iii) *safe and secured use of pesticides*. To further ensure social inclusion of vulnerable groups and citizen/stakeholders' engagement, ongoing consultations, and participatory M&E will continue throughout the project lifecycle as a means of providing a feedback loop to foster stakeholders' ownership and social accountability. The established grievance redress mechanism (GRM) will be conducted in line with the requests from community consultations and will be sensitive to the needs of vulnerable groups, especially widows, disadvantaged and disabled.

6.2 Approach to Enhance Project Implementation

This ESMF, along with the Gender Action Plan (GAP), is not being used solely as a compliance process: it goes beyond compliance and takes a proactive approach in design. Similarly, the grievance redress mechanism included in this document is not just about being a last-resort mechanism; rather, the GRM is

about creating a project culture of transparency with built-in feedback systems. Both the ESMF and the

Gender Action Plan are taken as positive aspects that help the project implementation units (at central and local levels) in identifying and developing activities for greater environmental and social co-benefits. To ensure, that the social, climate and environmental issues are addressed properly in accordance and in compliance with the IFAD's SECAP, all project activities shall systematically undergo a thorough screening, assessment, review, and clearance process before the physical execution of project activities.

This chapter describes the process for ensuring that environmental, climate and social safeguards concerns are adequately addressed through the proposed institutional arrangements and procedures used by the project for managing the identification, preparation, approval, implementation and reporting of sub-activities. The detailed environmental and social safeguard process is listed below:

6.2.1 Screening and Review

PROSPER Environment and Social Safeguards Risk Category is 'B' which means that 'some adverse impacts can be readily remedied by appropriate preventive actions and/or mitigation'⁶⁴. However, to remain a 'B' Category Project serious attention must be paid to land development (i.e., *likely potential for deforestation and related secondary effects*), and development of socioeconomic infrastructure including construction of feeder roads and small earth dams and irrigation schemes development. Loss of investments to floods, other natural hazards including drought is also very high across the participating 8 regions of the middle and north belts. By far the most important social risk is the resource-induced clashes between farmers and pastoralists given the rich livestock capital both natural regions are endowed with. All the project areas have the potential of being impacted by this risk.

During implementation, it is essential that all sub-project proposals be screened, first on eligibility on the basis of the 'letter of interest' / application form (see Annex 1), and secondly on the basis of

⁶⁴ Source: IFAD (2016) Managing Risks to Create Opportunities. IFAD's Social, Environmental and Climate Assessment Procedures (SECAP) (IFAD: Rome), p.18

environmental, climate and social impacts using the more detailed screening forms (see Annex 2)). Project Screening for Project Screening for environmental, climate and social impacts will ensure that sub-projects with high and irreversible impacts on the environment or people that cannot be readily mitigated are not eligible for support by PROSPER . It is very important to ensure that before land is developed for any cluster or farmer organization, they should take the responsibility of planting trees at the perimeter of the land area and nurturing them.

Sub-project proposals with medium (manageable) environmental and social impacts should include the following basic elements in the application and contain in the project-specific ESMP:

- a. A summary and description of the possible adverse effects that specific sub-project activities may occur;
- b. A description of any planned measures to avoid or mitigate adverse impacts, and how and when they will be implemented;
- c. A system for monitoring the environmental and social effects of the project;
- d. A description of who will be responsible for implementing and monitoring the mitigation measures; and
- e. A cost estimate of the mitigation measures, which should be included in the sub-project proposal.

The scope of any environmental and/or social review and related mitigation measures will be determined by the relevant PIU Environmental, Climate, Social Specialist (PIU- 1ECSS) in consultation with each of the two Zonal Officers (*Northern Belt & Middle Belt* – 2 ZECSO) and each of the 8 Regional Safeguards and Climate Focal Points (8 RSCFP) and involved technical experts where needed, via the sub-project screening and approval process. Sub-project proposals with only minor or no adverse impacts do not need a separate review (or ESMP).

☞ Screening for Eligibility

Thus far, PROSPER's PDR provides a detailed description of the targeting and selection process for project beneficiaries. Annex 1 provides the proposed format for the letter of interest/application form, which should be completed by each intended beneficiary and will be used as the primary tool for screening for eligibility.

☞ Screening for Environmental, Climate and Social Impacts

Based on relevant SECAP guidelines, two separate environmental and social screening forms have been developed: for agri-enterprise (Annex 2) and related socioeconomic infrastructure subprojects (Annex 3), and climate screening form for sub-projects (Annex 4).The intended beneficiaries are only required to complete the intention/application form in Annex 1 while the screening is done using the form in Annex 2, 3 and 4 by the PIU Environmental, Climate and Social Specialist (ECSS, assisted by the corresponding zonal ZECSO and corresponding RSCFP).

Annex 5 provides an environmental and social guideline for contractors, especially those handling the construction of socioeconomic infrastructure such as the construction/rehabilitation of market-connected rural feeder roads, irrigation facilities, dam's construction, production platforms, etc. Sound environmental and social management of construction projects can be achieved only with adequate site selection and project design. As such, the ESMP for projects involving any new construction, or any rehabilitation or reconstruction for existing projects, should provide information as to screening criteria for site selection and design. The guidelines include the site selection, prohibitions, construction management measures, safety during construction, community relations, chance finds procedures and environmental supervision during construction.

☞ Impact Significance Rating

To determine the significance of impacts, the likelihood of an impact occurring is considered against the consequence or magnitude of the impact if it was to occur. Likelihood is defined as the frequency of an impact occurring.

Table 10 Definitions of Consequence

Consequence	Definition
--------------------	-------------------

No Impact / No change	<ul style="list-style-type: none"> • No impacts on biophysical and social environments / livelihood / health / gender • No public concerns • No legal issues
Negligible	<ul style="list-style-type: none"> • Low/minor impact on environment / livelihood / health / gender • Minor social impacts • No legal issues
Intermediate	<ul style="list-style-type: none"> • Some level of impact on environment / livelihood / health / gender • Social issues apparent • May have legal implications
Severe	<ul style="list-style-type: none"> • High level impacts on environment / livelihood / health / gender • High public concerns or perceptions • Legal non- compliance
Unknown	<ul style="list-style-type: none"> • Extent of the impact cannot be determined at this point • Apply precautionary principle

- Projects that have low significance impacts may not require a new ESMP; in that case the standard ESMP in the ESMF report will suffice.
- In the case of project with medium significance, the development of appropriate plans, in addition to the standard ESMP in this ESMF may suffice to manage the severity of the impacts.
- In the case of projects with impacts of high significance, a separate ESIA is almost always required.

6.2.2 Safeguards and Climate Implementation Arrangements (SCIA)

Project Implementation Arrangement for Safeguards and Climate

For safeguards implementation, the Project Coordinator leading the **Project Coordination Unit (PCU)** will have the overall responsibility and accountability for the implementation of the project, including environmental and social safeguards and climate change compliance. More specifically, a Safeguards and Climate Specialist as well as Gender and Social Inclusion Specialist will be included in the PCU. They both will be the recipient of all project-related grievances at both the central and local levels, as detailed within the Grievance Redress Mechanism process in the below pages (i.e. section 9) of this ESMF. The roles and responsibilities of some of the PCU staffs are described in more details in both the project description in this document and in the Project Document Report (PDR).

→ **Project Coordination Unit (PCU):** A Project Coordination Unit, led and hosted by the MOFA, will be established in the project area (potentially in Tamale) to ensure political anchorage within the overarching decision-making structures, SECAP and strategies. The Project Steering Committee (SC) will include EPA. A **National Project Coordinator (NPC)** will be responsible for the physical operational and administrative project implementation and coordination with all project stakeholders, and operational leadership of the PCU. Under the overall leadership of the NPC, and in close coordination with the PCU **Senior Safeguards and Climate Specialist (SSCS)**, the **Senior Gender and Social Inclusion Specialist (SGSIS)** and likewise, financial intermediaries like APEX Bank will have both a **Safeguards and Climate Specialist (SSCS)**, the **Gender and Social Inclusion Specialist (SGSIS)**

the Executing Entity (MOFA), the **PROSPER-PCU** will be responsible for providing support to the implementation of the day-to-day activities at the national/central level

Both the Senior SCS and the Senior GSIS will be hired by the PCU to spearhead the different Safeguards and Climate, as well as Gender and Social Inclusion compliance with the ESMF and ESMP core requirements, its implementation, and its regular reporting across all project activities. In order to retain close proximity to the project intervention areas, the SSCS and the GSIS will be based out at the PCU in the field and ensure that the staff on-the-ground in the project areas conduct a screening for sub-activities prior to implementation, and then mitigate for any medium-risk activities using site-specific ESMPs developed during project implementation, based on that very screening checklist, once project activities footprints are known and clearer.

At local level, the BFF at the APEX Bank will include a Safeguards and Climate Specialist (SCS) and Gender and Social Inclusion Specialist (GSIS) who will ensure that the BPs are implemented in accordance with this ESMF/ESMP and IFAD SECAP guidelines. These two specialists will work in tandem with and report to the PCU's Specialists.

IFAD will have a designated Lead Safeguards and Climate Expert (LSCE) who will liaise with both PCU and APEX specialists to ensure constant brainstorming on the way the safeguards and climate as well as Gender and Social Inclusion dimensions agenda of PROSPER to ensure SECAP procedures are fully and adequately complied with. S/He will work in tandem with both the PCU and APEX Specialists.

6.3 Integrated Pests and Pesticides Management Plan (IPPM)

As stated in the tables above and some of the listed national laws and regulations, procurement of pest and pesticides is not envisaged under this project. However, the project could include sub-projects relating to enhancement of agricultural productivity and introduction of high value crops, support seed banks and beekeeping. These activities could result in the use of pesticides. The ESMF has included a screening tool to identify subprojects that would need to prepare a simple integrated pest management plan (IPMP). Such subprojects will prepare and publicly disclose an IPMP before they are approved for physical implementation. The Project will include relevant training at the field level such as in pest management (PM), selecting disease free seeds, bee keeping, etc. A mechanism will be put in place to demonstrate Integrated Pest Management procedures and to develop a farmer education program that stresses good and safe practices for storage and application of pesticides.

The project will use the Guidance document provided in Annex 11 for identifying the need to prepare an IPMP for a sub-project. A separate IPMP is needed if expected quantities of pesticides to be used are significant from health and environment (*biophysical & human*) standpoint; or if pesticides use or other non-indigenous biological control into an area will be introduced; or if hazardous products (*WHO Class Ia & Ib*) will be financed. The IPMP consists of the following components:

- ❖ Activities
- ❖ Actors and partners
- ❖ Institutional arrangements for implementation
- ❖ Phasing plan
- ❖ Cost estimates

The activities of the PMP are designed to ensure that implementation of PROSPER project in the selected 5 districts in each of the 8 regions of PROSPER intervention areas complies with both IFAD and corresponding national regulation.

- ➔ **Activity 1 – If feasible, study tours will be organized to similar programs/agency where farmers participatory Pest Management (PM) programs have been successfully implemented. The study tour will be organized for representatives of selected project district areas. A regional PM workshop (within the NMB) will be organized to cross fertilize and share experiences gained during the study tour and to facilitate the implementation of the IPMPs.**
- ➔ **Activity 2 - Promoting the adoption of climate-smart PM practices**
 - ✓ Supporting activities of the Community PM Action Committees
 - ✓ Developing PM training capacity in the extension services
 - ✓ Developing PM capacities amongst PIU and farmer Groups
 - ✓ Production of field brochures, PM posters, field guides and other IPM promotional materials; purchase of various PM Extension Guides publications.
 - ✓ Public awareness programs and PM networking amongst the project stakeholders
- ➔ **Activity 3 - Training in pesticides management; safe and secure use of pesticides**
 - ✓ Making decisions to use pesticides
 - ✓ Transport, storage, handling, and distribution of pesticides
 - ✓ Safe application of pesticides
 - ✓ Risks in the handling and use of pesticides
 - ✓ Managing risks and pesticide poisoning
 - ✓ Protective gear; use and maintenance

- ✓ Public awareness raising on the safe use of pesticides; radio talks, social medias, etc.
- ➔ **Activity 4 - Strengthening national regulatory frameworks and institutional capacities**
 - ✓ Support PCU to assist with national coordination of PMP activities of PROSPER project.
 - ✓ Support teams and beneficiaries to participate effectively in the implementation of the PMP
- ➔ **Activity 5 - Integrated Vector Management:** surveillance of disease vector populations in the environment of small irrigation schemes.
 - ✓ Surveillance teams to be set up in villages around the water sources and irrigation sites to conduct regular surveys on the incidence of waterborne diseases.
 - ✓ Training in environment and social management for the control of waterborne diseases

6.4 ESMF Monitoring and Evaluation

The overall objective of environmental and social monitoring is to ensure that recommended mitigation measures are incorporated, and that activities carried out during sensitization (i.e., training and awareness-raising) and infrastructure construction/maintenance are environmentally and socially acceptable, and therefore sustainable.

6.4.1 Project Monitoring & Evaluation

Currently IFAD M&E conducts multiple impact assessment studies for the projects they implement: Baseline Surveys, Post-Distribution Assessments, and Impact Assessments, etc. The Baseline Surveys, conducted regularly, will employ a hybrid approach that uses IFAD Field Monitors. An Impact Assessment to evaluate the project performance and achievements will be conducted once all data have been analyzed, activities implemented, and results validated by IFAD-Ghana.

6.4.2 Sub-Project Monitoring and Evaluation

Monitoring and reporting will be supervised by IFAD staff. Associated Government agencies and members of the community, through their representatives, should be trained to undertake both compliance monitoring and impact monitoring. This will be done throughout the sub-project cycle namely:

- ✚ During the planning phase, communities will participate in the identification of indicators for monitoring the mitigating measures;
- ✚ During the implementation phase, monitoring the execution of any works with respect to environmental and social aspects,
- ✚ During the operation and maintenance phase, the overall environmental, climate and social monitoring (*including monitoring human-natural resources conflict*) and alerting on any emerging environmental/climate hazards in conjunction with the ongoing sub-project activities. Communities will pass on their observations and concerns through the local Ghana-IFAD Project staff.

Key Performance Indicators

The key impact indicators for PROSPER are that:

- Estimated corresponding total number of household members
- Corresponding number of households reached
- Persons receiving services promoted or supported by the project (out of which 10% are PWD)
- Number of people with greater resilience (including PWD)
- Number of women and youth with access to good nutrition services
- Percentage of households reporting an improved access to markets and a 30% income increase)

The key monitoring indicators/variables include:

- Number of persons/households reporting adoption of new/improved inputs, technologies, or practices
- Number of hectares of farmland under water-related infrastructure constructed/rehabilitated
- Number of upgraded women/youth-led vegetable gardens
- Number of integrated market-oriented vegetable garden financed through matching grants
- Number of persons trained in production practices and/or technologies
- Number of rural producers accessing production inputs

- Number of Jobs created (100% youth-led agricultural service businesses)
- Number of financial service providers supported in delivering outreach strategies, financial products and services to rural areas
- Number of farmers' organizations engaged in formal partnerships/agreements or contracts with public or private entities
- Number of effective agricultural value chain interaction platforms (AVIP)
- Number of rural farmers' organizations supported
- Number of 4P businesses supported
- Number of feeder road/track roads (Km) rehabilitated/construction per districts
- Number of feeder road/track-roads maintained per year in districts,
- Number occupational health and safety sessions per RI organized per district
- Number of market or storage facilities (warehouse, workshop, silos) constructed or rehabilitated
- Number of agribusiness policy-dialogue (meetings, roundtables) between public, private and producers' stakeholders conducted

Various project impacts and aspects relate to these overall performance targets. When the activities and indicators are established, baseline data needs to be collected to serve as a benchmark and against which changes in the identified indicators can be measured. The types of parameters that can be monitored may include mitigation measures or design features, or actual impacts. In some cases, such as drainage structures and soil conservation interventions, monitoring is straightforward and can be done as part of routine or periodic maintenance. However, other parameters, particularly those related to social, ecological and climate change issues can only be effectively assessed over a period of 2 to 3 years.

6.5 ESMF Implementation Timeline and Budget

As outlined in the ESMF, the day-to-day implementation of the ESMF for the PROSPER project, will be led by two full-time project-recruited staffs, namely (i) a **Senior Environmental, Climate and Social Safeguards Specialist (SECSSS)** and a (ii) **Senior Gender and Social Inclusion Specialist (SGSIS)** at the PCU level in Tamale (indicatively), and supplemented by a **Focal Point (FP) in each of the participating 85 districts** of PROSPER in the 8 regions. These FPs will be hosted at the Local Authorities level with whom PROSPER management will sign an MOU (Memorandum of Understanding) to spearhead project implementation at local levels. The foreseen duration of PROSPER is eight (**08**) years (**2022-2029**). The total hiring of the proposed Safeguards et Climate + Gender and Social Inclusion team (**1 SECSSS & 1 SGSIS**), so to properly integrate gender and social inclusion mainstreaming in the safeguards management, especially at local level during the 8-years project duration, along with their provision for personal capacity strengthening each year is estimated to be **\$910,000 USD**. This cost will be included in the project overall cost, notably in Component 3.

At local level, the BFF at the APEX Bank will include a Safeguards and Climate Specialist (SCS) and Gender and Social Inclusion Specialist (GSIS) who will ensure that the BPs are implemented in accordance with this ESMF/ESMP and IFAD SECAP guidelines. These two specialists will work in tandem with and report to the PCU's Specialists.

IFAD will have a designated Lead Safeguards and Climate Expert (LSCE) who will work as counterpart with all 4 specialists (2 for the PCU and 2 for APEX). To ensure safeguards and climate as well as Gender and Social Inclusion compliance agenda of PROSPER to ensure SECAP procedures are fully and adequately complied with. S/He will work in tandem with both the PCU and APEX Specialists.

The monitoring plan in Table 12- lists the parameters to be monitored, activity that will generate the parameters, monitoring indicators, and responsibility, monitoring means, frequency and the estimated cost.

Table 11- ESMF Timeline & Budget for PROSPER Implementation

Parameter	Activity	Monitoring Indicator	Responsibility for monitoring	Monitoring means	Recommended frequency of monitoring	Estimated Monitoring Costs (USD)
ENVIRONMENTAL MONITORING						
Site-specific ESMPs and Environmental, Climate and Social Screening for roads (feeder and/or track) construction/rehabilitation, processing facilities construction, irrigation schemes development, commodity warehouse or workshop construction, and borehole/drinking water points construction/rehabilitation	Environmental, Climate et Social Screening and impact assessment	Baseline on the status of the environmental, climate and social conditions	PCUs FP, EPA, MOFA, DDA, MOW, Infrastructure/ Transport/ Irrigation Engineer, ECS Officer, Service Providers; RI, CRBs, District.	C-ESMP reports Adherence to laid legal and policy requirements (Category B)	Once (project specific – At least once each year, depending also on the needs on the ground)	1,000,000 (\$125,000 x 8)
Environmental, Climate and Social	Environmental, Climate	Baseline on status	PCUs & FP, EPA, MOFA,	Baseline reports,	Baseline and end term	200,000

Parameter	Activity	Monitoring Indicator	Responsibility for monitoring	Monitoring means	Recommended frequency of monitoring	Estimated Monitoring Costs (USD)
Monitoring – include - baseline and end term survey, biodiversity surveys; monitoring of land, water, and soil degradation and agrochemicals; climate, flooding and erosion prediction; pest infestation prediction and management	and Social Screening and risk & impact assessment	of the social, environment and climate conditions, risks, and vulnerabilities	DDA, MOW, Infrastructure/ Transport/ Irrigation Engineer, ECS Officer, Service Providers; RI, CRBs, District.	Biodiversity surveys report Climate risk and flooding and erosion risk reports Pest infestation prediction report	Once for specialized reports (incremental, based on needs on the ground)	(\$25,000 x8)
Risk Transfer - Agric insurance	Climate and conflicts risk transfer	Farmers sign on to agriculture insurance	PCUs & FPs, EPA, MOFA, DDA, MOW, Infrastructure/ Transport/ Irrigation Engineer, ECS Officer, Service Providers; RI, CRBs, District.	Number of RIs that sign onto agric-insurance	Annual	350,000 <i>This is part of the original project activities</i>
Technical support and backstopping - includes support for GHANA Agrimet for agroclimatic weather production and dissemination and setting up mini weather station; seed labs/silos; and bio waste valorization (Biogas et/ou bio-fertilizers production	Support for the GHANA Agrimet to install weather station and produce agroclimatic data for periodic climate monitoring Support seed lab development Support rice and vegetable waste valorization	Number of mini weather stations installed Periodic production and dissemination of agroclimatic information Number of equipped seed lab Number of rice and vegetable waste valorization initiatives	PCUs & PFPs, EPA, MOFA, DDA, MOW, Infrastructure/ Transport/ Irrigation Engineer, ECS Officer, Service Providers; RI, CRBs, District.	Field observation	Twice a year and on a random basis to ensure consistency	600,000 (\$75,000 x8) <i>Only AGRIMET included in the costabs explicitly, the rest are mainstreamed in the BP.</i>

Parameter	Activity	Monitoring Indicator	Responsibility for monitoring	Monitoring means	Recommended frequency of monitoring	Estimated Monitoring Costs (USD)
Training-includes training of spraying gangs, draining of rice paddies; and construction of water harvesting structure for both dry season irrigation and animal drinking point and fishfarming	Training of spraying gangs integrated pest and agrochemical management Training of farmers on water harvesting for dry season farming	Number of those trained	PCUs & FPs, EPA, MOFA, DDA, MOW, Infrastructure/ Transport/ Irrigation Engineer, ECS Officer, Service Providers; RI, CRBs, District.	Field observation	Twice a year, on a random basis.	200,000
SOCIAL MONITORING						
Support for conflict resolution - include support for stakeholders dialogue on conflict management and land governance	Conflict resolution stakeholders support and land governance dialogue	Activities of conflict resolution committee Organize land governance dialogue	PCU/FP, MOFA, EPA, Environmental Officer,	Conflict resolution and land governance dialogue reports	Once (more precisely the need is put forth	300,000
Other Social monitoring (GBV, SEAH vulnerability,	Include gender and People living with disabilities (PLWD) mainstreaming	Activities of Targeting committee	PCU/FP, MOFA, EPA, MOWA Environmental Officer,	Social Surveys, Beneficiaries assessment	Annual	100,000
Health and Safety	Health Insurance and outreach	Number of farmers with health insurance contracts	PCU/FP, MOFA, EPA, MOWA, MOH, Environmental Officer,	DHS Reports	Annual	100,000
GRAND TOTAL						2,850,00

NOTE: Most of these costs are already included in the project costab and already mainstreamed altogether with other related activities, carefully distributed between among sub-component 1-2 (**\$700K**), Matching Grants Scheme of sub-component 2-2 (**\$100K**) and Blended Finance Facility of sub-component 2-2 (**200K**).

7. CAPACITY BUILDING AND TRAINING FOR ENVIRONMENTAL, CLIMATE AND SOCIAL MANAGEMENT AND MONITORING PLANS

7.1 Strengthening Capacity and Improving Resilience

A successful mainstreaming of climate change and the ESMF into implementation of the project requires the strengthening of institutional capacities, in particular those, of the Agricultural Development Program by setting up mini weather station, Farmers Organization and Women Organizations. Moreover, there is a strong need for context-specific, in-situ training sessions for farmers, and others in the value chain, for example on climate-smart agriculture and climate change adaptation, to improve their resilience to deal more effectively with climate-related weather events. The same is also true for the economic, social and environmental literacy of RI, especially women, youth, PLWDs and RCBs.

7.1.1 Training Topics

Proposed training topics include, at the very least:

- a. Screening and rating as prescribed in the ESMF;
- b. Requirements of IFAD's SECAP and NRM, Gender/GBV/SEAH/VAC, Climate, Land, policies ;
- c. ESMF processes, procedures and institutional arrangements to develop and implement required management plans;
- d. Stakeholder consultation, participation, and public disclosure policies
- e. Agroclimatic data and early warning (including pest infestation) capacity building
- f. Environmental, social and climate risks and impacts assessment, and requirements ;
- g. Preparation, implementation, monitoring and reporting of ESMPs ;
- h. Community, RIs and agro-SMEs sensitization – including insurance and risk transfer mechanisms
- i. RIs training on climate smart agriculture, environmental and social best practices, including: *Sustainable land preparations, agrochemical application and pest and disease management, sustainable agronomic practices, soil fertility management, low-impact farming methods,*
- j. Conflict resolution and grievance management mechanisms;
- k. Sustainable agriculture waste management ;
- l. Environmental (EMS-ISO.14001), social audit, and report writing

7.1.2 Target Audience and Approach

The target groups for training should include, at least:

- a. Project Coordination Units Staffs (PCU+ SGIS + FP)
- b. MOFA, EPA, DDAs, MOW/MOSF staff, and EAs
- c. Service providers
- d. Beneficiaries (i.e., incubators and apprentices)
- e. Farmers Organizations
- f. Economists

The training topics will be delivered based on the needs of each training target group. As much as possible, Training the Trainers (TOT) will be encouraged, where applicable, to manage resources and effectively reach the target audiences.

Table 12: Training Activity and Estimated Cost

NB	Activity	Year (2022-2029)								Budget (USD)	Remarks
		1	2	3	4	5	6	7	8		
1	Global Stakeholders and District Communities sensitization workshops This is already factored in the project design under sub-component 1-1	X				X	X	X		350,000	Local media stream (recurrent) +:

NB	Activity	Year (2022-2029)								Budget (USD)	Remarks
		1	2	3	4	5	6	7	8		
2	ToT Capacity building for uptake of agroclimatic information and early warming DDA including safeguards	X		X		X		X		120,000	2-day -Training of ECS Officers and Focal Points and selected implementation staff, to downscale to farmers ,(Included in ToT under subcomponent 1.1) – This is already mainstreamed in the costable.
3	Stakeholders dialogue on green financing and climate smart agriculture	X	X	X		X	X			75,000	1day workshop (In the policy dialogue sub-component 3-2
4	Capacity building in IFADs & EPA ESMPs processes, procedures, implementation, and monitoring	X	X	X		X	X			100,000	3 days training (refresher courses) each other year
5	RIs training on climate smart agriculture, environmental and social best practices,	X	X	X		X	X			125,000	2day per each of the 8 regions Under component 1-1
6	Stakeholders' capacity building on Conflict resolution and grievance redress mechanism									85,000	2day per each of the 8 regions
8	Environmental, Climate and Social Audit and report writing	X	X	X	X	X	X			75,000	3day workshop for ECS officers led by IFAD's LSCS
	GRAND TOTAL									920,000	

Note: Generally, training is already mainstreamed across the different components⁶⁵. Given the fact that PROSPER is a climate focused project and has a strong focus on the environment and the social, many of the training and ESMP measures are already mainstreamed in project activities. However, the abovementioned cost are just for safeguards purposes. The total training cost for the whole project duration is estimated at **USD \$920,000** of the project cost. The total cost of the 2 Specialists at the PCU level and the two from APEX offices.

More specifically, a conservative estimate is that both the Environmental and Social Monitoring (including safeguards and Gender provision for the MOU with the Government, especially for the **85 Focal Points** pour les 8 années de fonctionnement du PROSPER, costs and Training cost accounts for **USD \$ 3 million..**

Tableau 13: Key PCU, Safeguards and Climate Staffs estimated Budget.

Designation	Duration	Unit Cost/Year	Total Cost
Senior Environmental, Climate and Social Safeguards Specialist – PCU (<i>Female</i>)	96	36,000	550,000
Senior Gender (GBV/SEAHVAC) Mainstreaming Officer (<i>Female</i>)	96	36,000	500,000
Environmental, Climate and Social Safeguards Specialist – (APEX)	96	32,000	450,000
Gender (GBV/SEAHVAC) Mainstreaming Officer (APEX)	96	32,000	430,000

⁶⁵ - These are distributed among sub-component 1-2 (\$700K), Matching Grants Scheme of sub-component 2-2 (\$100K) and Blended Finance Facility of sub-component 2-2 (200K)

Capacity Building to enhance their technical performances	FF	1,700	65, 000
Broader Miscellaneous (5%)	FF	10,000	80,000
Grand Total	---	----	2,080,000

Note: We opted for a rather more inclusive approach. Therefore, the above estimate is for both the Environmental, Climate and Social Safeguards Specialist and the Gender and Social Inclusion at the PCU level in Tamalé (Most likely). . There will Safeguards focal point identified at the district level.

To make it rather more inclusive and constructive, as it will surely yield more sustainable results, it is suggestable to:

- (i) have both the (a) Senior Environmental, Climate and Social Safeguards Specialist (SECSSS) and the Senior Gender and Social Inclusion Specialist (SGSIS) at the PCU level in the main office in Temale; and (b) an Environmental, Climate and Social Safeguards Specialist (ECSSS) and the Gender and Social Inclusion Specialist (APEX level) to facilitate GSIS) at to oversee both Safeguards and Climate, and the Gender and Social Inclusion mainstreaming compliance. To that effect, for their hiring, the respective TORs will include that candidates have some solid/proven background and expertise in properly handling safeguards/climate and gender mainstreaming issues in development operations ;
- (ii) have the District Focal Point (DFP) working to spearhead both safeguards and gender dimensions, and report directly to both the SECSSS and SGSIS at the PCU levels, together with the IFAD Lead International ECSS.

8. PUBLIC CONSULTATIONS, PARTICIPATION, AND INFORMATION DISCLOSURE

8.1 Stakeholder Consultations and Participation

Experience with previous IFAD and other economic and social investment projects indicate that stakeholder engagement and sensitization are of critical importance to project success. In the absence of clear communication with relevant stakeholders and appropriate sensitization of local communities, rumors, misinformation and speculation thrive, and accusations and tensions easily boil over into (violent) conflict within and between communities. Therefore, for many of the potential environmental, climate and social impacts, the ESMF preparation included extensive stakeholder consultations and participation. Key project stakeholders were identified for consultations and these included Government Ministries, State Agencies / Organizations/and Departments, Project offices, academia, research institutions, Non-governmental organization and local communities, both the affected and host communities, including women, the poor and most vulnerable groups.

Stakeholder consultations and participation is an iterative process that goes throughout the project lifespan. Thus, community sensitization (*i.e., awareness-raising and training*) activities need to be clear, timely and culturally appropriate; this means that key messages need to be communicated in a format and language that is easy to understand, preferably by someone who speaks the local language and is familiar with local customs and sensitivities, and during a time that is convenient and sufficient for all key community groups, particularly women, youth, people living with disabilities (PLWD). To ensure appropriate community entry and reach target groups most effectively and efficiently, it is advisable to also involve civil society organizations that are already active in and trusted by the selected communities.

Henceforth, during the field mission in Kumasi and Tamale regions, meetings were held with key officials and opinion leaders to gauge level of awareness and involvement with the project, concerns of project implementation, and to obtain relevant documents or baseline information. The consultations and participation also served to gather information on the mandates and permitting requirements to inform the development of the Program. The list of stakeholders contacted and issues discussed are presented in the Stakeholder Meetings and Public Consultation annex here below.

8.2 ESMF Disclosure

As many international development agencies, IFAD policies require that environmental, climate and social reports for projects are made available to project affected groups, local NGOs, and the public at large. Public disclosure of environmental, climate and social information is also a requirement of the Ghana EPA's procedures. However, there is no limitation as to the extent and scope of disclosure. IFAD, in collaboration with the Government line agencies and EPA will make available copies of the ESMF in selected public places as required by law for information and comments. Public notice in the media should be served for that purpose as well to ensure broader transparency in the design, preparation, and implementation of PROSPER intended activities. In the context of the COVID-19 pandemic, the notification will be done through all available means of communication, a newspaper, radio announcement, internet and broader social medias.

The notification should provide:

- a brief description of the Project;
- a list of venues where the ESMF report is on display and available for viewing;
- duration of the display period; and
- Contact information for comments.

The EPA will assist to select display venues upon consultation with MoFA. These would be project sites specific and very much informative to beneficiaries

9. GRIEVANCE REDRESS MECHANISM

9.1 Rationale of Grievances:

Grievance redress mechanisms (GRM) provide a formal avenue for affected groups or stakeholders to engage with the project implementers or owners on issues of concern or unaddressed impacts. Grievances are any complaints or suggestions about the way a project is being implemented. They may take the form of specific complaints for damages/injury, concerns about routine project activities, or perceived incidents or impacts. Identifying and responding to grievances supports the development of positive relationships between projects and affected groups/communities, and other stakeholders.

Like many international development agencies, the IFAD's SECAP procedures outline requirements for grievance redress mechanisms for some projects. GRM should receive and facilitate resolution of the affected institutional or communities' concerns and grievances. These concerns should be addressed promptly using an understandable and transparent process that is culturally appropriate and readily acceptable to all segments of project affected communities, at no cost and without retribution nor fear. Mechanisms should be appropriate to the scale of impacts and risks presented by a project.

Grievances can be an indication of growing stakeholder concerns (real and perceived) and can escalate if not identified and resolved. The management of grievances is therefore a vital component of stakeholder management and an important aspect of risk management for a project.

9.2 Managing Grievances:

Projects may have a range of potential adverse impacts to people and the environment in general, identifying grievances ahead of time and ensuring their timely resolution in an amicable way is therefore very necessary. As such the ESMF has developed a grievance management process to serve as a guide during project implementation. This Grievance Redress Mechanism (GRM) builds pretty much on the one provided in the table below.

Table 14. Grievance Management Guide

Step	Process	Description	Timeframe	Other information
1	Identification of grievance	Face to face; phone; letter, e-mail; recorded during public/community interaction; others	1 Day	Email address; hotline number
2	Grievance assessed and logged	Significance assessed and grievance recorded or logged (i.e. in a log book)	3-7 Days	Significance criteria * Level 1 – one off event; * Level 2 – complaint is widespread or repeated; * Level 3 - any complaint (one off or repeated) that indicates breach of law or policy or this ESMF provisions
3	Grievance is acknowledged	Acknowledgement of grievance through appropriate medium	7-14 Days	
4	Development of response	- Grievance assigned to appropriate party for resolution -Response development with input from management/relevant stakeholders.	3-7 Days 10-14 Days	
5	Response signed off	Redress action approved at appropriate levels	3-7 Days	IFAD/PCU/PIU should sign off
6	Implementation and communication of response	Redress action implemented and update of progress on resolution	10-14 Days	

Experience with previous IFAD and other economic and social investment projects indicate that stakeholder engagement and sensitization are of critical importance to project success. In the absence of clear communication with relevant stakeholders and appropriate sensitization of local communities, rumors, misinformation and speculation thrive, and accusations and tensions easily boil over into

(violent) conflict within and between communities. Therefore, for many of the potential environmental and social impacts, the management plans recommend the development of a stakeholder engagement plan with a clear communication strategy and the organization of community sensitization activities on a regular basis.

A stakeholder engagement plan (SEP) when the exact location are known for ESIA should include at least the following components⁶⁶:

- a) Principles, objectives and scope of engagement
- b) Regulations and (institutional) requirements
- c) Summary of previous stakeholder engagement activities
- d) Stakeholder mapping and analysis
- e) Strategies of engagement
- f) Key messages and communication channels
- g) Grievance mechanism (see also section 9.6 below)
- h) Resources and responsibilities
- i) Monitoring and evaluation

Community sensitization (i.e., awareness-raising and training) activities need to be clear, timely and culturally appropriate; this means that key messages need to be communicated in a format and language that is easy to understand, preferably by someone who speaks the local language and is familiar with local customs and sensitivities, and during a time that is convenient and sufficient for all key community groups, particularly women and youth. To ensure appropriate community entry and reach target groups most effectively and efficiently, it is advisable to also involve those civil society organizations that are already active in and trusted by the selected communities.

Grievance Management

Whenever a project causes negative environmental or social impacts there will be grievances (complaints) from people who are affected. "Having a good overall community engagement process in place and providing access to information on a regular basis can substantially help to prevent grievances from arising in the first place, or from escalating to a level that can potentially undermine project performance .In order to reduce conflicts, a robust grievance / complaints mechanism that meets at least the following 'effectiveness' criteria should be instituted:

- a) Legitimate: enabling trust from the stakeholder groups for whose use they are intended, and being accountable for the fair conduct of grievance processes;
- b) Accessible: being known to all stakeholder groups for whose use they are intended, and providing adequate assistance for those who may face particular barriers to access;
- c) Predictable: providing a clear and known procedure with an indicative time frame for each stage, and clarity on the types of process and outcome available and means of monitoring implementation;
- d) Equitable: seeking to ensure that aggrieved parties have reasonable access to sources of information, advice and expertise necessary to engage in a grievance process on fair, informed and respectful terms;
- e) Transparent: keeping parties to a grievance informed about its progress, and providing sufficient information about the mechanism's performance to build confidence in its effectiveness and meet any public interest at stake;
- f) Rights-compatible: ensuring that outcomes and remedies accord with internationally recognized human rights;
- g) A source of continuous learning: drawing on relevant measures to identify lessons for improving the mechanism and preventing future grievances and harms;
- h) Based on engagement and dialogue: consulting the stakeholder groups for whose use they are intended on their design and performance, and focusing on dialogue as the means to address and resolve grievances.

IFAD has established a Complaints Procedure to receive and facilitate resolution of concerns and complaints with respect to alleged non-compliance of its environmental and social policies and the mandatory aspects of its Social, Environmental and Climate Assessment Procedures in the context of

⁶⁶ Adapted from IFC (2007) *Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets* (IFC: Washington, D.C.), pp.164-168

IFAD-supported projects.

Complaints must concern environmental, social and climate issues only and should not be accusations of fraudulent or corrupt activities in relation to project implementation – these are dealt with by IFAD's Office of Audit and Oversight.

- Eligibility criteria

To file a complaint for alleged non-compliance with IFAD's social and environmental policies and mandatory aspects of its SECAP, IFAD will consider only complaints meeting the following criteria:

- The complainants claim that IFAD has failed to apply its social and environmental policies and/or the mandatory provisions set out in SECAP.
- The complainants claim that they have been or will be adversely affected by IFAD's failure to apply these policies.
- Complaints must be put forward by at least two people who are both nationals of the country concerned and/or living in the project area. Complaints from foreign locations or anonymous complaints will not be taken into account.
- Complaints must concern projects/programmes currently under design or implementation. Complaints concerning closed projects, or those that are more than 95 per cent disbursed, will not be considered.
- The process

The complainants should first bring the matter to the attention of the government or non-governmental organisation responsible for planning or executing the project or programme (the Lead Agency), or to any governmental body with the responsibility for overseeing the Lead Agency. If the Lead Agency does not adequately respond, then the matter may be brought to the attention of IFAD. The issue may be brought straight to IFAD if the complainants feel they might be subject to retaliation if they went to the Lead Agency directly.

The Regional Division will examine the complaint and, if necessary, will contact the Lead Agency, or the governmental body with the responsibility for overseeing the Lead Agency, to decide if the complaints are justified. If the complainants request that their identities be protected, IFAD will not disclose this information to the Lead Agency or anyone else in government.

If the complaint is not justified, the Regional Division will inform the complainants in writing.

If the Regional Division finds the complaint is justified and there is proof of actual or likely harm through IFAD's failure to follow its policies and procedures, IFAD will take action. This may consist of making changes to the project/programme, or requiring that the government observes its obligations under the Financing Agreement. IFAD's response will focus bringing the project/programme into compliance and no monetary damages will be available or paid in response to such complaints. The complainants will be informed of the outcome of the issue by the Regional Division.

In all cases, if the complainants disagree with IFAD's response, they may submit a request to SECAPcomplaints@ifad.org and request that an impartial review be carried out by the Office of the Vice-President.

The Office of the Vice-President will decide on the steps to be taken to examine such complaints, including, if necessary, contracting external experts to review the matter. The complainants will be informed of the results of the review.

IFAD will include in its Annual Report a list of received complaints and a summary of actions taken to address them.

- How to submit a complaint

A complaint relating to non-compliance with IFAD's Social and Environmental Policies and mandatory aspects of its SECAP can be submitted in any of the following ways:

- [Download the complaints form \(Word\)](#)
- [Send an email to SECAPcomplaints@ifad.org](mailto:SECAPcomplaints@ifad.org)

If you email or mail your complaint, please include the following information:

- Name, address, telephone number and other contact information
- Whether the complainants wish to keep their identity confidential, and if so, why
- Name, location, and nature of the IFAD project/programme (if known)
- How the Complainants believe they have been, or are likely to be, adversely affected by the IFAD-supported project or programme

Complaints sent by mail should be addressed to:

IFAD

SECAP Complaints (PMD)

Via Paolo di Dono 44

9.3 Closing the Loop and Fostering Sustainability

While grievances are inevitable in sustainable development operations, and they are meant to weight the checks and balances as to how well the project is doing in terms of making beneficiaries lives "**better-off**"; however, one core lessons to be learnt is to always avoid triggering such grievances. Though there is never a better way to avoiding such triggering; inclusive and systematic stakeholder consultation not only at the very early stages of project formulation, and thereafter throughout the project lifespan, has always proven to avoid or minimize their occurrence. Therefore, one common sense is to always keep in mind that the earliest inclusive and participatory stakeholder consultation is started earliest enough in a project life cycle, the better beneficiaries ownership such project activities (*i.e. feeling part and partial of the whole process*), and foster social accountability behaviour towards that very project. Experience has shown that triggering these two pillars (*i.e. Community Ownership & Social Accountability*) often leads to fostering project Sustainability. Therefore, each grievance needs to be processed in due diligence; and once the process is satisfactorily completed, steps should be taken to properly close the loop by recording the whole process and ensuring that all issues at stakes are therefore taken care of in an amicably fashion, and that nothing is left behind.

10. CONCLUSION

The field mission in the PROSPER intervention areas, precisely in Kumasi and Tamale enabled to clearly hear the collective voices of all farmers in the participating two regional zones, namely the Northern Belt and the Middle Belt. The teams was able to equally weight the welcoming and highly committed and capable-hands desperately waiting for the PROSPER project to materialize. It undoubtedly speaks volumes about both its timeliness and relevance for thousands of poor rural farmers in the participating 8 regions. It's truly clear from them that this project will bring them the needed support to sustain their livelihoods.

The **Promoting Rural Opportunities, Sustainable Profits and Environmental Resilience (PROSPER)** development objective is “*to strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority value chains in the Northern and Middle Ecological Belts taking advantage of the increased demand created by the national agro-processing strategy.*”, by reducing greenhouse gas emissions and improving the resilience and sustainable adaptation of vulnerable agroecosystems and of rural communities in the two concomitant belts in a context of climate change, aiming towards food, nutrition and water security.

As stated from the onset, the initial screening of proposed PROSPER activities reveals that the potential environmental and social risks rating is moderate to low. Despite its high climate risk rating, the main risks associated with the implementation of project foreseen activities in component 1 are small in scale, very limited, mostly site-specific, and readily avoidable if not considerably reduced with appropriate mitigation plans (ESMP), as stated in the project’s ESMF.

As a Category B operation⁶⁷, a formal Environmental and Social Impact Assessment is required. Further analysis of the conflict dimensions and site-specific Environmental and Social Management Plans (ESMP) will be mainstreamed throughout PROSPER implementation lifecycle. Moreover, to ensure safeguards compliance and project sustainability, a Safeguards and Climate Change Specialist and a Gender and Vulnerability Specialist (GBV/EASH/VAC) will be part of the PCU. Quarterly safeguards and climate compliance reports summarizing the level of compliance and performance of project activities implementation will be prepared and shared to inform IFAD and stakeholders.

Overall, the cumulative project environmental and social impacts are expected to be positive, and generate series of opportunities for beneficiary communities, as the end objective of PROSPER is to increase climate resiliency of the most vulnerable farmers in the targeted northern and middle belts of Ghana. Besides the inequality in the labour market and presence of landless farmers in the project area who will be included in project activities; the project is expected to improve agricultural land and the natural resources upon which NMB communities farmers work is based, and on improved climate-resilient agricultural practices as well as improved natural resources management, specifically water management technics. More specifically, better functioning ecosystems, controlled transhumance practices, and a greater and collaborative stakeholders’ engagement and participation, will positively affect human health, nutrition and well-being in the long run.

During project implementation stage, once the physical footprints of subproject activities are known, to ensure, that the identified social, climate and environmental issues are properly addressed in accordance and compliance with the IFAD SECAP Policies, all project activities will systematically undergo (i) a thorough screening, assessment, review, and clearance process, and (ii) elaborate site-specific **Environmental and Social Management Plan (ESMP)** prior to the physical execution of project activities in each of the selected districts of the regions of PROSPER. Hence, the elaboration of the ESMF allowed to identify series of environmental and social risks and impacts, and the elaboration of an environmental and social management plan (ESMP) that includes a comprehensive implementation arrangement scheme to help implement the identified series of safeguards mitigation measures.

The estimated total budget for safeguards and climate change compliance and gender and social inclusion mainstreaming, including staffing the project over the foreseen eight (**8**) years duration of PROSPER is: **three million (\$3,000,000 USD)**. This cost is included in the project overall cost, notably in component 3.

⁶⁷ The project will not invest in any category A subproject activities.

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Based on the average of 8 persons per household.
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12. ANNEXES

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Annex 1 – Eligibility Screening Form

PROSPER PROJECT

Letter of Interest (Eligibility Screening Form) **Please complete all the required spaces in this form**

1. Name: Surname ----- Other Names:-----
----- Maiden name (for married women):-----
2. Sex: (a) Male { } (b) Female { }
3. Date of birth: -----
4. Highest Education Level: (a) No formal education { } (b) Primary School { } (c) Secondary School { } (d) Vocational school (e) Tertiary Education { }
5. Which community do you belong to: -----
6. How long have you lived in this community: -----
7. How do you belong to this community: (a) by birth { } (b) by marriage { } (c) other (specify):-----
8. Local Government Area (LGA): ----- State: -----
9. What enterprise are you interested in (see list of selected enterprises for the LGA): -----
10. Do you have any experience in this enterprise: (a) Yes { } (b) No { }. If yes, how many years: -----
11. Do you belong to any youth or women organization: (a) Yes { } (b) No { }. If yes, what is the name: -----
12. Do you belong to any cooperative society: (a) Yes { } (b) No { }. If yes, what is the name: -----
13. Do you have access to any land for the enterprise: (a) Yes { } (b) No { }.
14. If yes to question 13, where is the land located-----; and what is the area size of the land? -----
15. What kind of title to you have to the land: (a) Government paper { } (b) Inheritance from parent { } (c) husband or wife's consent { } (d) family allocation { } (e) community's allocation { } (f) Others (specify):-----

Endorsements:

Applicant: I certify that the information provided here is correct

Name: -----

Signature: -----

Date: -----

Community/traditional leader:

Name: -----

Sign: -----

Date: -----

Verifications:

Comments by the Local Government Liaison Office:

Name of Officer: -----

Designation: -----
Sign and date: -----

Comments by the RCU Office:-----

Name of Officer: -----

Designation: -----

Sign and date: -----

Screening:

Comments by service providers:-----

-----Categorical comments (a) Applicant Eligible { } (b) Applicant Ineligible
{ }

Annex 2 - Environmental and Social Screening Forms for PROSPER Subprojects

A: Screening Form for SME/Socio-economic Infrastructure Projects

General Information

Project Name:	
Name of incubator / applicant:	
Name of Cooperative:	
Contact person's details:	
Name of Apex Group:	
Contact person's details:	
Project Location:	
Project sector (e.g. rice farming, vegetable processing, etc.)	
Estimated Cost:	
Proposed Date of Commencement:	
Expected Project duration:	
Site (estimated area in ha):	
Any equity/contribution brought into the project:	
Any plan for new construction:	

A1. Screening for Environmental and Social Issues

Question	Yes	No	Additional explanation of 'Yes' response
1. Will the sub-project develop any wetlands?			
2. Would the sub-project result in economic displacement ⁶⁸ (loss of assets or access to resources) or physical resettlement			
3. Would the sub-project result in conversion and/or loss of physical cultural resources?			
4. Will the sub-project have significant social adverse impacts (affecting access to and/use rights to land, access to potable water and water for other uses) on local communities or other project-affected parties?			

⁶⁸ Economic displacement implies the loss of land, assets, access to assets, income sources or means of livelihoods (see SECAP Procedure Guidance Statement 13)

Question	Yes	No	Additional explanation of 'Yes' response
5. Will the project trigger unsustainable natural resource management practices (fisheries, forestry, livestock, and significant increase in use of agrochemicals) that exceed the carrying capacity?			
6. Does the sub-project include conversion of significant areas (above 50 ha) of natural forests/other wild lands?			
7. Would the project potentially cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. habitat loss, erosion/ other form of land degradation, fragmentation, hydrological changes)?			
8. Does the proposed project target area include ecologically sensitive areas ⁶⁹ ; areas of global significance for biodiversity conservation and/or biodiversity-rich area; habitats depended on by endangered species?			
9. Does the project involve fisheries development in situations where little information exists on sustainable yield?			
10. Could the project pose a risk of introducing invasive alien species?			
11. Does the project involve the transfer, handling or use of genetically modified organisms/living modified organisms that may have an adverse effect on threatened biodiversity?			
12. Is the project site close to any oil and gas installation such as flow stations, oil terminal, oil or gas pipeline right of way?			
13. Has oil spill/ or pipeline fire ever been recorded around project site?			
14. Does the project involve land use changes (agricultural intensification and/or expansion of the cropping area) and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods?			
15. Will the project result in increased use of agrochemicals which may affect the natural environment/human health?			
16. Does the project include small-scale irrigation and drainage projects, and water impoundment including small dams (except in wetlands)?			
17. Does the project involve agricultural intensification and/or expansion of cropping area in non-sensitive areas?			
18. Do the project activities include rangeland and livestock development?			
19. Does the project involve artisanal fisheries where there is information on sustainable yield?			
20. Do the project activities include aquaculture and/or mariculture?			

⁶⁹ ‘Sensitive areas’ include: protected areas (national parks, wildlife/nature reserves, biosphere reserves); areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance) and areas with high social vulnerability due to poverty, disease, ethnicity and race.

Question	Yes	No	Additional explanation of 'Yes' response
21. Do the project activities include watershed management or rehabilitation?			
22. Does the project include large-scale soil and water conservation measures?			
23. Does the project include small and micro enterprise development sub-projects?			
24. Does the project involve credit operations through financial service providers, including credit for pesticide/other agrochemicals, livestock purchasing, irrigation, etc.?			
25. Do the project activities include natural resources-based value chain development?			
26. Would any of the project activities have minor adverse impacts on physical cultural resources?			
27. Would the project have low probability to have physical resettlement or economic displacement?			
28. Does the project include development of agro-processing facilities?			
29. Will the project require a migrant workforce during construction?			
30. Will the project require seasonal workers to plant and/or harvest produce?			
31. Will the construction or operation of the project cause an increase in traffic on rural roads?			

Guidance for sub-project categorization

"Yes" response to any of questions 1-13	Sub-project Environmental and social category is A	The project will not invest in Category A sub project and the screening is not required
"Yes" response to questions 14-31	Sub-project Environmental and social category is B	Sub-project to adopt the ESMP in the general ESMF
"No" response to almost all questions	Subproject Environmental and social category is C	No further analysis is required

B: Screening Form for (Market) Infrastructure Sub-Projects

Name of market infrastructure:	
Infrastructure type:	
Location:	
Proposed Date of Commencement:	
Expected Project duration:	
Estimated cost:	

Estimate number of communities to be served:	
Estimated number of entrepreneur to be served:	

B1: Screening for (Market) Infrastructure Sub-projects

Question	Yes	No
1. Will the project activities include construction/rehabilitation of rural roads or other rural infrastructure in protected/sensitive areas ⁷⁰ ?		All road length < 10 km
2. Does the project include construction of roads or other infrastructure that entail the total area being cleared of 50 ha or above?		
3. Does the project include construction of dam (s)/reservoir (between 5-15 m high with a reservoir exceeding 2 million m ³)?		
4. Does the project involve large-scale irrigation schemes rehabilitation/ development (above 100 ha)?		
5. Does the project involve significant extraction of ground water (significantly above recharge capacity)?		
6. Does the project include water-based (ground or surface) development where it is believed that significant depletion due to climate change or overutilization has occurred?		
7. Does the project involve significant extraction, diversion or containment of surface water?		
8. Does the project include drainage or correction of natural water bodies (e.g. river draining)?		
9. Will the project include construction/rehabilitation of rural roads that pass through oil infrastructure locations such as flow stations, tank farms or oil and gas pipelines?		
10. Would any of the project activities have minor adverse impacts on physical cultural resources?		
11. Does the project include development of agro-processing facilities?		
12. Will the project require a migrant workforce during construction?		
13. Will the construction or operation of the project cause an increase in traffic on rural roads?		
14. Has the government or community guaranteed the lease of the land for the (market) infrastructure?		
15. Is there any plan in place for sustainability of the infrastructure during the project life time?		
16. Does the project include specific measures to protect against dust (such as dust masks and water spraying)?		

⁷⁰ ‘Sensitive areas’ include: protected areas (national parks, wildlife/nature reserves, biosphere reserves); areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance) and areas with high social vulnerability due to poverty, disease, ethnicity and race.

17. Has arrangement been made to pay adequate compensation for private property that may be affected by the construction of the project?		
18. Will construction equipment with moderate decibels be used and the timing of use be so that people will experience less discomfort?		
19. Will tree and vegetation replanting be carried out to stabilize slopes and re-green road sides?		

Guidance for categorization

"Yes" response to any of questions 1-9	Environmental and social category is A	The project will not invest in Catgery A sub project and the screening is not required
"Yes" response to questions 10-13	Environmental and social category is B	Sub-project to adopt the general ESMP in the ESMF
"No" response to almost all questions 1-13 and 'Yes' to questions 14-19	Environmental and social category is C	No further analysis is required

C: Climate Screening Form for Sub-Projects

To be used with the environmental and social screening forms.

Screening for Climate Issues

Question	Yes	No	Additional Explanation of 'Yes' response*
18. Is the project area subject to extreme climatic events such as flooding, drought, tropical storms, or heat waves?			
19. Do climate scenarios for the project area foresee changes in temperature, rainfall or extreme weather that will adversely affect the project impact, sustainability or cost over its lifetime?			
20. Will the project make investments in low-lying coastal areas/ zones exposed to river flooding and coastal storm surge?			

Question	Yes	No	Additional Explanation of 'Yes' response*
21. Will the project promote agricultural activity in marginal and/or highly degraded areas that have increased sensitivity to climatic events (such as on hillsides, deforested slopes or floodplains)?			
22. Is the project located in areas where rural development projects have experienced significant weather-related losses and damages in the past?			
23. Will the project develop/ install infrastructure in areas with a track record of extreme weather events?			
24. Is the project target group entirely dependent on natural resources (such as seasonal crops, rain-fed agricultural plots, and migratory fish stocks) that have been affected by in the last decade by climate trends or specific climatic events?			
25. Will climate variability likely affect agricultural productivity (crops/ livestock/fisheries) or the associated incidence of pests and diseases for the project target groups?			
26. Would weather-related risks or climatic extremes likely adversely impact upon key stages of identified value chains in the project (from production to markets)?			
27. Is the project investing in climate-sensitive livelihoods that are diversified?			
28. Is the project investing in infrastructure that is exposed to infrequent extreme weather events?			
29. Is the project investing in institutional development and capacity building for rural institutions (such as farmer groups, cooperatives) in climatically heterogeneous areas?			
30. Does the project have the potential to become more resilient through the adoption green technologies at a reasonable cost?			
31. Does the project intervention have opportunities to strengthen indigenous climate risk management capabilities?			
32. Does the project have opportunities to integrate climate resilience aspects through policy dialogue to improve agricultural sector strategies/policies?			
33. Does the project have potential to integrate climate resilience measures without extensive additional costs (e.g. improved crop variety, capacity building; or including climate risk issues in policy processes)			
34. Based on the information available would the project benefit from a more thorough climate risk and vulnerability analysis to identify additional complementary investment actions to manage climate risks?			

Guidance for categorization

"Yes" response to any of questions 1-9	Sub-project Climate risk is High	Climate risk Analysis is required for sub-project
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"No" response to almost all questions	Sub-project climate risk is moderate	Sub-project to adopt the ESMP in the general ESMF
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Annex 3 - Environmental and Social Guidelines for contractors⁷¹ (for reference in contractor agreements/contracts)

Sound environmental and social management of construction projects can be achieved only with adequate site selection and project design. As such, the ESMP for projects involving any new construction, or any rehabilitation or reconstruction for existing projects, should provide information as to screening criteria for site selection and design including the following:

Site Selection

Sites should be chosen based on community needs for additional projects, with specific lots chosen based on geographic and topographic characteristics. The site selection process involves site visits and studies to analyze: (i) the site's, sub-urban, or rural characteristics; (ii) national, regional, or municipal regulations affecting the proposed sites; (iii) accessibility and distance from inhabited areas; (iv) land ownership, including verification of absence of squatters and/or other potential legal problems with land acquisition; (v) determination of site vulnerability to natural hazards, (i.e. intensity and frequency of floods, landslides, etc.); (vi) suitability of soils and sub-soils for construction; (vii) site contamination; (viii) flora and fauna characteristics; (ix) presence or absence of natural habitats and/or ecologically important habitats on site or in vicinity (e.g. forests, wetlands, rare or endangered species); and (ix) historic and community characteristics.

The rules (including specific prohibitions and construction management measures) should be incorporated into all relevant bidding documents, contracts, and work orders.

Prohibitions

The following activities are prohibited on or near the project site:

- Cutting of trees for any reason outside the approved construction area;
- Hunting, fishing, wildlife capture, or plant collection;
- Use of unapproved toxic materials, including lead-based paints, asbestos, etc.
- Disturbance to anything with architectural or historical value;
- Building of fires;
- Use of firearms (except by authorized security guards);
- Use of alcohol by workers.
- Use of all forms of forced labor and child labor
- Unfair treatment and discrimination of workers

Construction Management Measures

Solid, sanitation, and hazardous wastes must be properly controlled, through the implementation of the following measures:

Waste Management:

- Minimize the production of waste that must be treated or eliminated;
- Identify and classify the type of waste generated. If hazardous wastes (including health care wastes) are generated, proper procedures must be taken regarding their storage, collection, transportation and disposal;
- Identify and demarcate disposal areas clearly indicating the specific materials that can be deposited in each;
- Control placement of all construction waste (including earth cuts) to approved disposal sites (>300 m from rivers, streams, lakes, or wetlands). All garbage, metals, used oils, and excess material generated during construction should only be disposed in authorized areas, incorporating recycling systems and the separation of materials.

Maintenance:

- Identify and demarcate equipment maintenance areas (>15m from rivers, streams, lakes or wetlands);

⁷¹ Adapted from Ministry of Agriculture, Irrigation and Water Development, Republic of Malawi (2015) *Environmental and Social Management Framework for Programme for Rural Irrigation Development in Malawi*, pp.76-80.

- Ensure that all equipment maintenance activities, including oil changes, are conducted within demarcated maintenance areas; never dispose spent oils on the ground, in water courses, drainage canals or in sewer systems;
- Identify, demarcate and enforce the use of within-site access routes to limit impact on site vegetation;
- Install and maintain an adequate drainage system to prevent erosion on the site during and after construction.

Erosion Control

- Erect erosion control barriers around perimeter of cuts, disposal pits, and roadways;
- Spray water on dirt roads, cuts, fill material and stockpiled soil to reduce wind-induced erosion, as needed;
- Maintain vehicle speeds at or below 10mph within the work area, 15mph or below within 200m of the site, and abide by the relevant speed limits at all times to / from the work area.

Stockpiles and Borrow Pits

- Identify and demarcate locations for stockpiles and borrow pits, ensuring that they are 15 meters away from critical areas such as steep slopes, erosion-prone soils, and areas that drain directly into sensitive water bodies;
- Limit extraction of material to approved and demarcated borrow pits.

Site Cleanup

- Establish and enforce daily site clean-up procedures, including maintenance of adequate disposal facilities for construction debris.

Safety during Construction

The Contractor's responsibilities include the protection of every person and nearby property from construction accidents. The Contractor shall be responsible for complying with all national and local safety requirements and any other measures necessary to avoid accidents, including the following:

- Carefully and clearly mark pedestrian-safe access routes;
- If school children are in the vicinity, include traffic safety personnel to direct traffic;
- Maintain supply of supplies for traffic signs (including paint, easel, sign material, etc.), road marking, and guard rails to maintain pedestrian safety during construction;
- Conduct safety training for construction workers prior to beginning work;
- Provide personal protective equipment (PPE) and clothing (such as goggles, gloves, respirators, dust masks, hard hats, steel-toed and -shanked boots, etc.,) for construction workers and enforce their use;
- Post Material Safety Data Sheets for each chemical present on the worksite;
- Require that all workers read, or have read, all Material Safety Data Sheets. Clearly explain the risks to them and their partners, especially when pregnant or planning to start a family. Encourage workers to share the information with their physicians, when relevant;
- Ensure that the removal of asbestos-containing materials or other toxic substances be performed and disposed of by specially trained workers;
- During heavy rains or emergencies of any kind, apply construction safeguards guidelines;
- Brace electrical and mechanical equipment to withstand unexpected events during construction.

Nuisance and Dust Control

To control nuisance and dust the Contractor should:

- Maintain all construction-related traffic at or below 15 mph on streets within 200 m of the site;
- Maintain all on-site vehicle speeds at or below 10 mph;
- To the extent possible, maintain noise levels associated with all machinery and equipment at or below 90db;
- In sensitive areas (including residential neighborhoods, health centers, schools, etc.) more strict measures may need to be implemented to prevent undesirable noise levels;
- Minimize production of dust and particulate materials at all times, to avoid impacts on surrounding families and businesses, and especially to vulnerable people (children, elderly);
- Phase removal of vegetation to prevent large areas from becoming exposed to wind;
- Place dust screens around construction areas, paying particular attention to areas close to housing, commercial areas, and recreational areas;

- Spray water as needed on dirt roads, cut areas and soil stockpiles or fill material;
- Apply proper measures to minimize disruptions from vibration or noise coming from construction activities.

Community Relations

To maintain cordial community relations, the Contractor should:

- Following the country and ESMP requirements, inform the population about construction and work schedules, interruption of services, traffic detour routes, as appropriate;
- Limit construction activities at night. When necessary ensure that night work is carefully scheduled and the community is properly informed so they can take necessary measures;
- At least five days in advance of any service interruption (including water, electricity) the community must be advised through clearly visible posters at the project site and at central community locations;
- Where possible, particularly for tasks that can also be performed through low-skilled manual labor (such as digging of shallow trenches, etc.), make use of labor from the local community.

Chance Find Procedures for Culturally Significant Artifacts

In case culturally valuable materials (incl. shrines, graves, etc.) are uncovered during excavation:

- Stop work immediately following the discovery of any materials with possible archeological, historical, paleontological, or other cultural value, announce findings to project manager and notify relevant authorities;
- Protect artifacts as well as possible using plastic covers, and implement measures to stabilize the area, if necessary, to properly protect artifacts;
- Prevent and penalize any unauthorized access to the artifacts;
- Restart construction works only upon the authorization of the relevant authorities.

Environmental Supervision during Construction

The bidding documents should indicate how compliance with environmental rules and design specifications would be supervised, along with the penalties for non-compliance by contractors or workers. Construction supervision requires oversight of compliance with the manual and environmental specifications by the contractor or his designated environmental supervisor. Contractors are also required to comply with national and state regulations governing labour, the environment, public health and safety.

Annex 4 – Checklist for Construction Works

Based on the National Environmental (Construction Sector) Regulations (2011), at every construction facility the following checklist should be implemented:⁷²

- (1) Every facility shall implement programmes on best practices as set out in Schedule I of the Regulations while taking recognition of workers organizations
- (2) Every facility shall provide base for ancillary equipment and bund wall for containment of waste oil in the event of any unanticipated discharge or spillage.
- (3) Every operator of construction facility/site shall ensure:
 - (a) it has a functional, adequate and appropriate drainage system for the project;
 - (b) the separation or diversion of clean water runoff to prevent it from mixing with water containing high solid particle content;
 - (c) it minimizes the volume of water to be treated prior to release (same as storm water control system);
 - (d) the use of color coding for the drainage system such as blue for surface water drains and red for foul water drains;
 - (e) safe movement of materials and fuel to and from site;
 - (f) tanks are clearly labelled with their contents and storage capacity;
 - (g) workers are trained to carry out the outlined procedures in the Emergency Response Plan as specified in Schedule II to the Regulations;
 - (h) absorbent materials and other containment equipment (e.g. spill kits) suitable for the construction type, are available in adequate quantity on site; and
 - (i) all tanks are properly covered.
- (4) The operator shall ensure:
 - (a) high standard of housekeeping;
 - (b) that dust/particulate matter arising from loaded trucks entering or leaving the site is kept to a minimum level by the use of tarpaulin materials as cover and that water sprays or other dust suppression or collection methods are used at every dusty place where work is carried out;
 - (c) appropriate use of Personnel Protective Equipment (PPE) by all persons at construction site as in Schedule VI to the Regulations;
- (5) Every facility shall have an Emergency Response Plan in accordance with the guide template specified in Schedule II to these Regulations.

⁷² National Environmental (Construction Sector) Regulations (2011). S.I. No.19.

Annex 5 - Social Inclusion Strategy

*"In every country, certain groups (...) Confront barriers that prevent them from fully participating in their nation's political, economic, and social life. These groups are branded by stereotypes, stigmas, and superstitions. They often live with insecurity. And such disadvantages not only preclude them from capitalizing on opportunities to lead a better life, they also rob them of dignity."*⁷³

Social inclusion means different things to different people. In its flagship publication on the topic, the World Bank defines social inclusion as "the process of improving the ability, opportunity, and dignity of people, disadvantaged on the basis of their identity, to take part in society."⁷⁴ A strategy for social inclusion should therefore both address the above-mentioned 'barriers' as well as strengthen the capacities that disadvantaged groups in society require to make the most of development opportunities and realize their full potential.

The PROSPER will directly contribute to social inclusion by actively focusing on unemployed youth and women, which together with people with disabilities and widows remain among the most disadvantaged groups in The society.⁷⁵ To ensure fragile areas are eas are not entirely excluded from project activities and left marginalized, PROSPER is advised to develop tailor-made solutions in those locations where there is at least a commitment to safe access for the project so that youth and women in such areas will still be able to participate in different value chain components.

Using the World Bank's advice to focus on three critical 'inclusion domains' of markets, services and spaces, PROSPER can help promote social inclusion in the project area through the following instruments and policies:

1. Markets (Land, Regulatory Framework)

- Negotiate with traditional authorities in local communities for long-term land access by women and youth for agri-enterprise activities;
- Negotiate with state governments to allocate larger plots of unused (but suitable) farmland and provide security of tenure for women and youth associations for agri-enterprise activities;
- Support legislative reform establishing gender parity in land ownership and inheritance;
- Closely monitor project progress, hold regular meetings with leaders/representatives of women and youth organizations to discuss project challenges, and provide additional (technical) support where needed.

2. Services (Training, Financial, Labour, ICT)

- Provide refresher, advanced and/or top-up skills training on-site for women and youth (on any relevant topic that hinders progress in their agri-enterprises) in combination with intensive mentoring support;
- Support opportunities for information sharing, whereby women and youth who are currently not part of the project can visit the agri-enterprise sites and whereby entrepreneurs can share their experiences (including reasons for failure and success);
- Negotiate with agricultural banks to provide preferential credit arrangements for high-potential women or youth agri-entrepreneurs;
- Encourage contractors / service providers to give employment preference to local community members (e.g. via 'code of conduct');
- Organize a 'hackathon' together with a technology-oriented innovation centre to develop a special app for rural youth in the project area to promote farming and facilitate market access as well as create an online platform that allows women and youth to showcase their achievements and experiences with wider society and other relevant actors (e.g. government and donor agencies).

3. Spaces (Physical, Cultural, Social)

- Liaise with local police to ensure security in farming areas, markets and access routes;

⁷³ World Bank (2013) *Inclusion Matters: The Foundation for Shared Prosperity* (WB: Washington, D.C.), p.xv.

⁷⁴ Idem, p.4.

⁷⁵ Widows are often dispossessed of their late spouses' property including land by the spouse's kinsmen. Special consideration and protection needs to be given to this category of vulnerable people to make sure they have access to land and other productive bases.

- Organize public awareness-raising campaigns in consultation with local CSOs to promote farming, encourage inclusive community-level decision-making, prevent intra-community conflict and reduce gender-based violence;
- In general, ensure that initial screening, selection and support to project beneficiaries by community leaders and others at the grassroots level is based on merit and need rather than lingering primordial considerations;
- To prevent climate-induced exclusion, recommended climate change adaptation and mitigation measures should be given priority. Many beneficiaries may not be able to bounce back once they are affected by hydro-meteorological disasters such as flooding and erosion.

Annex 6 –Stakeholders Consultations (evidence from various locations – Design mission August 10-15, 2021- Kumasi & Tamale)

B. Guiding questions for environment and social screening	Yes/No	Comments/explanation
Category A project: The project will not invest in Category A sub project and the screening is not required		
Project location		
32.Would the project develop any wetlands? (Guidance statement GS1)	No	
33.Would the project cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. conversion of more than 50 hectares of natural forest, loss of habitat, erosion/other form of land degradation, fragmentation, and hydrological changes)? (GS 1, 2 & 5)	No	
34.Does the proposed project target area include ecologically sensitive areas,⁷⁶ areas of global/national significance for biodiversity conservation and/or biodiversity-rich areas and habitats depended on by endangered species? (GS1)	No	
35.Is the project location subjected to major destruction as a result geophysical hazards (tsunamis, landslides, earthquakes, volcanic eruptions)?	No	
Natural resources		
36.Would the project lead to unsustainable natural resource management practices (fisheries, forestry, livestock) and/or result in exceeding carrying capacity. For example, is their development happening in areas where little up-to-date information exists on sustainable yield/carrying capacity? (GS 4, 5 and 6)	No	
37.Would the project develop large-scale⁷⁷ aquaculture or mariculture projects, or where their development involves significant alteration of ecologically sensitive areas?	No	
38.Would the project result in significant use of agrochemicals which may lead to life-threatening illness and long-term public health and safety concerns? (GS 14)	No	
39.Does the project rely on water-based (ground and/or surface) development where there is reason to believe that significant depletion and/or reduced flow has occurred from the effects of climate change or from overutilization? (GS7)	No	
40.Does the project pose a risk of introducing potentially invasive species or GMOs which might alter genetic traits of indigenous species or have an adverse effect on local biodiversity? (GS1)	No	

⁷⁶ “Sensitive areas” include: protected areas (national parks, wildlife/nature reserves, biosphere reserves) and their buffer zones; areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance) and areas with high social vulnerability.

⁷⁷ The size threshold to trigger an Environmental and Social Impact Assessment (ESIA) may vary based on the country context and fragility of specific locations. Some countries have regulations on minimum size (usually ranging from a unit area of 10 to 50 hectares) and these will be adopted where they exist. However, where there are no standards, it is proposed to use 25 hectares as an aquaculture unit size to trigger ESIA.

41. Does the project make use of wastewater (e.g. industrial, mining, sewage effluent)? (GS7)	No	
Infrastructure development		
42. Does the project include the construction/rehabilitation/upgrade of dam(s)/reservoir(s) meeting at least one of the following criteria? (GS8) - more than 15 metre high wall or - more than 500 meter long crest or - more than 3 million m ³ reservoir capacity or - incoming flood of more than 2,000 m ³ /s	No	
43. Does the project involve large-scale irrigation schemes rehabilitation/development (above 100 hectares per scheme)?⁷⁸ (GS7)	No	
44. Does the project include construction/rehabilitation/upgrade of roads that entail a total area being cleared above 10 km long, or any farmer with more than 10 per cent of his or her private land taken? (GS10)	No	Rehabilitation/construction of feeder roads and/or track roads will vary between 7 km to 9.50 km just to link villages to farming areas.
45. Does the project include drainage or correction of natural water bodies (e.g. river training)? (GS7)	No	
46. Does the project involve significant extraction/diversion/containment of surface water, leaving the river flow below 20 per cent environmental flow plus downstream user requirements? (GS7)	No	
Social		
47. Would the project result in economic displacement⁷⁹ or physical resettlement of more than 20 people, or impacting more than 10 per cent of an individual household's assets? (GS13)	No	
48. Would the project result in conversion and/or loss of physical cultural resources? (GS9)	No	
49. Would the project generate significant social adverse impacts to local communities (including disadvantaged and vulnerable groups and indigenous people) or other project-affected parties? (GS13)	No	
Other		
50. Does the project include manufacture and transportation of hazardous and toxic materials which may affect the environment? (GS2)	No	
51. Does the project include the construction of a large or medium-scale industrial plant?	No	
52. Does the project include the development of large-scale production forestry? (GS5)	No	
Rural finance		
53. Does the project support any of the above (Q1 to Q22) through the provision of a line of credit to financial service providers? (GS12)	No	

⁷⁸ The size threshold to trigger an Environmental and Social Impact Assessment (ESIA) may vary based on the country context and fragility of specific locations. Some countries have regulations determining size of irrigation development requiring a full ESIA and these will be adopted where they exist. However, where there are no standards, it is proposed to use 100 hectares as an irrigation development unit size to trigger an ESIA.

⁷⁹ Economic displacement implies the loss of land, assets, access to assets, income sources or means of livelihoods (guidance statement 13).

Category B – the following may have some adverse environmental and/or social implications which can be readily remedied.

Location		
54. Does the project involve agricultural intensification and/or expansion of cropping area in non-sensitive areas that may have adverse impacts on habitats, ecosystems and/or livelihoods? (GS1, 2 and 12)	No	
Natural resource management		
55. Do the project activities include rangeland and livestock development? (GS6)	TBD	For nutrition and health improvement with small ruminant as IGA.
56. Does the project involve fisheries where there is information on stocks, fishing effort and sustainable yield? Is there any risk of overfishing, habitat damage and knowledge of fishing zones and seasons? (GS4)	No	
57. Would the project activities include aquaculture and/or agriculture in newly introduced or intensively practiced areas? Do project activities include conversion of wetlands and clearing of coastal vegetation, change in hydrology or introduction of exotic species? (GS4)	No	
58. Do the project activities include natural resources-based value chain development? (GS 1, 6 and 12)	Yes	Yes but only eligible activities under Category B criteria considered see (PDR and ESMF) with key mitigation measures
59. Do the project activities include watershed management or rehabilitation?	Yes	Yes but only eligible activities under Category B criteria considered see (PDR and ESMF) with key mitigation measures
60. Does the project include large-scale soil and water conservation measures? (GS 1 and 5)	No	
Infrastructure		
61. Does the project include small-scale irrigation and drainage, and small and medium (capacity < 3 million m³) dam subprojects? (GS 7 and 8)	Yes	Yes, mostly small scale socioeconomic infrastructure to support RIIs and local farmers
62. Does the project include small and microenterprise development subprojects? (GS 12 and 13)	Yes	Yes but only eligible activities under Category B criteria considered see (PDR and ESMF) with key mitigation measures
63. Does the project include the development of agro processing facilities? (GS 2, 6 and 12)	Yes	
64. Would the construction or operation of the project cause an increase in traffic on rural roads? (GS10)	No	
Social		
65. Would any of the project activities have minor adverse impacts on physical cultural resources? (GS9)	No	
66. Would the project result in physical resettlement of less than 20 people, or impacting less than 10 per cent of an individual household's assets (GS13)?	No	

67.Would the project result in short-term public health and safety concerns? (GS14)	No	
68.Would the project require a migrant workforce or seasonal workers (for construction, planting and/or harvesting)? (GS13)	No	
Rural finance		
69.Does the project support any of the above (Q24 to Q37) through the provision of a line of credit to financial service providers? (GS12)	Yes	Yes but only eligible activities under Category B criteria considered see (PDR and ESMF) with key mitigation measures

Ghana

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Project Design Report

Annex 6: First Annual Work Plan and Budget (AWPB)

Mission Dates: 02/08/2021 to 20/09/2021

Document Date: 22/11/2021

Project No. 2000002673

Report No. 5864-GH

West and Central Africa Division
Programme Management Department

Republic of Ghana										
PROSPER										
Component 1										
Subcomponent 1.1. Capacity Building of Rural Institutions Enterprises [1.1]										
Detailed Costs										
(US\$)										
		Unit	Quantity 2022	Quantity 2023 (half)	Total (2022 + half 2023)	Cumulative expenditure (000' USD)	Plan (18 months)	TOT IFAD	Financier rule (2022 and half 2023, USD)	
									GCF	GOG
									TOT GCF	TOT GOG
									TOT PFIs	Beneficiaries
									TOT Ben	Private Sector
									TOT PS	
I. Investment Costs										
A. CapaCity Building of Rural Institutions, Enterprises and Households										
1. Community mobilisation, cluster identification and planning										
a. Community mobilisation										
Workshop/consultation with stakeholders at regional level	workshop	2	1	3	31 787	30 198	0	1 589	0	0
Workshop/consultation with stakeholders at district level	workshop	10	10	20	42 559	40 431	0	2 128	0	0
b. Cluster identification										
Meetings at community level for identification of clusters	meetings	50	50	100	21 279	20 215	0	1 064	0	0
Training of trainers for extension staff /a	training	20	10	30	47 681	45 297	0	2 384	0	0
c. Cluster planning										
Cluster consultation and synthesis meetings	cluster	80	75	155	82 424	78 303	0	4 121	0	0
d. Support by RDAs/DDAs to Field Activities										
Regional/national depts of MoFA and other line ministries	days	300	250	550	29 226	27 765	0	1 461	0	0
DDA support for community mobilization and cluster planning	days	1200	900	2100	22 304	18 958	0	3 346	0	0
Subtotal					51 530	46 723	0	4 807	0	0
2. Community nutrition and healthy diet campaign										
a. Nutrition										
Participatory Needs Assessment	LS	3	0	3	15 762	13 398	0	2 364	0	0
Nutrition Knowledge, attitude, and practice study (KAP)	LS	0	0.5	0.5	4 039	3 433	0	606	0	0
Training on HH nutrition and household methodology	HH	0	25	25	5 386	5 116	0	269	0	0
Nutrition education for communities /b	HH	0	25	25	2 693	2 558	0	135	0	0
Training on Financial literacy - HH economics	cluster	0	25	25	2 693	2 558	0	135	0	0
Climate smart HH nutrition gardens; demos and training /c	HH	0	25	25	6 732	6 395	0	337	0	0
Dedicated training on post-harvest management	cluster	0	25	25	6 732	6 395	0	337	0	0
DDA Extension Field Support /d	days	200	100	300	3 179	3 020	0	159	0	0
Regional / National of MOFA and Other Line Ministries for nutrition	days	100	50	150	7 947	7 549	0	397	0	0
b. capacitation of rural institutions										
Awareness raising for Youth Farmership Development	Workshop	10	5	15	9 536	9 059	0	477	0	0
Training on organisational capacity	group	30	30	60	51 070	48 517	0	2 554	0	0
Training on NRM Sustainability training	Training	30	45	75	63 996	60 796	0	3 200	0	0
Training on Sustainable Use of Pesticides and Fertilizers (ESMP) /e	Training	15	22.5	37.5	31 998	30 398	0	1 600	0	0
Climate adaptation and mitigation demonstrations (ESMP) /e	demo	15	22.5	37.5	79 995	75 995	0	4 000	0	0
Training on farming as a business including climate/NRM	cluster	15	22.5	37.5	59 996	56 996	0	3 000	0	0
Training on enterprise Dev't including climate/NRM aspects	cluster	15	22.5	37.5	31 998	30 398	0	1 600	0	0
Training of trainers for extension staff including climate/NRM	district	10	5	15	47 681	45 297	0	2 384	0	0
Training of trainers for extension staff on IFAD SECAP and EPA Procedures	district	0.2	0	0.2	21 016	19 965	0	1 051	0	0
DDA Extension Field Support for nutrition	days	1200	600	1800	19 072	16 212	0	2 861	0	0
Support by Regional/national depts of MoFA and other line ministries /f	days	120	60	180	9 536	9 059	0	477	0	0
3. TA (national)	months	8	7.5	15.5	57 697	49 043	0	8 655	0	0
4. Gender, Vulnerability & Social Inclusion Specialist	person/year	0.5	0.5	1	43 282	0	36 790	6 492	0	0
5. Climate and Safeguard Specialist/g	person/year	0.5	0.5	1	53 624	0	45 580	8 044	0	0
6. Institutional support to Extension Services										
motorcycles for AEAs at district level	motorcycle	50	0	50	110 334	93 784	0	16 550	0	0
Laptops	unit	50	0	50	27 584	23 446	0	4 138	0	0
Assessment, categorization and creation of database of FBOs (including performance monitoring)	unit	1	0	1	105 080	89 318	0	15 762	0	0
Protective gear	lumpsum	0.2	0.05	0.25	27 722	23 564	0	4 158	0	0
7. Mini-Weather Stations (ESMP) /i	lumpsum	0	0.15	0.15	67 859	57 680	0	10 179	0	0
II. Recurrent Costs										
A. GoG staff pro rata time on PROSPER activities										
1. Chief Director	person/year	1	0.5	1.5	954	0	0	954	0	0
2. Director Project Planning M&E	person/year	1	0.5	1.5	922	0	0	922	0	0
3. Director of MOFA Extension Services	person/year	1	0.5	1.5	1 526	0	0	1 526	0	0
4. Regional Director of Agriculture	person/year	3	1.5	4.5	4 577	0	0	4 577	0	0

	5. Senior Agric Officer (Regional Rep for PROSPER)	person/year	3	1.5	4.5	1 287	0	0	1 287	0	0	0
	6. District Director of Agriculture	person/year	8	12	20	16 426	0	0	16 426	0	0	0
	7. District Planning Officer	person/year	8	12	20	7 253	0	0	7 253	0	0	0
	8. District Works Engineer	person/year	8	12	20	14 612	0	0	14 612	0	0	0
	9. Management Information Officers (MISOs)	person/year	8	12	20	7 253	0	0	7 253	0	0	0
	10. Accountants	person/year	8	12	20	4 480	0	0	4 480	0	0	0
	11. Crop Officers	person/year	8	12	20	18 132	0	0	18 132	0	0	0
	12. WIAD Officers	person/year	8	12	20	18 132	0	0	18 132	0	0	0
	13. Agriculture Extension Officers	person/year	24	36	60	69 116	0	0	69 116	0	0	0
Total						0	1 416 169	1 051 119	82 370	282 680	0	0
Subcomponent 1.2. Development of Socioeconomic Infrastructure [1.2]												
I. Investment Costs												
A. Development of socio-economic infrastructure												
	1. Off-farm/watershed works	cluster	0	10	10	277 091	235 527	0	41 564	0	0	0
	2. Feeder roads and farm tracks	km	0	10	10	554 181	471 054	0	83 127	0	0	0
	3. Communal social infrastructure	cluster	0	10	10	254 471	216 300	0	38 171	0	0	0
	4. Site Monitoring of Environmental, Climate and Social Conditions [ESMP]	lumpsum	0	0.5	0.5	47 124	40 056	0	7 069	0	0	0
	5. Infrastructure Engineer	person/year	0.5	0.5	1	53 624	45 580	0	8 044	0	0	0
	6. District Staff Field Support	days	0	60	60	646	614	0	32	0	0	0
Total						1 187 138	1 009 132	0	178 006	0	0	0
Total Component 1						2 603 306	2 060 250	82 370	460 686	0	0	0
Component 2												
Subcomponent 2.1 Sustainable marketing linkages and business development												
I. Investment Costs												
A. Sustainable marketing linkages and business development.												
	1. Value chain analysis											
	a. Value chain studies and integration of climate risks /a	lumpsum	0.3	0.35	0.65	88 260	88 260	0	15 575	0	0	0
	b. Scoping and mapping of operational VC actors in target areas /b	lumpsum	0.3	0	0.3	95 962	80 387	0	14 186	0	0	0
	Subtotal					182 832	168 647	0	29 761	0	0	0
	2. Establish and maintain value chain bodies	Lumpsum	1	0.5	1.5	63 535	33 774	0	5 960	0	0	0
	3. Promotion of linkages between producers and VC actors											
	a. Engagement with VC actors											
	Support by DDA to collect information /c	field days	200	100	300	3 020	3 020	0	159	0	0	0
	District-level meetings	meeting	10	7.5	17.5	44 302	44 143	0	2 323	0	0	0
	Discussions with interested VC actors	lumpsum	0.1	0.1	0.2	32 646	30 323	0	1 596	0	0	0
	Subtotal					79 082	77 486	0	4 078	0	0	0
	b. Creation of and support for partnerships											
	DDA support for the trainings and demonstrations /d	field days	500	375	875	2 649	2 649	55 030	465	0	0	0
	Training of RIs and MSMEs on climate risks and integration into BPs /e	cluster	40	25	65	79 079	23 584	100 889	4 138	0	0	0
	Training of RIs and MSMEs on VC linkages and green bankable BPs	cluster	40	25	65	148 265	43 238	82 545	7 586	0	0	0
	Demonstrations on climate risks and green BPs	cluster	40	25	65	125 508	35 377	68 788	6 206	0	0	0
	BRCs/BACs support for Partnerships creation between RIs, MSMEs and VC ad	cluster	40	25	65	104 475	29 481	68 788	5 172	0	0	0
	Demonstrations dedicated for women and youth on climate risks/green BPs	cluster	40	25	65	103 440	29 481	0	5 172	0	0	0
	Partnerships creation between RIs, MSMEs and VC actors /g	cluster	40	25	65	201 709	196 537	382 221	10 344	0	0	0
	Subtotal					752 910	360 346	382 221	39 082	0	0	0
	Subtotal					859 134	437 831	0	43 161	0	0	0
	4. Development of Business Plans.											
	a. Preparation of business plans for RIs & MSMEs - MG window											
	Call for preparation BPs at cluster level	cluster	40	25	65	3 276	3 276	0	172	0	0	0
	BRCs/BACs for Preparation of BPs under Matching Grant Window	cluster	40	25	65	65 685	65 512	0	3 448	0	0	0
	DDAs Support for BPs Preparation	days	300	200	500	8 489	5 041	0	265	0	0	0
	MoFA regional and central departments	days	80	60	140	7 328	7 063	0	372	0	0	0
	Subtotal					81 264	80 892	0	4 257	0	0	0
	b. Evaluation of business plans at RIs/MSMEs level - MG window	LS	0.1	0.1	0.2	13 301	9 044	0	1 596	0	0	0
	c. Preparation of business plans for RIs linked to VC Actors (BFF) /h											
	Call for preparation of ABPs for RIs	cluster	0	15	15	767	767	0	40	0	0	0
	BRCs/BACs for Preparation of ABPs for RIs (BFF)	cluster	0	15	15	30 738	30 698	0	1 616	0	0	0
	Subtotal					33 081	31 466	0	1 656	0	0	0
	d. Preparation of business plans for SMEs (standalone) - (BFF)					1 656	0	0	0	0	0	0
	Call for preparation of ABPs for MSMEs	cluster	0	15	15	767	767	0	40	0	0	0
	BRCs/BACs for Preparation of ABPs for MSMEs (BFF)	cluster	0	15	15	15 389	15 349	0	808	0	0	0
	Subtotal					0	0	16 924	16 116	0	848	0
	Subtotal					0	0	138 366	137 518	0	8 358	0
	5. Technical Assistance to Support to the BRCs/ BACs					0	0	8 358	0	0	0	0

	Design of assessment process	Nat consultant	0	0.5	0.5	22 889	22 889	0	4 039	0	0	0
	TA for support for partnership creation and preparation of BPs	month	24	18	42	136 747	132 708	0	23 419	0	0	0
	Subtotal			0	0	179 015	155 596	0	27 458	0	0	0
	6. Value Chain Specialists			0	0	27 458	0	0	0	0	0	0
	a. Senior Value Chain Development Specialist	person/year	0	0.5	0.5	23 072	23 072	0	4 072	0	0	0
	b. Value Chain Development Specialist	person/year	0	1	1	41 316	37 245	0	6 573	0	0	0
	Subtotal					66 890	60 317	0	10 644	0	0	0
	7. Institutional support to Value Chains											
	Support to veterinary services in MoFA and at districts	Lumpsum	0.1	0.05	0.15	21 278	21 278	0	3 755	0	0	0
	Support for the cocoa board for shea tree domestication program	Lumpsum	0.1	0.05	0.15	25 033	21 278	0	3 755	0	0	0
	Subtotal					46 310	42 555	382 221	7 510	0	0	0
	Total Investment Costs					1 425 969	1 036 238	0	132 852	0	0	0
	II. Recurrent Costs					132 852	0	0	0	0	0	0
	A. GoG staff pro rata time on PROSPER activities											
	1. District Director of Agriculture	person/year	10	15	25	0	0	0	10 281	0	0	0
	2. District Planning Officer	person/year	10	15	25	10 281	0	0	22 836	0	0	0
	3. Crop Officers	person/year	10	15	25	22 836	0	0	45 672	0	0	0
	4. WIAD Officers	person/year	10	15	25	45 672	0	0	45 672	0	0	0
	5. Agriculture Extension Officers	person/year	30	45	75	45 672	0	0	43 301	0	0	0
	Total Recurrent Costs					43 301	0	382 221	167 761	0	0	0
Total						1 586 220	1 036 238	0	300 613	0	0	0
Subcomponent 2.2. Access to Financial Services												
	I. Investment Costs											
	A. Access to Rural Financial Services.											
	1. Savings mobilisation											
	a. Promotion of Savings and Credit Group Methodology											
	Training of trainers and mentors /a	Training	2	0.5	2.5	3 168	3 010	0	158	0	0	0
	VSLA training and mentoring /b	Groups	850	425	1275	337 741	320 853	0	16 887	0	0	0
	RCB training on VSLA and savings promotion /c	RCB	0	1.5	1.5	1 616	1 535	0	81	0	0	0
	Subtotal					342 524	325 398	0	17 126	0	0	0
	2. Activities Supported by Matching Grants											
	a. Business Plans with Matching Grants for Groups of RIs											
	BP with Matching grants for poorer groups of RIs - Rice	Group	0	3	3	149 700	149 700	0	0	0	149 700	0
	BP with Matching grants for poorer groups of RIs - Maize	Group	0	3	3	117 000	117 000	0	0	0	117 000	0
	BP with Matching grants for poorer groups of RIs - Soy	Group	0	3	3	28 875	28 875	0	0	0	28 875	0
	BP with Matching grants for poorer groups of RIs - Cashew	Group	0	0.25	0.25	24 063	24 063	0	0	0	24 063	0
	BP with Matching grants for poorer groups of RIs - shea	Group	0	3	3	81 675	81 675	0	0	0	9 075	0
	BP with Matching grants for poorer groups of RIs - Poultry	Group	0	3	3	63 885	63 885	0	0	0	11 274	0
	Subtotal					465 198	465 198	0	0	0	339 986	0
	b. BP with Matching Grants with MSME (Standalone)											
	BP with matching grant support for MSMEs (9 employees and fewer) - Rice	Group	0	2	2	40 390	40 390	0	0	0	10 098	0
	BP with matching grant support for MSMEs (9 employees and fewer) - Maize	Group	0	2	2	29 725	29 725	0	0	0	7 431	0
	BP with matching grant support for MSMEs (9 employees and fewer) - Soy	Group	0	2	2	35 160	35 160	0	0	0	8 790	0
	BP with matching grant support for MSMEs (9 employees and fewer) - Casewh	Group	0	2	2	34 987	34 987	0	0	0	8 747	0
	BP with matching grant support for MSMEs (9 employees and fewer) - Shea	Group	0	2	2	23 600	23 600	0	0	0	5 900	0
	BP with matching grant support for MSMEs (9 employees and fewer) - Poultry	Group	0	2	2	34 400	34 400	0	0	0	8 600	0
	Subtotal					198 262	198 262	0	0	0	49 566	0
	c. Investment with Matching Grants for Nutrition and Other Poverty Initiatives					0	0	0	0	0	0	0
	Investment with matching grants support for off-season vegetable production	group	0	5	5	22 500	22 500	0	0	0	2 500	0
	Investment with matching grants support for post-harvest management (preser	group	0	0	0	0	0	0	0	0	0	0
	Investment with matching grants support for small ruminants (goats)	group	0	2.5	2.5	27 000	27 000	0	0	0	3 000	0
	Investment with matching grants support for poultry - egg production	group	0	2.5	2.5	11 250	11 250	0	0	0	1 250	0
	Investment with matching grants support for MSME along the food system	group	0	2.5	2.5	11 250	11 250	0	0	0	1 250	0
	Subtotal					72 000	72 000	0	0	0	8 000	0
	d. Agricultural risk guarantee - GIRSAL (50% of Premium Cost) /d	lumpsum	0	0.05	0.05	6 250	6 250	0	0	0	0	0
	e. Agricultural Insurance /e	lumpsum	0	0.05	0.05	17 500	17 500	0	0	0	0	0
	f. Site specific monitoring of the environmental, climate and social conditions (ESTI	lumpsum	0	0.5	0.5	8 078	6 867	0	1 212	0	0	0
	Subtotal					767 288	766 077	0	1 212	0	397 552	0
	3. Blended Finance Facility											
	a. Development of the BFF											
	TA to APEX Bank to develop the BFF	lumpsum	0.5	0	0.5	52 540	0	44 659	7 881	0	0	0
	Selection of the PFIs: TA to APEX Bank	lumpsum	0.2	0.1	0.3	71 522	0	60 793	10 728	0	0	0
	Subtotal					124 062	0	105 452	18 609	0	0	0
	b. PFI Capacity Building											

		Awareness raising and training on climate agriculture	lumpsum	0.17	0.065	0.255	20 264	0	19 251	1 013	0	0	0
		TA for PFIs to develop financial products (Green Lending) /f	lumpsum	0.2	0.05	0.25	31 187	8 416	16 831	5 940	8 416	0	0
		Tools and instruments to assess BPs (safeguards, mitigation, adaptation)	lumpsum	0.15	0.05	0.2	21 148	0	17 976	3 172	0	0	0
		TA to enhance governance and management of loan products	lumpsum	0.2	0.1	0.3	31 787	0	27 019	4 768	0	0	0
		Subtotal					104 386	8 416	81 077	14 894	8 416	0	0
	c.	Management of the BFF at the APEX Bank											
		BFF manager	per annum	0.5	0.5	1	53 624	45 580	0	8 044	0	0	0
		Two officers for north and middle belts	per annum	0.25	0.5	0.75	32 595	27 706	0	4 889	0	0	0
		Adaptation and Climate Coordinator	per annum	0	0.5	0.5	21 909	0	18 622	3 286	0	0	0
		Environment and Safeguard Specialist	per annum	0	0.5	0.5	21 909	0	18 622	3 286	0	0	0
		Vehicle pickup	Number	0	0.5	0.5	16 965	14 420	0	2 545	0	0	0
		Subtotal					147 001	87 706	37 245	22 050	0	0	0
	d.	BP with BFF loans to RIs (Groups) with Value Chain Actors											
		BP from groups of RIs financed by BFF loans - Rice	Number	0	1	1	333 298	93 765	160 740	78 794	17 860	138 415	35 720
		BP from groups of RIs financed by BFF loans - Maize	Number	0	1	1	279 189	78 542	134 644	66 002	14 960	115 944	29 921
		BP from groups of RIs financed by BFF loans - Soy	Number	0	1	1	108 120	30 417	52 143	25 560	5 794	44 901	11 587
		BP from groups of RIs financed by BFF loans - Cashew	Number	0	1	1	1 326 602	485 442	596 400	244 761	83 219	221 916	0
		BP from groups of RIs financed by BFF loans - shea	Number	0	1	1	223 021	76 352	104 984	41 685	9 544	35 790	9 544
		BP from groups of RIs financed by BFF loans - Poultry	Number	0	1	1	340 671	101 818	166 981	71 872	16 291	73 309	48 873
		Subtotal					2 610 901	866 336	1 215 892	528 673	147 668	630 274	135 645
	e.	BP with BFF Loans for standalone MSMEs BPs (up to 20 employees)											
		BP supported by BFF Loans (standalone MSMEs) - Rice	Number	0	1	1	90 011	26 902	44 119	18 990	4 304	32 282	0
		BP supported by BFF Loans (standalone MSMEs) - Maize	Number	0	1	1	104 230	31 152	51 089	21 990	4 984	37 382	0
		BP supported by BFF Loans (standalone MSMEs) - Soy	Number	0	1	1	104 230	31 152	51 089	21 990	4 984	37 382	0
		BP supported by BFF Loans (standalone MSMEs) - Cashew	Number	0	1	1	30 685	11 162	13 023	6 500	1 488	11 162	0
		BP supported by BFF Loans (standalone MSMEs) - Shea	Number	0	1	1	42 121	15 107	18 128	8 886	2 014	15 107	0
		BP supported by BFF Loans (standalone MSMEs)- Poultry	Number	0	1	1	145 326	42 832	71 957	30 537	6 853	51 398	0
		Subtotal					516 604	158 306	249 405	108 892	24 629	184 714	0
	f.	GIRSLAL Guarantee (50% of the premium cost) /g	Lumpsum	0	0.025	0.025	9 425	8 011	0	1 414	0	0	0
	g.	Agricultural Insurance	Lumpsum	0	0.025	0.025	13 464	11 444	0	2 020	0	0	0
		Subtotal					3 525 843	1 140 220	1 689 072	696 552	180 712	814 988	135 645
	4.	Rural Financial Services Specialist	person/year	0.5	0.5	1	43 282	36 790	0	6 492	0	0	0
	Total Investment Costs						4 678 938	2 268 484	1 689 072	721 382	180 712	1 212 540	135 645
	II. Recurrent Costs								0	0	0	0	0
	Total						4 678 938	2 268 484	1 689 072	721 382	180 712	1 212 540	135 645
	Total Component 2						6 265 158	3 304 723	1 689 072	1 021 995	180 712	1 212 540	135 645
	Component 3												
	Subcomponent 3.1. Project Management												
	I.	Investment Costs											
	A.	Project Management											
	1.	Infrastructure, vehicles and equipment											
	a.	Office Building and Equipment											
		Office building	lumpsum	0.75	0	0.75	124 126	105 507	0	18 619	0	0	0
		Computer sets	set	10	0	10	5 517	0	0	5 517	0	0	0
		Computer sets-2	set	0	0	0	0	0	0	0	0	0	0
		Multifunction Laser Printer	Unit	2	0	2	11 033	0	0	11 033	0	0	0
		Multifunction Laser Printer-2	Unit	0	0	0	0	0	0	0	0	0	0
		Office furniture	Sum	1	0	1	4 413	3 751	0	662	0	0	0
		Air Conditioners	Unit	10	0	10	22 067	18 757	0	3 310	0	0	0
		Office equipment, various	Sum	0.3	0	0.3	41 375	0	0	41 375	0	0	0
		Subtotal					208 532	128 016	0	80 517	0	0	0
	b.	Vehicles						0	0	0	0	0	0
		4WD pickup	unit	0	0	0	0	0	0	0	0	0	0
		4WD pickup	unit	15	0	15	397 204	0	0	397 204	0	0	0
		4WD station wagon	unit	0	0	0	0	0	0	0	0	0	0
		4WD station wagon	unit	2	0	2	99 301	0	0	99 301	0	0	0
		Subtotal					496 505	0	0	496 505	0	0	0
	Subtotal						705 037	128 016	0	577 021	0	0	0
	2.	Project management and coordination											
	a.	Support for IFAD Desks in MoFA and MoF											
		Vehicle	unit	2	0	2	66 201	56 271	0	9 930	0	0	0
		Trainings for Desk Officers	LS	2	1	3	7 947	7 549	0	397	0	0	0
		Trainings for Desk Officers	LS	2	1	3	7 947	7 549	0	397	0	0	0
		Equipment for IFAD Desks in MoFA and MoF	LS	2	0	2	11 033	9 378	0	1 655	0	0	0

	Subtotal				93 128	80 748	0	12 380	0	0	0	
	b. Support for GIMFIS implementation											
	Equipment for Internet Connectivity	unit	0.4	0.1	0.5	55 444	47 127	0	8 317	0	0	0
	c. Project support											
	Supervision missions	mission	0	0.5	0.5	8 078	7 675	0	404	0	0	0
	Implementation support missions	mission	0	0.5	0.5	5 386	5 116	0	269	0	0	0
	Unspecified studies and contract supervision	LS	1	0.5	1.5	31 787	30 198	0	1 589	0	0	0
	Subtotal					45 251	42 989	0	2 263	0	0	0
	Subtotal				193 823	170 864	0	22 959	0	0	0	
	3. Audit											
	a. Internal audit	LS	0	0.5	0.5	2 693	2 558	0	135	0	0	0
	b. External audit	LS	0	0.5	0.5	8 078	7 675	0	404	0	0	0
	c. Meetings and workshops				0	0						
	Project steering committee meetings	meeting	2	1	3	15 894	15 099	0	795	0	0	0
	Consultative stakeholder workshops	Workshop	1	0.5	1.5	15 894	15 099	0	795	0	0	0
	Consultative AWPB workshop	Workshop	1	0.5	1.5	23 841	22 648	0	1 192	0	0	0
	Subtotal					55 628	52 846	0	2 781	0	0	0
	d. Staff development											
	Training	LS	2	2.5	4.5	14 383	13 664	0	719	0	0	0
	Subtotal					80 782	76 743	0	4 039	0	0	0
	4. Knowledge management and learning											
	a. KM strategy formulation	consultancy	1	0	1	10 508	9 983	0	525	0	0	0
	b. Studies and learning products including climate	LS	0	0.05	0.05	16 157	7 675	7 675	808	0	0	0
	c. Learning events and communications materials incl climate	Event	0	0.05	0.05	16 157	7 675	7 675	808	0	0	0
	d. Communications and publications	LS	1	0.5	1.5	15 894	0	15 099	795	0	0	0
	e. South-South and triangular cooperation - tou	Workshop	0	0	0	0	0	0	0	0	0	0
	f. Annual Sahel Award	event	0	0	0	0	0	0	0	0	0	0
	g. Sahel Award replenishment	event	0	0	0	0	0	0	0	0	0	0
	h. Develop Sahel Award protocols	LS	0	0	0	0	0	0	0	0	0	0
	i. Enrol women and Youth to compete for Sahel Award	LS	0	0	0	0	0	0	0	0	0	0
	Subtotal				0	0	58 715	25 332	30 448	2 936	0	0
	5. M&E/MIS system				0	0						
	M&E software (PLAMES)	Software	1	0	1	22 067	18 757	0	3 310	0	0	0
	ArcGIS	Software	1	0	1	47 444	40 327	0	7 117	0	0	0
	ArcGIS licence	Licence	0	0	0	0	0	0	0	0	0	0
	Specialist services	Month	2	0.5	2.5	66 004	62 704	0	3 300	0	0	0
	Subtotal				0	0	135 515	121 788	0	13 727	0	0
	6. M&E studies and reviews				0	0						
	a. Baseline Study	Study	1	0	1	157 621	149 740	0	7 881	0	0	0
	b. Mid-Term Review	Study	0	0	0	0	0	0	0	0	0	0
	c. Completion Study	Study	0	0	0	0	0	0	0	0	0	0
	d. Outcome and Impact thematic studies	lumpsum	0	0	0	0	0	0	0	0	0	0
	e. Environmental, Climate and Social Monitoring (ESMP)	lumpsum	1	0.5	1.5	39 734	33 774	0	5 960	0	0	0
	f. Conflict Resolution and Land Governance Dialogue (ESMP) /a	lumpsum	0	0	0	0	0	0	0	0	0	0
	g. Other Social Monitoring (GBV, SEAH Vulnerability) - ESMP /b	lumpsum	1	0.5	1.5	19 867	16 887	0	2 980	0	0	0
	h. Health Insurance and Outreach Monitoring [ESMP] /c	lumpsum	1	0.5	1.5	19 867	16 887	0	2 980	0	0	0
	i. Environmental, Climate and Social Audit /d	lumpsum	0	0.5	0.5	26 928	25 582	0	1 346	0	0	0
	Subtotal				0	0	264 017	242 869	0	21 148	0	0
	Total Investment Costs				0	0	1 437 890	765 612	30 448	641 830	0	0
	II. Recurrent Costs				0	0						
	A. Salaries				0	0						
	1. Project Coordinator	person/year	0.8	0.5	1.3	82 752	82 752	0	0	0	0	0
	2. KM/M&E Manager	year	0.8	0.5	1.3	69 512	69 512	0	0	0	0	0
	3. KM/M&E Officer	pers-year	0.8	0.5	1.3	56 106	0	56 106	0	0	0	0
	4. M&E/MIS assistant	pers-year	0.8	1	1.8	19 561	19 561	0	0	0	0	0
	5. Financial Controller	year	0.8	0.5	1.3	69 512	69 512	0	0	0	0	0
	6. Project Accountant	pers-year	0.8	0.5	1.3	56 106	56 106	0	0	0	0	0
	7. Project Accountant - GCF	pers-year	0.8	0.5	1.3	56 106	0	56 106	0	0	0	0
	8. Accountant Assistant	year	0.5	0.5	1	10 852	10 852	0	0	0	0	0
	9. Procurement Manager	year	0.8	0.5	1.3	69 512	69 512	0	0	0	0	0
	10. Procurement Assistant	year	0.5	0.5	1	10 852	10 852	0	0	0	0	0
	11. Admin. Assistant	year	0.8	0.5	1.3	14 068	14 068	0	0	0	0	0
	12. Office Assistant	year	0.8	1	1.8	13 808	13 808	0	0	0	0	0
	13. Drivers	year	0.8	1	1.8	13 808	13 808	0	0	0	0	0

	14. PROSPER Liaison Officer	year	0.8	0.5	1.3	56 134	56 134	0	0	0	0	0
	15. LO Assistant	year	0.8	0.5	1.3	14 068	14 068	0	0	0	0	0
	Subtotal			0		612 758	500 546	112 212	0	0	0	0
	B. Operating costs (Proj Mgt + Policy)		0									
	1. Staff Monitoring Activities	LS	0.5	0.25	0.75	47 681	40 529	0	7 152	0	0	0
	2. Stationary and Sanitary Supplies	LS	0.5	0.25	0.75	19 867	16 887	0	2 980	0	0	0
	3. Vehicle Running, Repairs, & Maintenance	vehicle/year	17	8.5	25.5	135 096	114 832	0	20 264	0	0	0
	4. Utilities	LS	1	0.5	1.5	63 575	54 038	0	9 536	0	0	0
	5. Computer & Equipment Maintenance, miscellaneous.	LS	0.5	0.25	0.75	11 920	10 132	0	1 788	0	0	0
	Subtotal					278 139	236 418	0	41 721	0	0	0
	Total Recurrent Costs					890 897	736 964	112 212	41 721	0	0	0
Total						2 328 787	1 502 576	142 660	683 551	0	0	0
Subcomponent 3.2. Policy Engagement												
	I. Investment Costs											
	A. Policy Engagement											
	1. Sectoral policy support to GoG											
	Short Studies Related to ASWG	lumpsum	1	0.5	1.5	3 973	3 377	0	596	0	0	0
	TA Support to Green Finance and Green Agriculture	TA days	1	0.5	1.5	19 867	16 887	0	2 980	0	0	0
	Studies on Different Policy Topics	study	0	0.5	0.5	5 386	5 116	0	269	0	0	0
	Dialogue and advocacy on policy Topics /a	lumpsum	1	0.5	1.5	11 920	10 132	0	1 788	0	0	0
	Support to BoG on climate risk and green finance	Lumsum	0	0.25	0.25	18 850	0	16 022	2 827	0	0	0
	Total Investment Costs					59 996	35 513	16 022	8 461	0	0	0
	II. Recurrent Costs					0	0	0	0	0	0	0
Total						59 996	35 513	16 022	8 461	0	0	0
Total Component 3						2 388 783	1 538 089	158 683	692 011	0	0	0
Grand Total PROSPER						11 257 248	6 903 062	1 930 124	2 174 693	180 712	1 212 540	135 645

Ghana

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Project Design Report

Annex 7: Procurement Plan for first 18 months

Mission Dates: 02/08/2021 to 20/09/2021

Document Date: 22/11/2021

Project No. 2000002673

Report No. 5864-GH

West and Central Africa Division
Programme Management Department

Procurement Plan SUMMARY				
Country:	GHANA			
Project Name:	PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE			
Project ID:				
Version	1.0			
Version Date	14-Sep-21			
Prepared by:				
Approved by:				
Procurement Category	Plan		Actual	
Currency	USD	LCU	USD	LCU
Goods	650 000.00	-	-	-
Works	2 386 500.00	-	-	-
Consulting Services	11 624 771.00	-	-	-
Non-Consulting Services	-	-	-	-
Grants	-	-	-	-
TOTAL	14 661 271.00	-	-	-

The threshold tables below are based on the new LTB Template 2020.
Please fill in the fields that are applicable based on the provisions in the LTB for the project.

Prior Review Thresholds					
Category	Goods and goods-related Non-Consulting Services	Works and works-related Non-Consulting Services	Consulting Services and related Non-Consulting Services and/or MoU/Agreements	Individual Consultants	Decisions concerning Abnormally Low Bids shall be subject to the No Objection of IFAD:
Threshold	>= US\$ 70,000.00	>= US\$ 150,000.00	>= US\$ 60,000.00	>= US\$ 0.00	Only for procurement activities subject to prior review OR For all procurement activities

All Direct Contracting and Single-Source Procurements are **Prior Review** (in alignment with IFAD Procurement Handbook), or based on the thresholds stipulated in the LTB

The exchange rate at time of submission will be used for reviews.

Procurement Method Thresholds						
	CQS	QBS/LCS/FBS	QCBS	Shortlisting	SSS - Firms	SSS - Individuals
Consulting Services and related Non-Consulting Services	<= US\$ 70,000.00	< US\$ 0.00	>= US\$ 100,000.00	>= US\$ 0.00	<= US\$ 0.00 (subject to prior review. Justification required if above threshold)	<= US\$ 0.00 (or with a contract duration of 3 months or less; subject to prior review)
Direct Contracting	Shopping	NCB	ICB	Other Procurement Methods or Arrangements		
Goods and goods-related Non-Consulting Services	>= US\$ 0.00 (subject to prior review. Justification required if above threshold)	<= US\$ 70,000.00	>US\$70,000.00 to < US\$ 200,000.00	>= US\$ 200,000.00	Force Account	Up to a maximum aggregate amount of: US\$ 0.00 (subject to prior review)
Works and works-related Non-Consulting Services	>= US\$ 0.00 (subject to prior review. Justification required if above threshold)	<= US\$ 190,000.00	>US\$190,000 to < US\$ 800,000.00	>= US\$ 800,000.00	Community Participation	Allowed OR Not Allowed

Procurement Plan - Goods

GHANA

PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE

Project ID:

Prepared by:

Approved by:

	USD	LCU	
Total Amount	650 000.00	0.00	Plan
	0.00	0.00	Actual
Non-Consulting:	0.00	0.00	Plan
	0.00	0.00	Actual

Version	1.0	14-Sep-21	Basic Data										Pre-Qualification						Bidding			
			Description	Non Consulting	Funding	Lot No/Description	Project Area or Procuring Entity	Plan vs. Actual	Pre-or Post Qualification	Prior or Post Review	Procurement Method	Envelopes	Amount (USD)	Amount (LCU)	Plan vs. Actual	Submission of PreQual Docs	No Objection Date	PreQual Invitation Date	PreQual Closing Date	Submission of PreQual Report	No Objection Date	Submission of BD
AWPB/Componen t Ref	Ne																					
COMPONENT	1	Motorcycles for AEAs at District Level			IFAD		PROSPER-PCU	Plan	Post-Qual	Prior Review	ICB	1	100 000.00		Plan	N/A	N/A	N/A	N/A	N/A	13-Jun-22	20-Jun-22
								Actual					-	-	Actual							
COMPONENT	1	Laptop Computers to Support Extension Services			IFAD		PROSPER-PCU	Plan	Post-Qual	Post Review	NCB	1	25 000.00		Plan	N/A	N/A	N/A	N/A	N/A	22-Jun-22	N/A
								Actual					-	-	Actual							
COMPONENT	1	Protective Gear - Extension Services Protective Gear			IFAD		PROSPER-PCU	Plan	Post-Qual	Post Review	NCB	1	25 000.00		Plan	N/A	N/A	N/A	N/A	N/A	6-Jul-22	N/A
								Actual					-	-	Actual							
COMPONENT	2	Various goods - Veterinary Services at MoFA & Districts (Goods/Works)			IFAD		PROSPER-PCU	Plan	Post-Qual	Prior Review	NCB	1	150 000.00		Plan	N/A	N/A	N/A	N/A	N/A	6-Jul-22	13-Jul-22
								Actual					-	-	Actual							
COMPONENT	2	Support Value Chains -Shea Tree Domestication (Goods)			IFAD		PROSPER-PCU	Plan	Post-Qual	Prior Review	NCB	1	150 000.00		Plan	N/A	N/A	N/A	N/A	N/A	6-Jul-22	13-Jul-22
								Actual					-	-	Actual							
COMPONENT	2	Vehicle (Pick Up) for BFF Manager			ARB APEX Bank		ARB APEX Bank	Plan	Post-Qual	Prior Review	NCB	1	60 000.00		Plan	N/A	N/A	N/A	N/A	N/A	17-Aug-22	24-Aug-22
								Actual					-	-	Actual							
COMPONENT 3	Project Management	Procurement of Computers, Printers, Airconditioner, Office Furniture and equipment for PCU			IFAD		PROSPER-PCU	Plan	Post-Qual	Post Review	NCB	1	76 500.00		Plan	N/A	N/A	N/A	N/A	N/A	24-Aug-22	N/A
								Actual					-	-	Actual							
M&E/MIS System	ArcGIS Software plus 5 years license				IFAD		PROSPER-PCU	Plan	Post-Qual	Post Review	NCB	1	3 500.00		Plan	N/A	N/A	N/A	N/A	N/A	27-Sep-22	N/A
								Actual					-	-	Actual							
Support to GIMIS	Procurement of equipment for Internet Connectivity				IFAD		PROSPER-PCU	Plan	Post-Qual	Post Review	NCB	1	60 000.00		Plan	N/A	N/A	N/A	N/A	N/A	12-Oct-22	N/A
								Actual					-	-	Actual							
								Plan							Plan							
								Actual					-	-	Actual							
								Plan							Plan							
								Actual					-	-	Actual							

Procurement Plan - Goods
GHANA
PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PI
Project ID:

Prepared by:

Approved by:

Procurement Methods
 NS: National Shopping
 IS: International Shopping
 NCB: National Competitive Bidding
 ICB: International Competitive Bidding
 LIB: Limited (International) Bidding

Version 1.0 14-Sep-21			Process		Bid Evaluation				Contract Award & Signature											
AWB/Component Ref	No.	Description	Bid Invitation Date	Bid Closing-Opening	Submission Tech Eval Rpt	No-objection Date	Submission Combined Eval Rpt*	No-objection Date	Plan vs. Actual	Issue of NOTA&Standstill	Date Contract Award	Submission of Draft Contract	No-Objection Date	Date Contract Signature	Contract No.	Vendor Name/ID	Amount (USD)	Amount (LCU)	Date Contract Completion	Remarks
COMPONENT 1	1	Motorcycles for AEAs at District Level	22-Jun-22	6-Aug-22	N/A	N/A	27-Aug-22	3-Sep-22	Plan	6-Sep-22	21-Sep-22	26-Sep-22	3-Oct-22	7-Oct-22			100 000.00	-		
									Actual											
COMPONENT 1	1	Laptop Computers to Support Extension Services	24-Jun-22	24-Jul-22	N/A	N/A	7-Aug-22	N/A	Plan	10-Aug-22	25-Aug-22	30-Aug-22	N/A	3-Sep-22			25 000.00	-		
									Actual											
COMPONENT 1	1	Protective Gear - Extension Services Protective Gear	8-Jul-22	7-Aug-22	N/A	N/A	21-Aug-22	N/A	Plan	24-Aug-22	8-Sep-22	13-Sep-22	N/A	17-Sep-22			25 000.00	-		
									Actual											
COMPONENT 2	2	Various goods - Veterinary Services at MoFA & Districts (Goods/Works)	15-Jul-22	14-Aug-22	N/A	N/A	28-Aug-22	4-Sep-22	Plan	7-Sep-22	22-Sep-22	27-Sep-22	4-Oct-22	8-Oct-22			150 000.00	-		
									Actual											
COMPONENT 2	2	Support Value Chains-Sheath Tree Domestication (Goods)	15-Jul-22	14-Aug-22	N/A	N/A	28-Aug-22	4-Sep-22	Plan	7-Sep-22	22-Sep-22	27-Sep-22	4-Oct-22	8-Oct-22			150 000.00	-		
									Actual											
COMPONENT 2	2	Vehicle (Pick Up) for BFF Manager	26-Aug-22	25-Sep-22	N/A	N/A	9-Oct-22	16-Oct-22	Plan	19-Oct-22	3-Nov-22	8-Nov-22	15-Nov-22	19-Nov-22			60 000.00	-		
									Actual											
COMPONENT 3	Project Management	Procurement of Computers, Printers, Airconditioner, Office Furniture and equipment for PCU	26-Aug-22	25-Sep-22	N/A	N/A	9-Oct-22	N/A	Plan	12-Oct-22	27-Oct-22	1-Nov-22	N/A	5-Nov-22			76 500.00	-		
									Actual											
M&E/MIS System		ArcGIS Software plus 5 years license	29-Sep-22	29-Oct-22	N/A	N/A	12-Nov-22	N/A	Plan	15-Nov-22	30-Nov-22	5-Dec-22	N/A	9-Dec-22			3 500.00	-		
									Actual											
Support to GifMIS		Procurement of equipment for Internet Connectivity	14-Oct-22	13-Nov-22	N/A	N/A	27-Nov-22	N/A	Plan	30-Nov-22	15-Dec-22	20-Dec-22	N/A	24-Dec-22			60 000.00	-		
									Actual											
									Plan											
									Actual											
									Plan											
									Actual											
									Plan											
									Actual											

Procurement Plan - WORKS

GHANA PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROJECTS AND ENVIRONMENTAL RESILIENCE

PROMOTING EQUAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE

Prepared by:

	USD	EUR	
Total Amount	2 286 500.00	0.00	Plan
	0.00	0.00	Actual
Non-Consulting:	0.00	0.00	Plan

- Procurement**
- Methods**
- NOC National
Shopping
- IS International
Shopping
- NOC National
Competitive Bidding
- ICB International
Competitive Bidding
- LIC Limited
(International)
Bidding

Procurement Plan - Consulting

PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE

	USD	LCU	
Total Amount	11 624 771.00	0.00	Plan
	0.00	0.00	Actual
Non-Consulting:	0.00	0.00	Plan
	0.00	0.00	Actual
Grants:	0.00	0.00	Plan

Selection Methods
QCBS: Quality and Cost-Based Selection
QBS: Quality-Based Selection
COS: Selection by Consultants' Qualifications (shortlist is required for this method)
LCS: Least-Cost Selection
FBS: Fixed Budget Selection
PCB: Price and Consultants Selection (shortlist is required for this method)
SBS: Sole Source Selection
Selection (Design/PM): Single Sourcing established in the project design or implementation manual

Version	ID	Start Date	End Date	Basic Data								EOI Shortlist Procedure						Proposed Process				Evaluation			Contract Award & Signature																			
				Area/Component Ref	No.	Description*	Guest	Non Consulting	Funding	Project Area or Procurement Policy	Plan vs. Actual	Shortfall (Yes/No)	Prior or Post Review	Procurement Method	Amount (USD)	Amount (SLC)	Plan vs. Actual	Submission of RFIQ	No Objection Date	RFQ Launch Date	EOI Submission Deadline	Submission of Shortlist Request	No Objection Date	Submission of RFP/Q	RFP/Q/Launch Date	Proposal Submission Deadline	Submission of TEA	No-objection Date	Submission of CER	No-objection Date	Plan vs. Actual	Issue of MOU/TA/Standard	Date Contract Award	Negotiations Completed	Submission of Draft Contract	No-objection Date	Date Contract	Contract No.	Vendor Name/ID	Amount (USD)	Amount (USD)	Date Contract Completion	Remarks	
COMPONENT 1-2/ Consistency for design and delivery of socioeconomics infrastructure	1	Design & expansion of all form infrastructure, framework and Commercial social infrastructure #1		PROSPECTUS-CU	Plan	Yes	Post Review	ICS	22 000.00		Plan	10-Jan-22	N/A	12-Jan-22	2-Feb-22	N/A	20-Feb-22	N/A	22-Feb-22	15-Mar-22	N/A	N/A	29-Mar-22	N/A	Plan	N/A	4-Apr-22	18-Apr-22	23-Apr-22	N/A	27-Apr-22	22 000.00	-											
				EAD			Actual																																					
COMPONENT 1-2/ Consistency for design and delivery of socioeconomics infrastructure	1	Design & expansion of all form infrastructure, framework and Commercial social infrastructure #1		PROSPECTUS-CU	Plan	Yes	Post Review	ICS	32 000.00		Plan	10-Jan-22	N/A	11-Jan-22	3-Feb-22	N/A	17-Feb-22	N/A	21-Feb-22	13-Mar-22	N/A	N/A	21-Aug-22	N/A	Plan	N/A	2-Feb-23	16-Sep-22	21-Sep-22	N/A	25-Sep-22	32 000.00	-											
				EAD			Actual																																					
COMPONENT 1-2/ Consistency for design and delivery of socioeconomics infrastructure	1	Design & expansion of all form infrastructure, framework and Commercial social infrastructure #1		PROSPECTUS-CU	Plan	Yes	Post Review	ICS	32 000.00		Plan	10-Jan-22	N/A	11-Jan-22	3-Feb-22	N/A	17-Feb-22	N/A	21-Feb-22	13-Mar-22	N/A	N/A	21-Aug-22	N/A	Plan	N/A	2-Feb-23	16-Sep-22	21-Sep-22	N/A	25-Sep-22	32 000.00	-											
				EAD			Actual																																					
COMPONENT 1-2/ Capacity building of community institutions and enterprises	1	Meas with regard to Mid and other sectoral areas for cluster planning, nutrition and farmers' capacities (total 4 Month)		PROSPECTUS-CU	Plan	No	Prior Review	SSS	66 000.00		Plan	N/A	N/A	N/A	N/A	N/A	N/A	1-Jun-22	8-Jun-22	10-Jun-22	10-Jun-22	N/A	N/A	24-Jul-22	31-Jul-22	Plan	N/A	6-Aug-22	27-Aug-22	1-Sep-22	8-Sep-22	12-Sep-22	66 000.00	-										
				EAD			Actual																																					
COMPONENT 1-2/ Capacity building of community institutions and enterprises	1	Meas with COEs for cluster planning, nutrition and farmers' capacities (total 9 Month)		PROSPECTUS-CU	Plan	No	Prior Review	SSS	27 000.00		Plan	N/A	N/A	N/A	N/A	N/A	N/A	3-Jun-22	8-Jun-22	10-Jun-22	10-Jun-22	N/A	N/A	24-Jul-22	31-Jul-22	Plan	N/A	6-Aug-22	27-Aug-22	1-Sep-22	8-Sep-22	12-Sep-22	27 000.00	-										
				EAD			Actual																																					
COMPONENT 1-2/ Community Nutrition and Healthy Diet Campaign	1	Nutrition knowledge, Attitudes and Practice Study		PROSPECTUS-CU	Plan	No	Prior Review	ICS	8 000.00		Plan	10-Feb-23	17-Feb-23	19-Feb-23	12-Mar-23	26-Mar-23	2-Apr-23	1-Jun-22	8-Jun-22	10-Jun-22	10-Jun-22	N/A	N/A	15-Jul-22	22-Jul-22	Plan	N/A	28-Jul-22	11-Aug-22	16-Aug-22	23-Aug-22	27-Aug-22	8 000.00	-										
				EAD			Actual																																					
COMPONENT 1-2/ Cognition of Rural Institutions & Enterprises	1	TA (National) for one region and rolling out work in 2 regions		PROSPECTUS-CU	Plan	Yes	Prior Review	ICS	30 000.00		Plan	14-Jan-22	21-Jan-22	23-Jan-22	13-Feb-22	27-Feb-22	6-Mar-23	10-Mar-22	17-Mar-22	19-Mar-22	N/A	N/A	23-Apr-22	30-Apr-22	Plan	N/A	6-May-22	20-May-22	25-May-22	1-Jun-22	5-Jun-22	30 000.00	-											
				EAD			Actual																																					
COMPONENT 1-2/ Cognition of Rural Institutions & Enterprises	1	TA (National) for three regions		PROSPECTUS-CU	Plan	Yes	Prior Review	COS	17 000.00		Plan	20-Jan-22	27-Jan-22	29-Jan-22	18-Feb-22	5-Mar-23	12-Mar-23	16-Mar-22	23-Mar-22	25-Mar-22	25-Mar-22	N/A	N/A	29-Apr-22	6-May-22	Plan	N/A	12-May-22	26-May-22	31-May-22	3-Jun-22	11-Jun-22	57 000.00	-										
				EAD			Actual																																					
COMPONENT 1-2/ Assessment, Categorization and Creation of Database of F&B	1.1	Assessment, Categorization and Creation of Database of F&B		PROSPECTUS-CU	Plan	Yes	Prior Review	QCBS	100 000.00		Plan	9-Sep-22	16-Sep-22	18-Sep-22	3-Oct-22	16-Oct-22	23-Oct-22	23-Oct-22	3-Nov-22	5-Nov-22	20-Dec-22	3-Jan-23	10-Jan-23	24-Jan-23	3-Jan-23	Plan	1-Feb-23	18-Feb-23	5-Mar-23	10-Mar-23	27-Mar-23	21-Mar-23	100 000.00	-										
				EAD			Actual																																					
COMPONENT 1-2/ Site Monitoring of Environmental, Climate and Social Conditions (SMSC)	1.2	Value chain analysis and integration of climate risks		PROSPECTUS-CU	Plan	Yes	Prior Review	COS	85 700.00		Plan	14-Sep-22	21-Sep-22	23-Sep-22	14-Oct-22	28-Oct-22	4-Nov-22	8-Nov-22	15-Nov-22	17-Nov-22	20-Dec-22	2-Nov-22	22-Dec-22	N/A	N/A	22-Dec-22	29-Dec-22	Plan	N/A	4-Jan-23	18-Jan-23	23-Jan-23	30-Jan-23	3-Feb-23	85 700.00	-								
				EAD			Actual																																					
COMPONENT/Value Chain Analysis	2.1	Value chain analysis and integration of climate risks		PROSPECTUS-CU	Plan	Yes	Prior Review	QCBS	97 500.00		Plan	21-Sep-22	28-Sep-22	30-Sep-22	14-Oct-22	28-Oct-22	4-Nov-22	8-Nov-22	15-Nov-22	17-Nov-22	20-Dec-22	2-Nov-22	22-Dec-22	N/A	N/A	15-Dec-22	22-Dec-22	Plan	N/A	15-Feb-23	2-Mar-23	17-Mar-23	22-Mar-23	29-Mar-23	97 500.00	-								
				EAD			Actual																																					
COMPONENT Value Chain Analysis	2.1	Mapping and mapping of operational IC actions in target areas		PROSPECTUS-CU	Plan	Yes	Prior Review	QCBS	90 000.00		Plan	21-Sep-22	28-Sep-22	30-Sep-22	14-Oct-22	28-Oct-22	4-Nov-22	8-Nov-22	15-Nov-22	17-Nov-22	20-Dec-22	2-Nov-22	22-Dec-22	N/A	N/A	15-Dec-22	22-Dec-22	Plan	N/A	15-Feb-23	2-Mar-23	17-Mar-23	22-Mar-23	29-Mar-23	90 000.00	-								
				EAD			Actual																																					
COMPONENT 2/ Evaluation of Business Plans at MoG&G	2.1	Evaluation of Business Plans at MoG&G Level		PROSPECTUS-CU	Plan	Yes	Post Review	COS	15 000.00		Plan	21-Jan-22	N/A	23-Jan-22	14-Oct-22	25-Oct-22	N/A	3-Nov-22	N/A	3-Nov-22	24-Nov-22	N/A	N/A	8-Dec-22	N/A	Plan	N/A	14-Dec-22	28-Dec-22	2-Jan-23	6-Jan-23	13-Jan-23	11-Jan-23	15 000.00	-									
				EAD			Actual																																					
TECHNICAL ASSISTANCE TO SUPPORT BUREAUCRACY	2.1	Design of Assessment Process as evidence to BIR/CS/SAIC		PROSPECTUS-CU	Plan	Yes	Post Review	ICS	50 000.00		Plan	28-Sep-22	N/A	30-Sep-22	21-Oct-22	4-Nov-22	N/A	8-Nov-22	N/A	10-Nov-22	1-Dec-22	N/A	N/A	11-Dec-22	N/A	Plan	N/A	21-Dec-22	4-Jan-23	9-Jan-23	19-Jan-23	29-Jan-23	50 000.00	-										
				EAD			Actual																																					
COMPONENT 2/ TA for support of Project creation and preparation of IFCs (Individual Consultants)	2.1	TA for support of Project creation and preparation of IFCs (Individual Consultants)		PROSPECTUS-CU	Plan	Yes	Prior Review	ICS	211 000.00		Plan	29-Oct-22	5-Dec-22	7-Dec-22	29-Dec-22	11-Jan-23	18-Jan-23	31-Jan-22	29-Jan-22	16-Feb-22	1-Dec-22	21-Dec-22	N/A	N/A	5-Jan-23	12-Jan-23	23-Jan-23	Plan	N/A	18-Jan-23	1-Feb-23	6-Feb-23	13-Feb-23	23-Feb-23	213 000.00	-								
				EAD			Actual																																					
COMPONENT 2/ Promotion of Savings and Growth through Technology	2.2	TA for TA to support the environment, climate and social conditions (SCMP)		PROSPECTUS-CU	Plan	Yes	Prior Review	ICS	15 000.00		Plan	5-Oct-22	12-Oct-22	14-Oct-22	4-Nov-22	18-Nov-22	25-Nov-22	2-Nov-22	8-Dec-22	9-Dec-22	2-Dec-22	2-Dec-22	12-Jan-23	N/A	Plan	N/A	25-Jan-23	9-Feb-23	13-Feb-23	20-Feb-23	24-Feb-23	15 000.00	-											
				EAD			Actual																																					
DEVELOPMENT OF THE BFF	2.2	TAs for APF Bank to develop the BFF		AIB APEX Bank	Plan	Yes	Prior Review	QCBS	50 000.00		Plan	5-Oct-22	12-Oct-22	14-Oct-22	28-Oct-22	28-Oct-22	18-Nov-22	2-Dec-22	9-Dec-22	13-Dec-22	20-Dec-22	2-Dec-22	12-Jan-23	N/A	N/A	2-Jan-23	1-Mar-23	5-Mar-23	5-Apr-23	12-Apr-23	10-Apr-23	50 000.00	-											
				EAD			Actual																																					
COMPONENT 2/ Selection of the IFCs to APEX Bank	2.2	Selection of the IFCs to APEX Bank		AIB APEX Bank	Plan	Yes	Prior Review	QCBS	67 500.00		Plan	12-Oct-22	19-Oct-22	21-Oct-22	4-Nov-22	18-Nov-22	25-Nov-22	6-Dec-22	8-Dec-22	12-Dec-22	1-Dec-22	12-Dec-22	1-Dec-22	5-Mar-23	Plan	B-Mar-23	23-Mar-23	7-Apr-23	13-Apr-23	23-Apr-23	23-Apr-23	67 500.00	-											
				EAD			Actual																																					
COMPONENT 2/ PRICEDITY BUILDING	2.2	Awareness raising and training on climate agriculture		PROSPECTUS-CU	Plan	Yes	Prior Review	ICS	19 215.00		Plan	12-Oct-22	19-Oct-22	21-Oct-22	11-Nov-22	25-Nov-22	2-Dec-22	6-Dec-22	13-Dec-22	15-Jan-23	1-Dec-22	29-Dec-22	1-Dec-22	5-Feb-23	Plan	N/A	1-Feb-23	15-Feb-23	20-Feb-23	27-Feb-23	3-Mar-23	19 215.00	-											
				EAD			Actual																																					
COMPONENT 2/ Awareness raising and training on climate agriculture	2.2	TAs for IFCs to develop financial products (Green Lending)		PROSPECTUS-CU	Plan	Yes	Prior Review	QCBS	37 500.00		Plan	19-Oct-22	26-Oct-22	28-Oct-22	18-Nov-22	2-Dec-22	9-Dec-22	13-Dec-22	20-Dec-22	22-Dec-22	12-Jan-23	N/A	N/A	2-Jan-23	2-Feb-23	2-Feb-23	6-Feb-23	27-Feb-23	6-Feb-23	37 500.00	-													
				EAD			Actual																																					
COMPONENT 2/ Tools and instruments to assess BPs (mitigation, adaptation)	2.2	Tools and instruments to assess BPs (mitigation, adaptation)	</																																									

Goods & Works

Procurement Method	Submission of PreQual docs			No Objection Date			PreQual Invitation Date			PreQual Closing Date			Submission of PreQual Report			No Objection Date			Submission of BD			No-objec tive Date	
	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max
Single Envelope																							
RFQ/Shopping (NS/IS)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	N/A-Start Date	7	10
NCB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10
ICB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10
LB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10
NCB (with PreQual)	1	4	N/A-Start Date	7	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10
ICB (with PreQual)	1	4	N/A-Start Date	7	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10
LB (with PreQual)	1	4	N/A-Start Date	5	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10
Direct Contracting/ Force Account	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	N/A-Start Date	7	10
Two Envelope																							
NCB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10
ICB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10
LB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10
NCB (with PreQual)	1	4	N/A-Start Date	7	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10
ICB (with PreQual)	1	4	N/A-Start Date	7	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10
LB (with PreQual)	1	4	N/A-Start Date	7	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10

Services

Selection Method	Submission of REOI			No Objection Date			REOI Launch Date			EOI Submission Deadline			Submission of Shortlist Report			No Objection Date			Submission of RFP/RCQ			No-objec tive Date	
	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max
QCBS (w/Shortlist)																							
QCBS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	14	14	21	14	7	10	7	1	7	4	7	10
FBS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	21	14	21	14	7	10	7	1	7	4	7	10
LCS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	21	14	21	14	7	10	7	1	7	4	7	10
QBS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	21	14	21	14	7	10	7	1	7	4	7	10
CQS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	21	14	21	14	7	10	7	1	5	4	7	10
ICS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	21	14	21	14	7	10	7	1	5	4	7	10
QCBS (noShortlist)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A- Start Date	7	10
FBS (noShortlist)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	N/A- Start Date	7	10
LCS (noShortlist)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A- Start Date	7	10
QBS (noShortlist)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A- Start Date	7	10
SSS/ Selection (Design/PIM)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A- Start Date	7	10

NOTE

- Some procurement methods for low-value processes might require No Objections based on the Prior Review Thresholds. Where they do not require, No Objection number of days should be zero.
- RFP:** Request for Proposals: standard procurement document used for Services.
- RCQ:** Requests for Consultants Qualifications: Procurement document used for CQS and LCS. The RFP is used for all other procurement methods
- Consulting services and Good/Works methods could either be used for Non-Consulting Services
- All days are calendar days

Do not edit or delete these cells	Validation List Source
	Yes
	Prior Review
	Post Review
	NS
	IS
	NCB
	ICB
	LB
	DC
	Force Account
	QCBS
	FBS
	LCS
	QBS
	CQS
	ICS
	SSS
	Selection (Design/PIM)

Goods & Works

Procurement Method	n	Bid Invitation Date			Bid Closing-Opening			Submission Tech Eval Rpt			No-objection Date			Submission Combined Eval Rpt/Bid Evaluation Report			No-objection Date			Issue of NOITA & Standstill			Date Contract Award		
		Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max
Single Envelope																									
RFQ/Shopping (NS/IS)	7	1	3	1	5	21	14	0	0	0	0	0	0	1	7	7	7	10	7	0	0	0	4	-	
NCB (no PreQual)	7	1	3	2	30	45	30	0	0	0	0	0	0	3	21	14	7	10	7	1	3	3	14	-	
ICB (no PreQual)	7	1	3	2	45	70	45	0	0	0	0	0	0	3	21	21	7	10	7	1	3	3	14	-	
LIB (no PreQual)	7	1	3	2	45	70	45	0	0	0	0	0	0	3	21	21	7	10	7	1	3	3	14	-	
NCB (with PreQual)	7	1	3	2	30	45	30	0	0	0	0	0	0	7	21	14	7	10	7	1	3	3	14	-	
ICB (with PreQual)	7	1	3	2	45	70	45	0	0	0	0	0	0	7	21	21	7	10	7	1	3	3	14	-	
LIB (with PreQual)	7	1	3	2	45	70	45	0	0	0	0	0	0	7	21	21	7	10	7	1	3	3	14	-	
Direct Contracting/ Force Account	7	1	3	1	7	30	14	0	0	0	0	0	0	3	21	7	7	10	7	0	0	0	4	-	
Two Envelope																									
NCB (no PreQual)	7	1	3	2	30	45	30	3	21	3	7	10	7	3	14	14	7	10	7	1	3	3	14	-	
ICB (no PreQual)	7	1	3	2	45	70	45	3	21	21	7	10	7	3	14	14	7	10	7	1	3	3	14	-	
LIB (no PreQual)	7	1	3	2	45	70	45	3	21	21	7	10	7	3	14	14	7	10	7	1	3	3	14	-	
NCB (with PreQual)	7	1	3	2	30	45	30	7	21	14	7	10	7	3	14	14	7	10	7	1	3	3	14	-	
ICB (with PreQual)	7	1	2	2	45	70	45	7	21	21	7	10	7	3	14	14	7	10	7	1	3	3	14	-	
LIB (with PreQual)	7	1	2	2	45	70	45	7	21	21	7	10	7	3	14	14	7	10	7	1	3	3	14	-	

Services

Selection Method	n	RFP/RCQ Launch Date			Proposal submission deadline			Submission of TER			No-objection Date			Submission of CER			No-objection Date			Issue of NOITA & Standstill			Date Contract Award		
		Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max
QCBS (w/Shortlist)																									
QCBS (w/Shortlist)	7	1	3	2	45	60	45	14	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	
FBS (w/Shortlist)	7	1	3	2	45	60	45	14	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	
LCS (w/Shortlist)	7	1	3	2	45	60	45	14	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	
QBS (w/Shortlist)	7	1	3	2	21	60	45	14	21	14	7	10	7	0	0	0	0	0	0	1	3	3	14	-	
CQS (w/Shortlist)	7	1	3	2	14	30	21	0	0	0	0	0	0	14	21	14	7	10	7	0	0	0	4	-	
ICS (w/Shortlist)	7	1	3	2	14	30	21	0	0	0	0	0	0	14	21	14	7	10	7	0	0	0	4	-	
QCBS (noShortlist)	7	1	3	2	45	60	45	14	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	
FBS (noShortlist)	7	1	3	2	14	30	21	7	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	
LCS (noShortlist)	7	1	3	2	21	30	25	7	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	
QBS (noShortlist)	7	1	3	2	21	60	45	14	21	14	7	10	7	0	0	0	0	0	0	1	3	3	14	-	
SSS/ Selection (Design/PIM)	7	1	3	2	7	30	30	0	0	0	0	0	0	7	21	14	7	10	7	0	0	0	4	-	

Validation List Source
Yes
Prior Review
Post Review
NS
IS
NCB
ICB
LIB
DC
Force Account
QCBS
FBS
LCS
QBS
CQS
ICS
SSS
Selection (Design/PIM)

Goods & Works

Procurement Method	rd	Submission of Draft Contract			No-objection Date			Date Contract Signature			Totals			
		Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx
Single Envelope														
RFQ/Shopping (NS/IS)	6	3	7	5	7	10	7	4	7	4	40	78	58	1m 27d
NCB (no PreQual)	15	3	7	5	7	10	7	4	7	4	78	123	94	3m 3d
ICB (no PreQual)	15	3	7	5	7	10	7	4	7	4	93	148	116	3m 25d
LIB (no PreQual)	15	3	7	5	7	10	7	4	7	4	93	148	116	3m 25d
NCB (with PreQual)	15	3	7	5	7	10	7	4	7	4	126	208	164	5m 12d
ICB (with PreQual)	15	3	7	5	7	10	7	4	7	4	141	233	186	6m 4d
LIB (with PreQual)	15	3	7	5	7	10	7	4	7	4	139	233	186	6m 4d
Direct Contracting/ Force Account	6	3	7	5	7	10	7	4	7	4	44	101	58	1m 27d
Two Envelope														
NCB (no PreQual)	15	3	7	5	7	10	7	4	7	4	88	147	104	3m 13d
ICB (no PreQual)	15	3	7	5	7	10	7	4	7	4	103	172	137	4m 16d
LIB (no PreQual)	15	3	7	5	7	10	7	4	7	4	103	172	137	4m 16d
NCB (with PreQual)	15	3	7	5	7	10	7	4	7	4	136	232	185	6m 3d
ICB (with PreQual)	15	3	7	5	7	10	7	4	7	4	151	256	207	6m 25d
LIB (with PreQual)	15	3	7	5	7	10	7	4	7	4	151	256	207	6m 25d

Services

Selection Method	rd	Negotiations completed			Submission of Draft Contract and MoN Date			No-objection Date			Date Contract Signature			Totals			
		Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Approx Months/Days		
QCBS (w/Shortlist)	15	10	28	15	3	7	5	7	10	7	4	7	4	172	268	193	6m 11d
FBS (w/Shortlist)	15	10	28	15	3	7	5	7	10	7	4	7	4	172	268	200	6m 18d
LCS (w/Shortlist)	15	10	28	15	3	7	5	7	10	7	4	7	4	172	268	200	6m 18d
QBS (w/Shortlist)	15	10	28	15	3	7	5	7	10	7	4	7	4	134	244	179	5m 27d
CQS (w/Shortlist)	6	7	14	14	3	7	5	7	10	7	4	7	4	113	195	142	4m 21d
ICS (w/Shortlist)	6	7	14	14	3	7	5	7	10	7	4	7	4	113	195	142	4m 21d
QCBS (noShortlist)	15	10	28	15	3	7	5	7	10	7	4	7	4	128	190	145	4m 24d
FBS (noShortlist)	15	10	28	15	3	7	5	7	10	7	4	7	4	90	158	121	3m 30d
LCS (noShortlist)	15	10	28	15	3	7	5	7	10	7	4	7	4	97	160	125	4m 4d
QBS (noShortlist)	15	10	28	15	3	7	5	7	10	7	4	7	4	90	166	124	4m 3d
SSS/ Selection (Design/PIM)	6	7	21	21	3	7	5	7	10	7	4	7	4	55	126	103	3m 12d

Validation List Source
Yes
Prior Review
Post Review
NS
IS
NCB
ICB
LIB
DC
Force Account
QCBS
FBS
LCS
QBS
CQS
ICS
SSS
Selection (Design/PIM)

Ghana

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Project Design Report

Annex 8: Project Implementation Manual (PIM)

Mission Dates: 02/08/2021 to 20/09/2021

Document Date: 22/11/2021

Project No. 2000002673

Report No. 5864-GH

West and Central Africa Division
Programme Management Department

PROSPER's PROJECT IMPLEMENTATION MANUAL

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Map of the Project area



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 20-09-2021

Chapter 1: Introduction and background

Economic context. Ghana is a lower-middle-income country with an estimated per capita GDP of USD 2,221 (2019). In 2019, GDP grew by 6.5%, up from 6.3% in 2018 – one of the highest rates in the world. Ghana's economy is dependent on the export of a limited number of commodities such as gold, cocoa and oil, and remains vulnerable to commodity price shocks and climate change. In 2020, the inflation rate was 9.2%, unemployment 4.53% and the national debt 78% of GDP (64% in 2019).¹ The impact of COVID-19 has resulted in economic slowdown and socioeconomic challenges that detailed below.

Ghana's performance towards the achievement of the SDGs is still lagging although some improvement is registered. The country is rated 114 among the 165 UN Member States on the 17 SDG in the 2021 SDSN Sustainable Development Report. The achievement of SDG 1 (No poverty) and SDG 2 (Zero hunger) still faces important challenges, while performance on SDG 5 (Gender equality), SDG 6 (Clean water and sanitation) and SDG 8 (Decent work and economic growth) is slightly improving. It is worth noting, however, that significant achievements were made on SDG 12 (Responsible consumption and production) and SDG 13 (Climate Action).² Further, the Ministry of Food and Agriculture (MoFA) priorities are also in line with the 2003 Maputo Declaration, ratified by Ghana in 2007. Key commitments of the declaration include increased investment finance in agriculture, reducing postharvest losses and boosting intra Africa trade.³

Poverty and food insecurity. 23% of Ghana's population are monetary poor and 8.2% live in extreme poverty.⁴ With multidimensional poverty (across the dimensions of education, health, and living standards), the proportion increases to 45.6%, especially in rural areas, where it is far higher (64.6%) than urban areas (27.0%).⁵ Wealth distribution is biased towards men: 62% of female-headed households fall into the two poorest quintiles – compared to 39% of male-headed households. The regions of the Northern Belt have the highest prevalence of poverty, up to 62% in the rural areas, and are the most vulnerable to climate change. The highest concentration of extreme poor (49%) lives in the Savannah region.⁶ Poverty, in the Middle Belt and other areas, is lower than in the North, but still considerable in some regions, such as in Oti (45%), Bono East (36%) and Bono (28%). While some of the regions have lower overall poverty levels, there are persistent pockets of poverty, food insecurity, undernourishment, malnutrition, and vulnerability to climate change. Ghana has a prevalence of undernourishment of 7%. Moderate or severe food insecurity stands at 49.6%. People with disabilities (PWD) represent 3% of the total population, with more than half concentrated in the Middle Belt and almost a quarter in the Northern Belt.⁷

Agricultural and rural development context. Agriculture accounts for 21% of Ghana's total GDP, 71% of employment in rural areas, and over 40% of export earnings. Agricultural imports are substantial, reaching GHS 13.2 billion in 2017 mainly through the imports of wheat, rice, chicken (frozen), milk and fish. Rain fed agriculture prevails in 96% of arable land. Around 85% of farming households own less than 10 ha and more than two-thirds own less than 2 ha of cultivable land. Factors contributing to rural poverty include underdeveloped agricultural technologies that damage the environment, poor access to financial services (especially among women) including green finance for adaptation and

¹ Statista, 2021.

² SDSN Sustainable Development Report, Sustainable Development Solutions Network 2021.

³ Medium Term Expenditure Framework (MTEF) For 2020-2023, Ministry of Food and Agriculture in Ghana, Programme Based Budget Estimates, 2020.

⁴ Ghana Living Standards Survey, 2018.

⁵ Ghana's Multidimensional Poverty Index (MPI) Report, UNDP, 2020. The indicators that contribute most to multidimensional poverty in Ghana are lack of health insurance coverage, undernourishment, school lag and households with members without any educational qualification.

⁶ Ghana Living Standards Survey, 2018.

⁷ 2010 Population and Household Census.

mitigation, lack of secured market linkages, inadequate marketing infrastructure, post-harvest losses, lack of advisory services and cumulative environmental degradation. Only 37% of the rural population has access to accounts in formal financial Institutions. Rural institutions are generally weak with limited capacity to support small-scale production. These challenges are compounded by the negative effects of climate change, such as increasing dry spells and rising temperatures, and the degradation of arable land and critical infrastructure.

Most of the *Northern Belt* falls within the Guinea Savannah Ecological Zone. Smallholders grow mainly soya, maize, sorghum, rice, millet and vegetables. Rice cultivation in the valley bottoms has great potential to reduce poverty levels. Dry season vegetable production is significant at irrigation sites. Productivity remains below potential due to lack of inputs, mechanization and extension outreach. Shea trees cover around 77,670 square kilometres in the Northern Belt and support the livelihood of approximately 900,000 rural women. Trade in shea butter has been rising with strong export demand. The *Middle Belt* falls within the Transition Ecological Zone. Smallholders grow mainly cassava, plantain, maize, yam and soya, with rice cultivation in valley bottoms. The cashew value chain (VC) generates income for about 350,000 smallholders. Cashews can grow on marginal lands, stabilize the soil in which it grows and serve as a carbon sink. However, production is less than 50% of potential with multiple constraints including difficulty in accessing improved planting materials and farm inputs, inadequate extension services, access to credit, lack of effective pricing and marketing mechanisms, bush fires, loss of soil nutrients and inadequate soil moisture.

Vegetables such as tomato, pepper, okra, garden eggs and cabbage are grown mostly under rainfed conditions as backyard production for subsistence and commercial purposes in both the Northern and Middle Belts. Availability is highly seasonal, peaking from June-September. Productivity is usually less than 50% of potential due to traditional cultivation practices, the lack of irrigation systems, limited use of improved inputs and high post-harvest losses. The *livestock* sector is an important component of Ghana's agriculture. In 2019, the sector contributed about 13.3% of agricultural GDP in direct products and had a growth rate of 5.4%, (SRID, 2020). Most rural households (41.5%) keep some form of livestock as an adjunct to crop farming. Small and large ruminants are kept as a form of security and not as a source of protein, so the direct contribution to household food and nutrition security is low. The *COVID-19* pandemic resulted in GDP growth of 1.1% in 2020 down from the pr-pandemic level of 4.8% in 2020. Petroleum receipts, import duties and other tax revenues were affected negatively, reducing the fiscal space for the GoG. 77.4% of households in Ghana have experienced declines in income. Reduced remittances to rural areas contributed to food insecurity. The country's average monthly food inflation recorded an increase from 8.4% in March 2020 to 13.7% in July 2020. While food prices continued to rise into 2021, the overall economic crisis eased and growth is projected to increase to 4.0% in 2021 and 4.1% in 2022.

To mitigate the socioeconomic impact of COVID-19, the GoG took measures including: the Coronavirus Alleviation Programme (CAP), starting with a USD 219 million contribution from the Ministry of Finance (MoF); a reduction in the inter-bank policy rate from 15.5% to 14% by the Central Bank of Ghana; and lowering reserve requirements from 10% to 8% to increase credit availability and affordability. MoFA launched an Agricultural Response Plan increasing the supply of subsidized seeds and fertilizers to poor smallholders. IFAD's *Emergency Support to Rural Livelihoods and Food Systems Exposed to COVID 19* (ESRF) supported the GoG efforts in this area. Ghana's economy showed signs of recovery in the second half of 2020 and is projected to grow by 4.2% in 2021 and 5.3% in 2022. Volatile commodity prices uncertainty over the COVID-19 pandemic still present downside risks.⁸

National strategies, policies and lead institutions. The Medium-Term National Development Policy Framework (MNDPF 2018-2021) recognizes the growth of agriculture as the driving force for rural development and transformation. The Ghana Agricultural Development Plan (GADP) focuses on the development of the agricultural sector from 2018 to 2021 through modernization and transformation. MoFA has increased support to the production of field crops through the Planting for Foods and Jobs

⁸ <https://www.worldbank.org/en/country/ghana/overview>.

(PFJ) initiative for farmers in the Northern and Middle Belts with 2-3 acres land to access improved seeds and fertilizers, with a 50% subsidy, extension services and marketing opportunities. GoG is implementing the PERD (2019-2023) programme for job creation and export diversification through tree-crops and established the Tree Crops Development Authority. MoFA chairs the Agricultural Sector Working Group (ASWG) comprising GoG and development partners including IFAD to ensure coordination and policy dialogue.

The One District One Factory (1D1F) programme led by the Ministry of Trade and Industry (MoTI) aims at establishing at least one medium-to-large-scale industrial enterprise in every district to create quality jobs and achieve a balanced spread of industries. The programme established 104 companies so far, of which 68 were existing companies and 36 newly built, employing 150,975 people) As part of 1D1F, the IFAD-supported Rural Enterprises Programme (REP) established 58 ENABLE Youth factories as a vehicle for employment creation for tertiary level graduates. In 2020, an MSME and Entrepreneurship Policy was approved, which led to the transformation of the NBSSI into the Ghana Enterprises Agency (GEA). A network of 166 Business Advisory Centres (BACs) and 57 Business Resource Centres (BRCs) has been established across the country under an arrangement between REP, GEA and participating District Assemblies, to provide high-value business development services to the business community.

Special aspects relating to IFAD's corporate mainstreaming priorities

Gender. Women constitute 58% of the rural labour force. Despite Ghana ranking second in the ECOWAS Gender Inequality Index, the country is ranked 117 out of 156 countries in the WEF Global Gender Gap Report. Traditional culture and entrenched gender inequality limit women's access to education, healthcare, good nutrition, credit, extension services, new technologies, inputs and output markets, and participation in the public sphere and community decision-making. Female-headed households have less access to land for farming and are more likely to be smallholders (87% compared with 60% of male-headed households). GoG adopted the National Gender Policy (2015) to mainstream gender, women's empowerment and social protection concerns into national development processes, natural resources and agriculture. A Gender and Agricultural Development Strategy (GAD II) was developed in 2015 by the MoFA Women in Agriculture.

Youth. The country has a youth bulge (15-35 years of age⁹) with 57% of the total population being below the age of 25. The rural community comprises 56% youth compared to 44% in urban contexts. Youth contribute to family labour for agricultural production and engage in other activities such as processing, warehousing and transportation, but are unable to pursue farming independently due to limited access to land, credit, quality inputs and sustainable profitable output markets. Due to limited access to jobs, inadequate training and illiteracy, youth unemployment and underemployment in Ghana reached 12% and 50% respectively by 2020, resulting in growing youth migration from rural areas to urban centres.¹⁰ Initiatives to provide jobs, capacity-building and opportunities for youth include: the MNDPF (2018-2021); the PFJ in agriculture and related sectors; the Initiative for Sustainability, Stability and Security (3S) under the IFAD managed Rural Resilience Trust fund (focused on the Northern Belt); the IFAD-supported REP; and the Youth Agripreneurship Development Programme, run jointly by AGRA and Nestle. Despite these initiatives from GoG and development partners, the outreach to youth from semi-subsistence smallholder families remains limited.

People with Disabilities. Statistically, PWD make up 3% of the population. Disability in Ghana is considered both a human rights concern and a developmental issue due to its strong links to exclusion, discrimination and poverty. In 2006, Parliament passed the Persons with Disability Act, 2006 (Act 715) protecting the rights of PWDs and guaranteeing the rights to education, healthcare,

⁹ The National Youth Policy in Ghana (2010).

¹⁰ Youth Employment Programmes in Ghana: Options for Effective Policy Making and Implementation, World Bank, 2020.

employment and movement of PWDs. The Act established the National Council on Persons with Disability charged with the responsibility of proposing and evolving policies and strategies to enable PWDs to integrate and participate fully in national development. However, despite efforts being made to educate the public, PWDs are still stigmatized, discriminated against and socially excluded. There is strong correlation between disability and poverty. Poor health, limited schooling and employment opportunities impact negatively on the socioeconomic status of affected households. Households with disabled members may be vulnerable to poverty due to extra costs of living with a disability.

Nutrition. Ghana is 'on course' to meet two targets for Maternal, Infant and Young Child Nutrition (MIYCN) reducing anaemia among women of reproductive age (46.4% of women aged 15 to 49 years are still affected) and achieving the low-birth-weight target (14.2% of infants have a low weight at birth). No progress has been made towards achieving the exclusive breastfeeding target, with just 42.9% of infants aged 0-5 months exclusively breastfed. Ghana is 'on course' to meet the target for stunting (chronic undernutrition), with 17.5% of children under 5-years affected but the proportion rises to 33% in the Northern Region. Some progress has been made towards achieving the target for wasting (acute undernutrition) but 6.8% of children under 5-years are still affected. The prevalence of overweight children under 5-years is 1.4% and the country is 'on course' to prevent the figure from increasing.¹¹ Ghana has shown limited progress towards achieving the diet-related non-communicable disease (NCD) targets. However, the country has shown no progress towards achieving the target for obesity, with an estimated 16.6% of adult women and 4.5% of adult men living with obesity. Diabetes is estimated to affect 6.6% of adult women and 6.4% of adult men. The diet mainly on starchy roots, fruit and cereals. Dietary diversity remains low with limited intake of protein and a general reluctance to consume fruits and vegetables, causing stunting in preschool-aged children and anaemia amongst pregnant women. A long-term Food and Nutrition Security (FNS) Strategy has been developed and used to review the National Nutrition Policy (NNP).

The NNP aims to address nutrition-related challenges of feeding practices for infants and young children, nutrition among women of reproductive age and the promotion of nutritionally adequate safe diets. Ghana joined the Scaling Up Nutrition (SUN) Movement in 2011 and has established national, regional and district level multi-sectoral nutrition coordination mechanisms. Ghana's multi-stakeholder platform (MSP), the Nutrition Cross-Sectoral Planning Group (NCSPG), continues to expand, bringing together ten sectors; all five Northern regions have nutrition MSPs.

Climate and environment. Climate change is projected to affect vital water resources, energy supplies, crop production and food security, with the Northern Belt the most vulnerable. Ghana is experiencing increased extreme weather conditions with higher incidences and prolonged periods of flooding and droughts. The country's dependence on the production of crops that are sensitive to climate change (cassava, cocoa, shea) and lack of agricultural diversification exacerbate the vulnerability. Energy production meets demand, but rural communities continue to rely on fuelwood, resulting in forest depletion estimated at 2% loss per annum. Rural credit is a crucial factor in building climate resilience and improving productivity and lack of access remains a key constraint for producers and MSMEs, particularly in COVID-19 recovery efforts and for rural women and youth. Agriculture is estimated to be the second largest contributor (10.05 MtCO₂e) to Ghana's greenhouse gas emissions after the energy sector (15.02 MtCO₂e). Ghana is committed to implementing its National Climate Adaptation Policy, as highlighted in the National Climate Change Communication to the United Nations Framework Convention on Climate Change (UNFCCC) and its Nationally Determined Contribution (NDC) to the Paris Agreement.

The development challenge and prognosis. The underlying issue flagged is the persistence of intractable poverty in many rural communities dependent on agriculture in the drier Northern parts of the country. The prevailing low input-low output rainfed farming systems in the Northern and Middle Belts are suboptimal and, with a long history of over-exploitation, the economic carrying capacity of

¹¹ <https://globalnutritionreport.org/resources/nutrition-profiles/africa/western-africa/ghana/>.

the heavily depleted productive NR base is declining whilst the number of dependents is increasing. The negative effects of rapid climate change are making bad conditions worse. The remedy is to uplift rural economies by transforming the bedrock of small-scale farming from predominantly subsistence to financially and environmentally sustainable systems tied into functioning markets. This rationale focuses on both the supply side – the scale and technical transformation of production – and a marked increase in real demand for the produce, whilst ensuring that the most vulnerable people are not left behind in poverty.

For the producers, individually and in groups, the imperative is the technical and organisational skills needed to progress to climate-resilient “farming as a profitable business” and to transition to agricultural and land management practices that lower emissions and reverse the depletion of the NR base (soil, water and trees), both on- and off-farm. A key mindset change for producers is to engage proactively with other private sector operators to build collaborations that are mutually beneficial and with balanced bargaining power. To this end, the critical linkage in the VC is the first, that between producers and agribusinesses.

On the demand side, the agricultural market prospects in the Northern and Middle Belts are promising, with strong global demand for maize, shea and cashew and rapidly increasing domestic demand and import substitution possibilities for rice, soya and poultry. GoG is investing heavily in the scale and capacity of “upstream” VC actors through 1D1F and other programmes. However, the mass of rural producers is not able to capitalise on the growth in demand, being effectively outside the mainstream economy. The development challenge for PROSPER is to broaden, deepen and extend the reach of these commodity VCs to engage with significant numbers of primary producer groups. The resulting “demand pull” is much stronger than “supply push” in driving local economic growth. The increased volume of business is expected to create opportunities for enterprises in agro-processing and value addition at all scales, fuel employment and incomes within local economies through a multiplier effect, and thereby raise the food security and nutrition security of whole communities in the context of the changing climate.

PROSPER will focus on climate-sensitive and nutrition-sensitive value chains, and will include training and awareness-raising activities promoting behavioural changes. The project will also introduce matching grants activities devoted to nutrition related activities and partner with nutritionists from the Ministry of Health for capacity-building, training on food preparation and consumption and so forth.

IFAD's comparative advantage. The Fund has a wealth of technical expertise to offer in addressing intractable rural poverty combined with the capacity to mobilise resources at a scale that can make a lasting impact on the lives of vulnerable people. IFAD has a strong record in Ghana in working with poor rural communities in the food and agriculture sector in the Northern and Middle Belts. A portfolio of IFAD funded projects has focused on various closely related aspects relevant to the design of PROSPER. *Roots and Tubers Improvement & Marketing Programme* (RTIMP) took an integrated commodity chain approach. *Northern Rural Growth Programme* (NRGP) combined commodity chain and rural infrastructure development with access to financial services. *Rural and Agricultural Finance Programme* (RAFIP) followed by *Rural Financial Services Project* (RFSP) have built up the microfinance subsector. *Ghana Agricultural Sector Investment Programme* (GASIP) is concentrated on agribusiness linkages and VC development, with measures to promote climate change resilience. *Rural Enterprises Programme* (REP) seeks to promote rural business, many of which are based on agriculture and NRs. The *Affordable Agricultural Financing for Resilient Rural Development Project* (AAFORD) focuses on smallholder access to formal credit. *Emergency Support to Rural Livelihoods and Food Systems exposed to COVID 19* (ESRF) was a rapid response to support smallholders coping with the pandemic.

PROSPER will scale up and build on the broad and deep experience, lessons learned, fruitful partnerships and cumulative development achievements of the IFAD projects in Ghana. Corporate knowledge of relevance to the new initiative includes: capacity of Rural Institutions (RIs) and MSMEs; resilience building and the sustainable use of NRs; capacity of extension services to support VC

producers and actors; creation of market linkages; capacity of BACs and BRCs to provide training to RIs and MSMEs; affordable loans in a market segment where FIs do not operate; partnerships with Apex Bank and other FIs to promote inclusive rural financial services; innovative cashless credit model¹²; and one-time Matching Grants (MGs) for beneficiary groups ensuring subsequent access to affordable credit to sustain their marketing partnerships.

Concessional resources for green finance are beneficial in supporting smallholder producers and processors to adopt climate resilient agricultural and agribusiness practices. With its first successful experience in Niger, the Inclusive Green Financing for Low Emission and Climate Resilient Agriculture (IGREENFIN) initiative is stimulating a paradigm shift within the country's financial system. IFAD is expanding this business model in thirteen countries of the Great Green Wall Initiative area, including Ghana. It will support local financial institutions, one in each country, in setting up green credit lines to finance green agricultural investments and align their portfolio towards meeting Nationally Determined Contributions (NDC) targets in the Land Use, Land-Use Change and Forestry (LULUCF) sector. PROSPER will leverage IGREENFIN to promote green investments by smallholder farmers and related enterprises.

Lessons Learned

The foregoing development interventions have yielded a range of pertinent lessons for the design of PROSPER, including the following.

- *Rural institution capacity building (training and skills transfer) is a priority from the outset to support enduring agribusiness partnerships and the creation of internal capital through savings.* Many of the RIs supported by RTIMP, NRGp and GASIP were assessed as institutionally weak at completion, (lacking financial resources or bank linkages and requiring capacity support). For example, in NRGp, only 1,625 of the 8,127 farmer-based organisations established (20%) were assessed to be functional and only 4% were considered to be a Mature Cooperative. Following this lesson, PROSPER will provide relevant training and capacity building of sufficient quality to enable beneficiaries to enter and progress within the VCs.
- *RI/MSME internal financial assets, such as the creation of internal capital from savings mobilisation and retained earnings,* is a necessary condition for RIs and MSMEs to engage with VCs. Many existing groups remain chronically undercapitalised as they lack the culture, orientation or assets to retain a part of current profits to finance inputs for the following year. Ghana has had success in the establishment of member-based savings common interest groups. Variations of the Village Saving and Loan Association model have proved effective in a group setting, particularly for women and PROSPER will build on this experience.
- *RI integration in value chains to facilitate farmers' access to markets.* PROSPER will learn from and build on the experience of previous projects with the common aim of integrating farmers into VCs and facilitating their access to markets. The District Value Chain Committees model of NRGp will be supported as a potentially valuable discussion medium for producers and other VC actors in each district. The Cluster Driver Approach of GASIP and the Anchor Agribusiness concept piloted under the PFJ initiative are reflected in the PROSPER design with the creation and expansion of stable agribusinesses linking medium-scale entrepreneurs with multiple smallholder producer groups. PROSPER will support market linkages between these initiatives and the Ghana Commodity Exchange (GCX).¹³ This is a big step up from enhanced subsistence farming.
- *Need to combine production, marketing and credit support to ensure maximum returns to developing producer groups.* While the cashless credit model of NRGp was a successful innovation, the initiative was not integrated with marketing support. A total of 20,000 households benefitted from credit linkages to increase production, but only half participated

¹² Eligible farmers receive inputs and services from vendors and providers; rural banks pay the sellers; after harvest and sale of the produce, farmers repay the loan.

¹³ <https://gcx.com.gh/>.

in marketing groups and many farmers had to revert to traditional and less profitable marketing practices after one season, affecting their creditworthiness. The District Stakeholder Fora (DSF) developed under RTIMP were organized around supply chain leaders and facilitated business linkages for smallholders, but no formal credit linkages were established. GASIP demonstrated excellent integration between production support and marketing linkages for beneficiaries but was less successful in developing credit linkages for farmers already linked to the market. Consequently, PROSPER will build up the capacities of FIs both to increase the quantity, quality and profitability of production and to link into markets, negotiate prices and bargain for better services. The project is focused on the establishment of enduring contracts between producers and agribusinesses.

- *Need to develop functional capacity of PFIs through capacity building.* The bottlenecks in extending access to finance include the risk-averse attitude of PFIs, limited outreach, lack of liquidity in rural banks, high interest rates and inadequate capacity for monitoring. The experience from credit lines for agricultural VCs and rural MSMEs financing since 2005 shows that PFIs will not be financially stable unless credit is backed by capacity building to undertake properly due diligence on loan requests and access to offtaker markets in long-lasting agreements with producers, loan and risk management, pragmatic scheduling of loan repayments linked to borrower business cash flows and the monitoring and recovery in full of due loans so that funds revolve. The project will collaborate with AAFORD to provide such PFI capacity building with adequate TA on financial literacy, productivity enhancement and responsible borrowing by servicing loans due. Ghana Incentive Based Risk Sharing Agricultural Lending (GIRSL) has designed a special training programme for banks and PROSPER will encourage all participating PFIs to enrol in the training.
- *Affordable financing modalities for RIs/MSMEs to ensure access to finance for smallholders.* Lack of access to finance at affordable interest rates is a constant issue for smallholders wanting to progress. In NRGPs innovative cashless credit model, financial institutions provided USD 4,861,625 worth of credit from their own funds to 21,349 smallholders, but necessarily at market interest rates which proved unsustainable for the borrowers. Concessional lines of credit have been recognised as an important tool of support to smallholder farmers in Ghana, who have difficulty accessing formal market-priced financial services. In July 2021, thirteen key lines of credits (launched since 2010) were operational for agricultural value chain and rural SMEs financing. However the supply of funds at affordable on-lending rates remains below the volume needed to build the capacity of the target group to address concerns. None of the above is factoring into consideration adaptation to climate risks. Provision of a line of credit for climate mitigation as well as adaptation will be a forward leap in Ghana's efforts to meet its Nationally Determined Contributions under the Paris Agreement. PROSPER will facilitate the development of a blended agricultural refinancing facility to provide FIs with additional resources to offer affordable credit to poor and very poor producers. The project will also contribute to mitigating the inherent financial risks associated with lending to smallholders facing escalating climate change by promoting linkages between (i) PFIs and GIRSL's partial credit guarantee scheme, and (ii) producers and the smallholder agricultural insurance scheme at GAIP. The GCF lines of credit are designed to counter such risks and invest in mitigation and adaptation actions. PROSPER will thus support interest rate flexibility to achieve sustainability for PFIs while ensuring profitability and positive livelihood changes to its beneficiaries.¹⁴
- *One-off Matching Grants.* Experience reveals that Matching Grants (MGs) for financing capital investments and (mainly) variable costs such as inputs have delivered mixed results in IFAD-supported projects in Ghana. The GASIP one-off MG support for seasonal inputs produced

¹⁴ The new inclusive rural finance policy (IRF) passed by IFAD's EB on 14 September 2021 underscores the need to "improve use of subsidies to foster long term sustainable outcomes of IRF activities and to attract investment capital". In lieu of market-priced on-lending interest rates, IRF 2021 stipulates, "IFAD will employ asset subsidies, matching grants, production and market access TA, value chain development, public and private infrastructure development, and other interventions to help develop sustainable climate IRF markets in developing member states".

encouraging short-term results, particularly for maize and soybean, but revealed the need to support beneficiaries over more than a single cropping cycle to ensure mastery of the technical capacity and skills acquired, which would undermine IFAD's policy to use a MG as a one-off support. . The current context and GoG practice warrants the use of matching grants for both working and investment capital. This approach is delivering excellent results in the WCA region, for example; in Nigeria with VCDP. PROSPER will implement a phased financing protocol and sequencing, starting with mobilizing savings for securing a beneficiary contribution.

- *Climate change adaptation and mitigation measures have high levels of adoption when included in production packages linked to markets and financial instruments.* PROSPER will integrate NRM and climate resilient agricultural practices into all interventions and build explicit green criteria into business plans, in particular the larger schemes considered for the Finance Facility funding.
- *Vulnerable beneficiary targeting.* PROSPER is committed to identifying the poorest people living in very poor communities, including specific vulnerable groups: women, youth (18-35 years) and PWD. The cumulative experience of projects suggests that the effectiveness of direct targeting is increased greatly by authentic participatory consultations. Special attention must be paid to the constraints on smallholder farming, particularly women and youth access financial institutions.

Theory of Change

Developmental challenges. The main development challenges in the project area are high levels of rural poverty, youth and women unemployment, food insecurity, malnutrition in all forms, climate change and accelerating environmental degradation. Most poor farmers are engaged in low input-low output production in the small-scale rainfed field-crop sector, which is neither financially nor environmentally sustainable. In the absence of linkages to VCs, marketing tends to be haphazard even in good years. There are significant numbers of vulnerable people – women, youth and PWD – excluded from the rural agricultural economy.

These challenges are compounded by accelerating NR scarcity and degradation exacerbated by climate change and a growing rural population. Traditional farming systems and diminishing access to energy in rural areas leads to soil erosion, deforestation and loss of command over water; the productive land becomes progressively less fertile and yields decrease. These factors expose rural livelihoods to external shocks, limiting the ability of households to meet their basic needs. The lack of access to healthy and diversified diets leads to compromised diets, particularly for pregnant/lactating women and children under two years.

On the demand side, VCs are suboptimal with progressively less market offtake in remote areas. Farmers sell any surplus produce in local markets or to traders and middlemen straight after harvest when prices are low. In these circumstances, there are few opportunities for individual households and whole communities to accumulate the human, physical and financial resources needed to modernize production and progress from subsistence. Women and youth are most affected due to many factors including socio-cultural exclusion. The absence of public investment over many years has resulted in a lack of basic infrastructure, such as reliable potable water supplies, which places constraints on both livelihoods and living standards.

Opportunities. PROSPER will tackle these formidable challenges with a market approach. On the supply side, the project will invest not only in the technical capabilities of primary producers and processors but also in the organisational and business skills required to enter lasting commercial arrangements. Climate change has drawn attention to the cumulative depletion of the NR base, with much formerly productive land and forest already beyond the point of no return. The aim of the work with farmers will be to increase productivity and profitability rather than short-term production, in ways that slow and then reverse the rapid deterioration of the productive land, both on- and off-farm. Advice and demonstrations of climate-resilient farming practices such Conservation Agriculture will be supported

by purposeful remediation works in the wider landscape after years of neglect. The key success factor in this regard is progress towards proactive NR management arrangements, with acceptance of community responsibility for the fragile land. Environmental sustainability is a necessary condition for successful “farming as a business”. Even limited additional profit coming into a poor community can trigger growth in the local economy, including opportunities for new enterprises to provide support services to the farmers. This requires access to rural climate finance to incentivize the sector to adopt best adaptation and mitigation practices.

The project recognises fully that stimulating field and tree crop production alone, however well the agronomy is adjusted to the environment, will not benefit the target population without a substantial increase in the real demand for the produce, in terms of volume, prices that at least cover production costs and access to the multi-step markets. The argument hinges on the efficacy of demand pull rather than supply push. PROSPER takes a VC approach for the selected commodities, in which the smallholders are linked into the existing private sector VCs. The key link for a primary producer group is a contract arrangement with an agribusiness or aggregator. PROSPER is oriented to facilitate such private sector arrangements by guiding and coaching the emergent RIs and MSMEs, developing business plans as appropriate for groups with differing levels of maturity, engaging with larger-scale VC actors (“drivers”) and arranging access to affordable financial services as needed. These mainstream business interventions are complemented with measures to include marginalised and vulnerable people and to invest in shared public socioeconomic infrastructure to improve the living conditions of whole communities.

Success with the growth in agricultural production in the framework of rapidly expanded value chains will drive up the incomes of the whole economy in the target rural communities and stimulate local demand for increased and additional support services both in the sector and in the wider population. It is this secondary demand that will provide opportunities for youth to escape from the under- and unemployment prevalent in the project area. Major constraints regard the lack of opportunities in the rural setting and the desire to migrate to urban areas; working in agriculture is not considered attractive or remunerative enough. PROSPER is designed to help youth along an authentic pathway from poverty by providing general training on running a business, helping micro-enterprises of all types (related to the six PROSPER value chains) and linking the emergent MSMEs to affordable finance. The new enterprises then contribute themselves to the recovery of the local economy.

PROSPER will promote women’s participation and empowerment by addressing barriers prevalent in the geographical context of the project. Major constraints are represented by low level of education among poor women, already existing workload, and lack of willingness of spouses and other family members to support full participation of women in project activities. PROSPER will mitigate these constraints by increased participation in training (e.g. Financial Literacy) and promotion of educational and income generation activities; labour - saving and women-friendly technologies to address workload; community awareness on gender equality as a vehicle for prosperity and the introduction of GALS approach. PROSPER will advocate for different male role models by encouraging men to support women’s participation through guarantee of land and other resources required. Gender targeting in PROSPER will include the inclusion of young women (youth) and women with disabilities (PWDs). Training and meetings with PWDs will be organized in close-by locations in the communities, in sensitive teaching and learning environments. To cater to the special needs of the PWDs with visual, hearing, physical and speech impairments, PROSPER will train them in braille, sign and audio languages.

In PROSPER nutrition and health will be promoted through several pathways, including selection of value chains that are climate and nutrition-sensitive or that will make a high contribution to nutrition; food conservation, post-harvest processing and value addition; promotion of vegetable gardens; and nutrition education. Specific trainings and a Social Behaviour and Communication Strategy (SBCC) strategy will be developed to promote non-discriminatory intra-household food distribution, adequate diets for adolescent girls, consumption of diversified diets, food hygiene and safety, and improved

WASH practices as well as the discrimination of negative socio-cultural habits like teenage marriages and early pregnancies resulting in low-birth weight babies as major risk factors for malnutrition.

Chapter 2: PROSPER

Project goal and objectives

The **PROSPER Project Development Objective** is: Strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority VCs in the Northern and Middle Ecological Belts taking advantage of the increased demand created by the national agro-processing strategy. PROSPER aims to provide a framework for the long-term engagement with and financing for private sector-led, pro-poor agricultural VC development tailored to the specific needs and potential of small-scale producers and operators in targeted regions of Ghana.

In line with IFAD11 mainstreaming commitments, PROSPER qualifies as:

- Climate finance:** PROSPER will integrate adaptation and mitigation measures in the value chain packages, supported by special financial mechanisms promoted by the project.
- Nutrition sensitive:** PROSPER will select nutrition sensitive VCs, increase production of highly nutritious crops and animal sourced foods, promote food conservation, post-harvest processing and value addition, and promote better dietary patterns by providing nutrition education and SBCC(SBCC).
- Youth sensitive:** PROSPER will target male and female youth (each group with a minimum of 50% eligible youth), adding their access to land as a precondition for community participation in the project. PROSPER will support the establishment of youth-led enterprises along the selected VCs and will provide targeted financial inclusion, skills development and capacity building.

Project area and geographical targeting

Geographical targeting. The geographical targeting strategy of PROSPER considers (i) high rural population, (ii) high poverty prevalence, (iii) high rate of food and nutrition insecurity, (iv) strong concentration of female and male youth and (v) presence of economic opportunities relevant to the project, impact of climate change and, natural resources degradation.

The geographic area of intervention extends to eight regions in the drier North of the country and the middle belt which is characterized to have significant challenges. The five regions in the Northern Belt are Upper West, Upper East, North East, Savannah and Northern, all with a high poverty head count up to 92% (Wa West District, Upper West). The three regions in the Middle Belt are Bono East, Bono and Oti. Although, on average, less poverty stricken than the Northern Belt, the Middle Belt has pockets with poverty head counts and peaks up to 78% (Kintampo South District, Bono East), 78% (Banda District, Bono) and 67% (Kadjebi District, Oti).

Phased approach. Selection of all eight proposed PROSPER regions is based on exhaustive analysis of available poverty, food insecurity and socioeconomic data in the Northern and Middle Belts. The plan is to start with three of the poorest regions to conduct the various project-wide inception activities without over-extending Government and management resources and to align with the pattern of project financing.

The project will start implementation in three adjacent regions in the Northern Belt (Calibration Phase): Northern, Upper West and either Savannah or North East. The original concept envisaged this cautious approach, with all project activities tried from inception and scaled up when modalities are shown to be effective. The project structure is flexible and phasing can and should be adjusted in the light of experience gained in the first years, particularly with lessons learned from piloting the innovative Blended Finance Facility (BFF).

The project will be scaled up to the remaining five target regions (Replication and Scalability Phase), by the middle of the third year of implementation according to four trigger conditions:

- (i) filling the financing gap (currently estimated at USD 22,7 million), in part or in full from IFAD-12 (IFAD);
- (ii) Government meeting its PROSPER cofinancing commitments during the Calibration Phase (GoG);

- (iii) MoUs with implementing partners established and progressing well (PROSPER management); and
- (iv) Satisfactory arrangements in place with regard to the operation of the Matching Grants and Blended Finance Facility (PROSPER management).

If one or more of the above conditions are not met, this could lead to restructuring of the project or any other possible remedies to address underlying issues through the mechanism of an early mid-term review. Examples of measures that could be taken for restructuring include reducing the size of the project, reconfiguring implementation arrangements to address performance shortfalls, reducing the scope of components facing challenges and increasing the size of those that are performing better, and /or partial cancellation.

It is estimated that PROSPER will be active in any target district for about four years to provide the core project support.

Food security. Food insecurity prevalence as reported by the CFVSA 2020 and based on the Food Consumption Score is not necessarily corresponding to the poverty head count. However, the latest food security and nutrition monitoring updates of WFP (June 2020) show high level of food insecurity (moderately and severe) in the target regions, including the ten worst-off districts nationwide in terms of food insecure households: Upper East (5), Northern (3), Upper West (1) and North East (1). Main barriers to food security are food availability and accessibility. This affects access to micronutrients, especially for women and children.

Minimum Dietary Diversity for Women (MDDW) is an indicator for the adequacy of the diet in a household. The Ghana Micronutrient Survey (2017) reports that the proportion of women (15-49 years) not meeting the MDDW score ranged from 37.9% to 42.4% in the target regions, with a high national average of 40.2%.

There are significant regional disparities concerning nutrition security in Ghana. The Northern region is worse off when it comes to rural (extreme) poverty, rural child stunting (chronic undernutrition) and the prevalence of anaemia among women and children while the middle belt comes second. The national child wasting (acute undernutrition) rate stands at 7%, with the highest prevalence reported for Northern Ghana (10.9%). The presence of PWD has also regional differences. The prevalence of PWDs by district ranges from 3.0% to 8.3% in the Northern Zone and from 7.3% to 12.4% in the Middle Belt.

Annex 14 provides more information regarding the evaluation of the different considerations in selecting the regions.

Target groups and targeting strategy

PROSPER will benefit approximately 100,000 beneficiaries, with the targeted participation of 40,000 women, 60,000 men, 30,000 youth, and 5,000 PWD. PROSPER's primary target groups will be the poorest, the poor and the vulnerable people and those who have little access to assets and opportunities due to social exclusion and marginalization.

The poorest are the ones with not more than 1 ha cultivable land or are landless. These are mainly the poorest households and vulnerable groups including women, unemployed female and male youth between 18-35 years, and persons with disability.

The poor households comprise of smallholders with less than 2 ha cultivable land whose livelihood comprise smallholders whose livelihoods are more vulnerable to natural resource degradation and climate change risks. Also in this group the support is focussed on women, female and male youth and people with disability who are economic active.

Market-oriented farmers with 2 to 10 ha cultivable land are the third target group benefitting from the project support.

Larger market oriented- farming households with more than 10 ha arable land and larger private sector entities may only participate in project activities such as capacity-building if they offer employment or business opportunities to the targeted smallholder and poorest households. Targets for saving mobilization interventions under component 1: 'Development of Rural Institutions and Social Infrastructure' are 100,000 beneficiaries (40,000 women, 60,000 men, 30,000 youth and 5,000 PWD). Those beneficiaries will be selected primarily among existing Rural Institutions (RIs) and MSMEs whenever they exist and meet the targeting criteria; otherwise, the project will foster their formation. The project will reach out to the poorest groups who are non-members of RIs/MSMEs. Efforts will be made to integrate them in RIs/MSMEs. It is estimated that 90% of project beneficiaries will be members of RIs while 10% will be affiliated to MSMEs. The above number of beneficiaries is assumed to correspond to 70,000 HHs.

It is expected that 50% of total beneficiaries (comprising 20,000 women, 30,000 men, 15,000 youth, 3,000 PWDs) will successfully complete the organisational and other relevant training, graduate from tier 1 to tier 2 with regard to the financial literacy and saving mobilisation, start utilizing improved financial arrangements within their institutions and enterprises and start working towards meeting the saving targets. Those will be called to participate in efforts to create market linkages, trained on business planning, supported to develop them and called to submit their business plans for funding. 70% of those business plans will become eligible for the matching grants / BFF loans after successful submission of BPs.

Table 1 -- Total Beneficiaries – Component 1 and 2

Total Blended Finance Facility					
Total	Women	Men	Youth	PWD	
23,965	11,476	12,219	7,362	1,198	
Total Matching Grant (excl. livelihood grants)					
20,436	11,718	8,718	8,482	2,044	
Total target from MG and BFF (assume 30% from MG scheme graduate to benefit from BFF)					
38,315	20,000	18,379	17,485	13,412	2,633
Total benefiting from business plan training					
51,536	26,558	24,978	18,147	3,599	
Total benefiting from Component 1 – capacity building and infrastructure					
108,072	53,116	49,956	36,295	7,199	

Table 2 -- Target groups: Matching Grant and Blended Finance Facility

Activity	%	Total #	Women	Men	Youth	PWD
MG Cluster Rural Inst./Value Chain						
Rice	50 women					
Maize	40 youth					
Cashew	10 PWD					
Poultry		1,900	10,950	7,950	7,560	1,890

Activity	%	Total #	Women	Men	Youth	PWD
Shea	100 women 40 youth 10 PWD					
MG MSMEs						
Rice						
Maize						
Soy						
Cashew						
Shea						
Poultry						
MG Livelihood options						
Off-season vegetable	60 women					
Post-Harvest Mgmt.	40 youth					
Small ruminants	10 PWD					
Poultry – eggs						
MSMEs						
BFF Cluster of RI/Value Chain	Rice, Maize, Soy, Cashew: 40 women 50 youth 5 PWD					
Rice	Poultry:					
Maize	40 women					
Soy	30 youth					
Cashew	5 PWD					
Poultry						
Shea	Shea: 232 women / cluster 30 youth / cluster 5% PWD / cluster					
BFF MSME						
Rice						
Maize						
Soy						
Cashew						
Shea						
Poultry						

Technical & socioeconomic targeting, gender & social inclusion

In line with IFAD's targeting guidelines, PROSPER will reach the target group through a combination of geographical targeting, community targeting (i.e. PWDs), self-targeting and direct targeting mechanisms. In adherence to IFAD's mainstreaming objectives, the targeting will include special provisions regarding gender, youth, nutrition, climate vulnerability, and for PWD.

Self-targeting will be ensured through the participatory formulation of cluster level plans and group of RIs coming together, and standalone MSMEs Business Plans (BPs) which will serve as the key investment tools for directing project support to the communities. Participatory development of these planning and investment tools will ensure that the activities which are identified correspond to the priorities and capacities of the target group. Amongst other activities, the selection of pro-poor activities around the selected value chains which involve agricultural practices that generate high levels of rural employment, involve low input costs and contribute to food security and family nutrition, will lead to self-targeting. For example, phase 1 implementation will include the shea nuts value chain which is characterized by high involvement of women in the collection, trading and processing of shea nuts to shea butter, which is a rich source of quality fatty acids and contribute to family nutrition. Similarly, the selection of agricultural and village enterprise related machinery/equipment will be based on the relevance of such tools in smallholdings and their labor reduction and time saving benefits for priority target groups such as women, PWD and female and male youth. Self-targeting will be facilitated through the use of gender-sensitive delivery systems (e.g. delivering non-residential training at village level respecting the appropriate timing for women). Moreover, capacity-building will be tailored to the needs of women, female and male youth and PWD based on continuous consultations with the beneficiaries in regularly organized consultative forums.

Direct targeting: In line with the Ghana COSOP, direct targeting will be one of the key mechanisms for reaching the poorest households and vulnerable groups. Direct targeting will aim at achieving the outreach targets of 70-80% very poor and poor households, and at least 40% women, at least 30% youth (15% young women; 15% young men), at least 5% PWD (within the groups of women and/or youth) participating in project activities. A person is deemed to be “poor” in Ghana if their income is less than 1,314 GHC per adult per year (which was USD 1.83 per day in 2013 when the relevant survey was undertaken, but was only 62 cents in April 2021) while the “extreme poor” live on less than 792 GHC per adult per year (USD 1.10 per day, in 2013, and 48 cents in April 2018). According to UNDP, the poverty line was only 27.1% of the mean consumption level in 2012/13, while the extreme poverty line is 44.9%.

The mechanism for maximizing outreach will prioritize targeting of existing Rural Institutions and MSMEs with at least 50% of poor and very poor including vulnerable groups. In case, such groups do not or insufficiently exist, the project will foster their formation. The project will also identify very poor beneficiaries who are not members of RIs and MSMEs and will promote their integration in such institutions / MSMEs, especially the ones that will be eligible for the more concessional project support. For the RIs to be eligible for selected project activities; e.g. Matching Grants (MGs), they should have at least a membership of 50% among the very poor (including vulnerable groups), 40% women, 30% youth and 15% PWDs. Matching grants will target as well MSME of up to 9 employees. The Blended Finance Facility will target all RIs comprising of poor and very poor (50% of the members are among the poor category) as well as from the special target group (40% women, 30% youth and 5% PWDs). MG category geared towards nutrition and livelihood activities will target 60% women, 40% youth and 10% PWDs.

Eligibility criteria for direct targeting will be defined with the participation of community members in a transparent manner. Thus, direct targeting will start with the development of the cluster plans wherein the communities will categorize the households into different socio-economic groups based on participatory wealth ranking. The women headed households, households with unemployed female and male youth, and PWD in the different socio-economic groups will also be identified during the process. Subsequently, the business plans developed at the group level will list the names of all the potential beneficiaries/households along with their socio- economic category and priority group (women, f/m youth, and PWD). The project will screen these business plans by checking that they comply with the direct targeting guidelines for the particular business activity, and by verifying that

the details of the potential beneficiary households match their socio-economic and priority group status identified in the cluster plans. The direct targeting guidelines for the different types of business plans and MGs are defined in table 2 above.

PROSPER will collaborate with the Livelihood Empowerment Against Poverty (LEAP), a flagship programme of the Ministry of Gender Child and Social Protection implemented as part of the National Social Protection Strategy (NSPS). PROSPER will work with LEAP to identify the clusters within the geographical region based on poverty and vulnerable groups related data from LEAP and it will assist the households in the project areas which qualify for LEAP support to enroll and benefit from LEAP's cash transfers activities in social welfare services. Similarly, PROSPER will engage with the GFD for information dissemination about project activities, the identification of PWDs in the project area, as well as to fine tune and support implementation of strategies for increasing the project's impact on PWDs. PROSPER will also explore partnerships with the World Bank supported Ghana Jobs and Skills Project which is also oriented towards the needs of PWDs.

Social inclusion will be pushed by measures such as organizing meetings or events, appropriate to women's time and venue constraints; encouraging the submission of business proposals from women-only groups; and ensuring women hold at least 30- 40% of leadership posts in project supported Rural institutions. PROSPER will also promote access to productive land through sensitization across the districts and chiefdoms on land tenure and access to land for the intended beneficiaries; engaging with Paramount Chiefs to secure land for intending beneficiaries with no access to land; and making access to land by women and youth one of the preconditions for a community to participate in the project.

Youth empowerment: Both male and female youth (50% each) will be supported to establish enterprises along the selected value chains, and the project will provide skills development and capacity building of the youth groups and financial inclusion.

PROSPER will place a particular focus on potential vulnerabilities affecting specific sections within the youth category (e.g. ensure young women have equal opportunities with the young men to participate and benefit from the project, inclusion of youth with disabilities, etc). The project will also leverage synergies with other on-going programmes to maximize the outcomes and also ensure sustainability of the interventions (AFFORD, World Bank's Jobs and Skill Project, etc).

Safeguards against elite capture: The primary safeguards against elite capture will be the self-targeting plus the participatory identification of the poor and priority households and rigorous screening to ensure the inclusion of these households as beneficiaries, in the group level business plans implemented with project support. Additionally, PROSPER will create a high level of awareness about the project benefits and eligibility criteria amongst all target groups using community level open announcements, focus group discussions and consultations with community institutions and implementation committees. PROSPER's rural institutions capacity building inputs will address elite capture through measures such as representative governance structures with members from various targeted categories and priority groups, fixed tenure of governing members, regular stakeholder meetings, and setting up transparent rules, regulations and decision-making processes. Additionally, detailed screening of business plan proposals on commercial viability, conflicts of interest and corruption will be undertaken. Compliance with pre-approved, objective selection criteria and transparent information-sharing and decision-making will be ensured.

Analysis of District Data, Presence of Rural Institutions and SMEs

As part of the design process, a situational analysis was conducted for the selected regions to assess the status at district level. The analysis included collection of information such as population; poverty head count; number of food insecure people; presence of people with disability; presence of key value chains and area cultivated; key issues in relation to agriculture, water resources and institutions,

presence of RIs, etc. The district level information indicates clearly that most of the districts have a presence of the above mentioned target groups, as well significance of the selected value chains and distinct opportunities for project activities around them.

Targeting within a selected district will take place over a number of adjacent communities; i.e. a cluster. Clusters will be identified following a broad consultation with the communities, taking the following criteria into consideration:

- Incidence of poverty, food insecurity and undernutrition and presence of the target group.
- Climate change impacts and vulnerability of the natural resources base.
- Opportunities for implementation of project activities around the targeted value chains.

Presence of financial institutions.

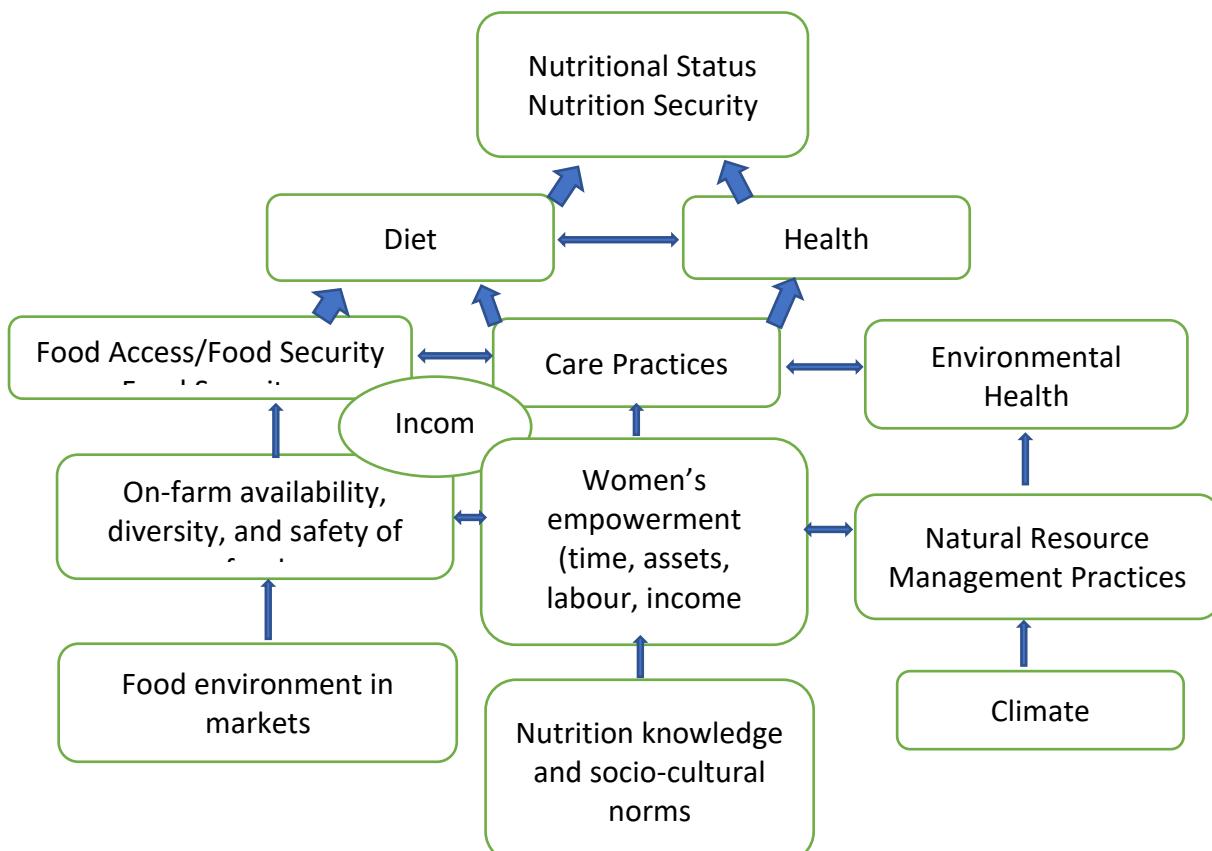
Presence of RIs and SMEs as key drivers for targeting was assessed as part of the design. While available data on the presence of RIs (Farmer Based Organizations) in the target area do not provide a complete data set, it was still possible to gather important information regarding the presence and nature of RIs in the target area.

Aggregated data regarding presence of SMEs around the target value chains in the selected regions indicate significant presence of such enterprises.

Nutrition and Food Security

Based on the conceptual framework of (mal) nutrition developed by UNICEF in 1990, food security is one the three underlying determinants of the nutrition status; care practices and environmental health are the other two determinants.

Adaptation from the UNICEF conceptual framework of malnutrition showing only the main interconnections



While diets (food intake) and health (especially infectious diseases) are the only direct causes for the nutritional status, food security, care practices and environmental health are underlying causes. One

can have food security without having nutrition security, but one cannot have nutrition security without food security.

Food security covers availability, accessibility, stability, and utilization of food. There are various indicators to measure food security. Very common is the 'Food Consumption Score (FCS)'. The FCS combines dietary diversity, frequency of consumption and the relative nutritional importance of different food groups to score a household's food consumption status. Based on predetermined thresholds a household is scored as having poor (0-21), borderline (21.5-35) and acceptable (>35) food consumption statuses.

Another common food security indicator is the 'Food Insecurity Experience Scale (FIES)'. The FIES is a measure of access to food at the level of individuals or households. It measures severity of food insecurity based on people's responses to questions about constraints on their ability to obtain adequate food. This approach to food security measurement represents a significant change compared to traditional ways of assessing it indirectly through determinants such as food availability, or consequences such as poor quality diets, anthropometric failures, and other signs of malnutrition. The FIES is not intended to quantify food consumption nor does it provide a quantitative assessment of dietary quality. It is not a measure of malnutrition and cannot be used to detect nutritional deficiencies or obesity. Consequently, it is not the appropriate tool for monitoring malnutrition or assessing nutrition-specific outcomes of food security programs and policies.

The latest food security and nutrition monitoring updates of WFP for Ghana, dated June 2020, reported that, when using the Food Consumption Score as a proxy for food security, out of the total number of households surveyed (n=1600), 91.5% were considered food secure, i.e. within the acceptable food consumption group while 7.7% and 0.8% were moderately food insecure (borderline) and severely food insecure (poor), respectively. According to the survey, moderately and severely food insecure households were from the Bono, Bono East, Northern, Oti and Ashanti regions. A quarter (24.2%) adopted one or more coping strategies to deal with lack of food or money to buy food during the month of June, including relying on less preferred or less expensive foods, borrowing from relatives and friends, limiting or reducing the portion or size of meals, restricting food consumption of adults in order for small children to eat, and reducing the number of meals eaten in a day. The majority of the respondents had physical access to market, however, the lack of money (62.9%), COVID-19 pandemic (22.2%) and closure of markets and shops (5.6%) were cited as the main reasons for households' inability to access the market or grocery shops.

The lack of access to affordable nutritious foods is one of the main causes of poor diets. Seasonality particularly affects access to diverse diets for the poorest households who rely on their own food production. The cost of diet analysis of WFP calculated the lowest costs of locally available diet that meets nutrient requirements - when constrained for locally preferred staples. The regional unavailability of this diet ranged from 10% (Greater Accra) to 78% (Northern Region), with correlation between unaffordability and stunting prevalence. During lean season, food prices rise, especially in the North. The vegetables that are perceived to be local (kontomire, okro, roselle, garden eggs) seem to be the most affordable, while the vegetables that are perceived as foreign or exotic (lettuce, cabbage, cucumber, cauliflower, beetroot) are more expensive.

Research conducted in three agroecological zones in Ghana shows that livestock allows savings, enables resources-poor households to amass assets, and helps fund planned and unplanned spending (e.g., school fees and illness). Due to these various and often critical uses, direct consumption of home-reared animal source food is not a major priority, especially for poor households. In addition, access to markets is affected by frequent flooding obstructing roads and bridges to markets.

The Ghana micronutrient survey of 2017 reports that national proportion of (non-pregnant) women achieving minimum dietary diversity is 47.2%, with a consumption of, on average 4.4 food groups. Other studies in a sample of pregnant women in Northern Ghana showed that 46.1% consume the

minimum dietary diversity, and among a sample of women attending ante and post-natal care the average number of food groups was reported at 4.3 groups.

The minimum dietary diversity score is expected to be at least 5 food groups.

The nutrition status is measured with anthropometric indices such as weight and height, combined with age. Measuring height and age provides information about chronic undernutrition; weight and height provides information about acute undernutrition. While acute undernutrition is usually visible, chronic undernutrition cannot be simply assessed by looking at children for example without knowing their age.

Realizing that IFAD supported projects are not nutrition-specific but nutrition-sensitive interventions, 'stunting' (chronic undernutrition) was replaced as Core Indicator by Minimum Dietary Diversity Score for Women (MDD-W). The MDD-W is an indicator for the adequacy of a diet of a household or family anticipating that a higher score gives a valid information about micro-nutrient content as one of the indicators for diet quality. Out of 12 defined food groups¹⁵, women of re-productive age should consume at least 5 different food groups.

Beside diet, the nutrition status is also determined by the age, nutrition, and health status of the mother; stunted mothers tend to give birth to stunted babies; early marriages are most of the time resulting in teenage pregnancies which have a great likelihood of giving birth to low-birth-weight babies being a great risk factor for stunting. Foetal growth failure is a main contributor to chronic child undernutrition. The first 1000 days which cover pregnancy and the first 23 months are therefore very important for mother and child. This does not mean that after this period caring is not important anymore, but the first 1000 days are the most sensitive days.

Studies showed that women's educational level and her empowerment have very positive impacts on the child's nutritional status. Therefore, nutrition interventions should be strongly linked to gender responsive activities.

Living in an unhealthy environment increases the risk of undernutrition. Access to safe drinking water, personal and food hygiene, food safety are some of the important determinants with potential impact of health and nutrition outcomes. Nutrition interventions should therefore also integrate Water, sanitation, and hygiene (WASH) aspects, which of course adds to the complexity of nutrition interventions.

Moreover, increasing income or production is not sufficient to achieve nutrition security SBCC plays a very important role and fosters change in knowledge, attitude, and practice.

Ghana is 'on course' to meet two targets for maternal, infant, and young child nutrition (MIYCN). Some progress has been made towards achieving the target of reducing anaemia among women of reproductive age, with 46.4% of women aged 15 to 49 years now affected. Meanwhile, some progress has been made towards achieving the low-birth-weight target with 14.2% of infants having a low weight at birth (< 2500g). No progress has been made towards achieving the exclusive breastfeeding target, with 42.9% of infants aged 0 to 5 months exclusively breastfed. Ghana is 'on course' to meet the target for stunting (chronic undernutrition), with 17.5% of children under 5 years of age affected, which is lower than the average for the Africa region (29.1%) but rises to 33% in the Northern Region of Ghana. Some progress has been made towards achieving the target for wasting (acute undernutrition) but 6.8% of children under 5 years of age are still affected, which is higher than the average for the Africa region (6.4%). The prevalence of overweight children under 5 years of age is 1.4% and Ghana is 'on course' to prevent the figure from increasing.¹⁶ Ghana has shown limited progress towards achieving the diet-related non-communicable disease (NCD) targets. The country has shown no progress towards achieving the target for obesity, with an estimated 16.6% of adult (aged 18 years and over) women and 4.5% of adult men living with obesity. Ghana's obesity

¹⁵ <http://www.fao.org/documents/card/en/c/cb3434en>

¹⁶ <https://globalnutritionreport.org/resources/nutrition-profiles/africa/western-africa/ghana/>

prevalence is lower than the regional average of 18.4% for women and 7.8% for men. At the same time, diabetes is estimated to affect 6.6% of adult women and 6.4% of adult men.

The high rates for overweight and obesity is a sign for Ghana being at a stage of nutrition transition. Modernization, urbanization, economic development, and increased wealth lead to predictable shifts in diet, referred to as “nutrition transitions.”

Researchers divide the nutrition transition into five patterns:

- Pattern 1 - Hunter Gatherer: Individuals live highly active lifestyles, hunting and foraging for food. Diets typically are rich in fibrous plants and high in protein from lean wild animals.
- Pattern 2 - Early Agriculture: Famine is common, slowing individual's growth and decreasing their body fat.
- Pattern 3 - End of Famine: Famine recedes as income rises and diet improves.
- Pattern 4 - Overeating, Obesity-Related Diseases: As income continues to rise, individuals have access to an abundance of high-calorie foods, ultra-processed food, and they become less active, leading to increases in obesity and obesity-related chronic diseases, such as diabetes and heart disease.
- Pattern 5 - Behaviour Change: In response to increasing rates of obesity and obesity-related chronic diseases, individuals change their behaviour and the health system and communities promote behaviour changes to prevent these conditions.

Currently, most low- and middle-income countries are rapidly moving from pattern 3 (end of famine) to pattern 4 (consuming more energy-dense diets). This shift from traditional diets to so called modern-style diets has been a key contributor to the obesity epidemic in low- and middle-income countries.

Malnutrition in all forms (underweight, micronutrient deficiencies, overweight, and obesity) affects all countries with at least one form. In countries in transition often all forms of malnutrition exist at the same time, for example you can be overweight but at the same time you suffer from micronutrient deficiency.

For PROSPER, the challenge is to develop a SBCC strategy which addresses the various forms of malnutrition as undernutrition and nutrient deficiency are not the only challenge but also overweight and obesity.

In PROSPER nutrition and health will be promoted through several pathways, including the selection of value chains that are nutrition-sensitive or that will make a high contribution to nutrition; food conservation, post-harvest processing and value addition; promotion of vegetable gardens; and nutrition education. SBCC strategy will be developed to promote non-discriminatory intra-household food distribution, adequate diets for adolescent girls, consumption of diversified diets, food hygiene and safety, and improved WASH practices as well as the discrimination of negative socio-cultural habits like teenage marriages and early pregnancies resulting in low-birth weight babies as major risk factors for malnutrition.

Gender

In Ghana, harmful social norms and behaviours continue to impact opportunities and human potential, affecting health; education; and the productivity of men, women, boys, and girls. Critical gender gaps and disparities remain in the labour force and employment opportunities; access to quality education and levels of educational attainment; access to and use of health services; control over and access to long-term assets and resources; promulgation of GEWE-related government

policies and legislation; and gender-responsive decision-making, leadership, and political representation.¹⁷

The 2020 World Economic Forum's Global Gender Gap (GGG) report positions Ghana at 107 (out of 153 countries).¹⁷ Ghana's 2020 global rankings in gender gap indices are 94 for economic participation and opportunity, 119 for educational attainment, 121 for health and survival, and 107 for political empowerment. Ghana's 2020 overall ranking on the GGG Index dropped since 2018 because other countries achieved larger gains during the same two-year period. In total scoring, Ghana has made improvements on the educational attainment and political empowerment indices, maintained its progress on child health and survival, but it slid backwards on the economic participation and opportunity index.

Women's dual reproductive roles and work responsibilities place them and their children at greater risk of poor health outcomes. Women in rural areas are obliged to carry out a large number of reproductive tasks.

PROSPER will therefore, promote women's participation and empowerment by addressing barriers prevalent in the geographical context of the project. Overall, 40% women outreach will be targeted. Increased participation in training, educational and income generation activities will be promoted by spending enough time for mobilization on targeting to reach everybody at community meetings. A mix of community-based targeting, direct targeting and self-targeting will be applied depending on the type of intervention.

The project will work with local media as well as local trusted NGOs. Men will be encouraged through advocacy to support women's participation through guarantee of land and other resources required. Gender targeting in PROSPER includes the inclusion of young women (youth) and women with disabilities (PWDs).

PROSPER intends to generate several positive results for women, including:

- Improve participation in household decision making (HH methodology)
- Increase in women's financial literacy including households economics; business plans
- Development / strengthening women's income generation activities
- Improvement of household dietary intake through nutrition-sensitive hh-based livelihood interventions

Household methodologies to enhance gender equality

Household methodologies (HMs)¹⁸ are innovative approaches to enable more poor households to be reached and to improve intra-household gender relations. The purpose of such methodologies is to empower members of households to realize their development potential and create stronger, more resilient, and sustainable smallholder farming and rural livelihood systems. Although the focus of HMs is to stimulate change at the household level, it is also necessary to engage at the community level and beyond.

The various methodologies share four basic principles:

• **Focus on people.** Household strategies are designed by and for household members who define whom they want to be and what they want to do. They define and implement their own strategies for developing and improving their livelihoods, based on their goals, strengths, opportunities and assets.

¹⁷ <https://banyanglobal.com/wp-content/uploads/2020/05/USAID-Ghana-Gender-Analysis-Report.pdf>

¹⁸ <https://www.ifad.org/en/web/knowledge/-/publication/household-methodologies-harnessing-the-family-s-potential-for-change>

♣ **Empowerment.** The cornerstone of the HHM empowerment process is strengthening the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. This can be achieved by building on a mutual understanding of different roles and responsibilities.

♣ **Self-generated solutions.** Willingness to change is generated by household members themselves (women and men of all ages) by placing them in the driver's seat of the development process. They take responsibility for the changes they want to see and work closely with one another, friends and the community to make them happen.

♣ **Equal opportunities.** Women and men, as well as youth, PWD and other vulnerable groups, have an equal voice in setting the household vision and equal access to development opportunities, productive assets, decision-making and benefits. Some HHMs explicitly address gender relations with a "gender justice" lens, making the promotion of gender equality an essential goal of any type of intervention. In others, gender inequalities emerge as a factor limiting the achievement of household goals and the ability of households to better use the productive resources available to them, and participants commit to addressing gender issues as their own choice.

The four Steps in the household methodology process at the household level are:

Step 1: Creating a household vision and situational analysis

Step 2: Preparing an action plan

Step 3: Implementing the action plan and monitoring progress

Step 4: Graduating and sustaining the use of HHMs

As preferred HHM tool for visioning PROSPER will use the Gender Action Learning System (GALS). The goal is to address gender and social justice in economic development efforts with an inclusive and participatory process. The methodology aims at empowering men and women to achieve a better and happier life. It is using simple mapping and diagram tools for visioning and planning in order to empower men and women to make changes in their lives. The process embeds a broader change philosophy. A GALS process is based on a series of principles, tools and stages, implemented over a period of two to three years

GALS principles:

Four sets of principles are integrated:

1. principles of social inclusion: everyone is a leader (regardless of sex, age, ethnicity, and status), human rights are non-negotiable, inclusion and equity, respect difference;
2. principles of gender justice: women are intelligent agents of development (not victims), men are allies in change, gender is fun, gender transformation, women's right are non-negotiable in regard of the CEDAW rights¹⁹;
3. principles of empowerment: inspire with visions, every event is focused on action for change, from individual to collective action, respect differences, building capacities, removing all forms of "power over" some people or groups, in order to gain "power within" (confidence, self-efficiency), "power to" take action and "power with" to act collectively (as a family, a group or community);
4. principles of sustainability: start with individual self-interest and ownership, a pyramidal peer sharing mechanism that leads to self-upscaling, integration in existing activities at community level, movement for gender and social justice at various levels (community, project, country).

Gender-sensitive Value Chain analysis

¹⁹ Committee On The Elimination Of All Forms Of Discrimination Against Women

Active participation in Value Chains offers women great opportunities for economic empowerment. However, often women are participating at inferior level and support for the development of a business orientation is needed.

Women's participation in selected VCs and the potential to increase or modify their engagement:

Value Chain	Occupation	Ownership	Potential
Maize	Planting, harvesting, threshing, sometimes pest control (spraying)	Men dominated	Various side businesses: animal feed processing (poultry, brewery, trade); SME on input provision, cultivation, IT services. Aggregation, transportation, warehousing, (semi-)processing
Soybeans	Planting, harvesting, threshing, sometimes pest control (spraying)	Women have a share as smallholders	SME on input provision, cultivation, IT services. Aggregation, transportation, warehousing, (semi-)processing
Cashew (Note: dedicating land from food crops to cash crops is challenging food security)	Overseeing harvesting, transporting, sorting, and drying. Making juice and alcohol from cashew apples	Women represent 10-15% of the cashew producers; the rest are "helping hands" to their husbands and fathers	Processing, marketing, capacity development
Rice	Planting, harvesting, threshing, sometimes pest control (spraying)	Dominated by large companies and SMEs	SME on input provision, cultivation, IT services. Aggregation, transportation, warehousing, (semi-)processing, managing eatery places with various diets from rice
Shea Nut	Picking (limited scale for most, hence no processing capacity); Local women processors	Women are the primary processors	Improve production capacity, invest in marketing skills; improve quality in niche production
Vegetables	Selling and trading; Transporting	'market queens'	Increase economic viability through improved production and post-harvest management
Poultry	Only at hh level; SMEs in layers and broilers	Large companies	Egg production; 1-day chicks production; quality products for domestic market

Special support for women (incl. women headed-households, young women, and women with disabilities)

Women will participate in the Matching Grant Scheme for different livelihood options: i) off-season vegetable production; ii) post-harvest management incl. processing; iii) rearing of small ruminants; iv) poultry – egg production; v) MSMEs – small businesses/shops.

The Matching Grants are eligible for groups and intend to strengthen women's economic empowerment. A mix of self-targeting and direct targeting will be applied.

Successful groups will have the opportunity to move to the BFF.

Matching grants are provided one time to only one member of the household. It cannot be provided to more than one member of the same household. It is expected, however, than more than one member in the same household will benefit from project activities (e.g. MG and nutrition training).

Targeting Youth

The country has a youth bulge (between 15-35 years of age²⁰) with 57% of the total population being below the age of 25. The rural communities consists of 56% youth, compared to 44% in urban contexts. Youth contribute to family labour for agricultural production and engage in other activities such as processing, warehousing and transportation but are often unable to pursue farming independently due to limited access to land, credit, quality inputs and sustainable profitable output markets. Due to limited access to jobs, inadequate training and illiteracy, youth unemployment and underemployment in Ghana reached 12% and 50% respectively.²¹ The lack of employment opportunities in rural areas has resulted in growing youth migration from rural areas to urban centres.

GoG's initiatives that aim at providing jobs, building capacities and providing opportunities for youth are: the Medium-term National Development Policy Framework (2018-2021); the PFJ in agriculture and related sectors, the Initiative for Sustainability, Stability and Security (3S), housed under the IFAD managed rural resilience trust fund and focusing on the Northern Belt; the IFAD-supported Rural Enterprise Programme (REP); and the Youth Agripreneurship Development Programme, jointly run by AGRA and Nestle. Despite these initiatives from GoG and development partners, the outreach to youth from semi-subsistence smallholder families remains limited.

In 2016, it was projected that, because of the country's growing youth population, 300,000 new jobs would have to be created each year to absorb the increasing number of unemployed young people. Yet the structure of the Ghanaian economy in terms of employment has not changed much from several decades ago. Most jobs are low-skilled, requiring limited cognitive or technology know-how. The quality of these jobs is reflected in low earnings and less decent work. Although Ghana has launched a number of initiatives in response to this challenge, the lack of coordination among stakeholders in the sector has led to duplication. Key stakeholders on youth employment, including those in the private sector, currently have limited interaction. Regular exchanges are important for promoting synergies and reducing duplication of programs, and for sharing knowledge. Furthermore, Ghana lacks a comprehensive database on the characteristics of various categories of youth information—a database that is essential for the design and implementation of effective programs. Without transformation of the current Ghanaian economic structure, employment opportunities will remain limited. Most existing government-led youth employment programs lack adequate systems for monitoring and evaluation and for impact measurement. Few programs include clear indicators that measure performance, and most do not carry out tracer studies to assess their effectiveness and what happens to beneficiaries once they have exited the programs. Without such systems and data, policy makers and other stakeholders find it difficult to make informed decisions on whether to fund or scale up a program or make changes for improvement.

Any options for young people seeking jobs must include consideration of the disparity in unemployment and literacy rates between urban and rural areas. The unemployment rate in urban areas (13.4 percent) is relatively higher than that in rural areas (10.2 percent), irrespective of gender.

²⁰ The National Youth Policy in Ghana (2010).

²¹ Youth Employment Programs in Ghana: Options for Effective Policy Making and Implementation, World Bank, 2020.

The urban unemployment rate is higher than the rural unemployment rate in 7 of Ghana's 10 regions, different (Ghana Statistical Service 2015). The northern regions have the lowest youth literacy rates for both females (31.9 percent) and males (50.6 percent).

In Ghana, young women are limited in employment and entrepreneurial opportunities because of many economic and sociocultural factors, including lack of property rights, lack of access to capital, stereotypes, and limitations in the use of digital technology. PWD are also mostly excluded from youth employment programs because of employer discrimination, a lack of disability-friendly facilities in the workplace, and a general view that they are "alms seekers" rather than productive members of society. This group also faces challenges in job search efforts.

PROSPER will support young women and men in establishing enterprises along the supported value chains (rice, maize, soy, poultry, cashew, and shea), focusing on activities that cater for the youth. For vulnerable youth, PROSPER provides Matching Grant support to enter into off-season vegetable production, post-harvest management, poultry – egg production, small ruminant rearing, or MSMEs. The project will provide skill development and capacity building of youth groups and financial inclusion. A particular focus will be placed on potential vulnerabilities affecting specific sections in the youth category (e.g. ensure young women have equal opportunities as young men to participate and benefit from the project interventions; ensure inclusion of young women and men with disabilities). The project will also leverage synergies with on-going projects and programmes to maximise the outcomes and also ensure sustainability (AFFORD, World Bank Job's and Skill Project, etc.).

Targeting PWDs

Statistically, PWDs make up to 3% of the population in Ghana. Disability in Ghana is considered both a human rights concern and a developmental issue due to its strong links to exclusion, discrimination, and poverty. In 2006, the Parliament of Ghana passed the Persons with Disability Act, 2006 (Act 715)²². The Act protects the rights of PWDs and makes specific provisions to guarantee the right to education, healthcare, employment and movement of PWDs. The Act also established the National Council on Persons with Disability. The Council is charged with the responsibility of proposing and evolving policies and strategies to enable PWDs to integrate and fully participate in national development.

However, despite efforts being made educating the general public, PWDs are still stigmatized, discriminated, and socially excluded.²³ There is strong correlation between disability and poverty. Poor health, limited schooling and employment opportunities are negatively impacting on the socio-economic status of affected households.²⁴ Households with disabled members may be vulnerable to poverty due to extra costs of living with a disability.

As part of sensitizing the communities about the nature of the project, PROSPER will create community awareness about PWDs and different nature of impairments. The needs assessment of the PWDs will follow tailored approaches for capacity building; economic engagement and social protection support will be defined depending on the nature of impairment. PROSPER will aim to mainstream PWDs through their inclusion in the project supported Rural institutions and participation in the different project supported activities. Training and meetings with PWDs will be organized in close-by locations in the communities, in PWD sensitive teaching and learning environments. To cater to the special needs of the PWDs with visual, hearing, physical and speech impairments, PROSPER will train them in braille, sign and audio languages. Accessible training venues, sign language translators and interpreters will be organized.

²² https://www.humanrightsinitiative.org/publications/ghana/disability_rights_in_ghana.pdf

²³ file:///C:/Users/User/Downloads/09687599.2018.pdf

²⁴ <https://link.springer.com/article/10.1007/s10834-020-09741-5>

Chapter 3: Project components

Component 1. Development of rural institutions and socioeconomic infrastructure

The expected component outcome is: Improved and sustainable livelihoods in target areas supported by strengthened rural institutions and improved socioeconomic infrastructures. These actions are concentrated on investing in “public goods” within and for the benefit of the targeted 100,000 beneficiaries in the project areas.

Subcomponent 1.1 Capacity building of rural institutions, enterprises and households

It comprises a range of institution-building and skills development activities to enable target communities to take ownership of and accountability for their own development initiatives, to promote sustainable community-based NR management, to strengthen their ability to implement modern sustainable and climate resilient farming, and to adopt healthier diets.

Community mobilization, cluster identification and planning.

Regional and District Consultations

The project will seek to secure community interest in PROSPER and the approaches it is promoting with a series of interactive workshops and consultations at regional and district levels, starting with three adjoining Northern sector regions in the first phase. The regions will be consulted in the choice of Districts that PROSPER will be working. Following the effectiveness of PROSPER, there will be a national launch to which key national stakeholders²⁵ will be invited to participate and pertinent project information will be disseminated. The stakeholders will be sensitized and seek the cooperation of their decentralized agencies at the national, regional and district levels in the roll out of PROSPER. Following the national launch, PROSPER will engage the services of technical assistance to support the launches and roll out of the project in the regions and districts. PROSPER will be launched in a selected region with a consultation workshop under the auspices of the Regional Coordinating Council and attended by regional stakeholders of key institutions supporting agricultural value chains and natural resources management. The PROSPER PCU and the TA will have undertaken preliminary discussions with the Regional Department of Agriculture (RDA) and other agencies about the selection of districts to implement the project and the preliminary ideas on selection of districts will be validated at the regional consultations’ forum. The selection of districts will be based on criteria comprising the following:

- i. Level of poverty
- ii. Presence of PWDs
- iii. Presence of value chains
- iv. Natural resources degradation

The regional entry will be completed by the formation of a regional PROSPER team by the RDA comprising a senior agricultural officer, a natural resources/climate specialist and gender specialist. Representation from Ministry of Gender, Children, and Social Protection; Environmental Protection Agency, and any other agency relevant for implementation of SECAP and ESMF under the project will be ensured in all of the regional teams. The focal person will be the Senior Agricultural Officer. For at each region a regional consultative committee will be formed to guide the regional implementation team. This committee will comprise key relevant governmental agencies at the regional level, key value chain actors, private sectors and Fls.

²⁵ Key national stakeholders of PROSPER include the Ministry of Food and Agriculture; Ministry of Gender, Children and Social Protection; Ministry of Trade and Industry; Ministry of Local Government and Rural Development; Department of Cooperatives; Environmental Protection Agency; Ghana Commodity Exchange; National Buffer Stock Company.

The district entry of PROSPER will be marked by a consultation workshop that will gather all key players in agricultural value chains in the district comprising the following:

- ✓ Representation from Regional Department of Agriculture
- ✓ District Coordinating Council (Planning Unit, Works Department etc.)
- ✓ District Assembly Members
- ✓ District Department of Agriculture
- ✓ Specialized District Agencies (Department of Feeder Roads, Department of Gender, Children and Social Protection etc.)
- ✓ EPA and other relevant agencies for the SECAP and ESMF implementation
- ✓ District Agribusiness (Processors, Aggregators, Warehousing)

Following the district launch, a PROSPER District Team will be established to coordinate and advance the delivery of the project in the district. The PROSPER Team comprise the following persons:

- ✓ District Director of Agriculture
- ✓ District Planning Officer
- ✓ District Works Engineer
- ✓ Management Information Systems Officer
- ✓ Accountant
- ✓ Crops Officer
- ✓ WIAD Officer
- ✓ Agricultural Extension Agents (3No.)
- ✓ EPA and any other agencies that are relevant to the SECAP and ESMF implementation

The consultations at the region and districts levels are aimed at creating awareness of the project and its services and roles and responsibilities of implementing partners. The AEAs, district and regional focal officers of the project will be trained to facilitate the ensuing process at the cluster and communities. PROSPER will enter into formal implementation agreements with the RDAs and DDAs to finance project related expenses beyond the district own budgets, such as, fuel costs and lunches. There will be no salary top-up or DSA. The outline of the implementation agreement is shown in Box 3.

Cluster Identification

In each selected district, the district project team, the PROSPER PCU climate change and vulnerability expert, and TA support will identify and form clusters of neighboring communities through a screening of NRM and socioeconomic conditions and mobilization meetings at community level.²⁶ The Team composition for community meetings to identify clusters comprise the following:

- ✓ Regional Focal Person
- ✓ District Project Team (Planning Officer, Crops Officer etc.)
- ✓ PROSPER Climate Change and Safeguard Expert, Gender and Vulnerability Expert with support from the Value Chain Officer
- ✓ TA support

²⁶ In this document, a “cluster” is a term for several neighbouring settlements sharing natural resources. It has no administrative significance but locates the combined population in the specific land area upon which they depend and provides the project with a convenient unit for planning and operational purposes. Each cluster will include various common economic interest groups, such as Farmer Based Organisations and VSLAs, alongside non-profit community structures. To avoid confusion and excessive use of acronyms, the term Rural Institution (RI) is used here for a production-related group and Micro-, Small- and Medium-Enterprise (MSME) for any business set up for other purposes.

The identification of clusters will involve community meetings animated and moderated by PROSPER Teams. Eventually, a supra community meeting at the level of the cluster will be organized with the aim of forging unity of purpose among the communities within the cluster. Where interest is strong, the community leadership decides to commit to PROSPER and opportunities exist around the target value chains, a gender balanced Cluster Committee will be established to interact with the project. The cluster will be made up of four to eight adjoining communities. Population of a given cluster would be in the range of 1,500 to 3,000. There shall be a maximum of four clusters per district. The Cluster Committee will oversee the planning and implementation of the project at the cluster level. During implementation, specialized sub-committees will be established at the community level to ensure the sustenance of socioeconomic investments and services, such as Natural Resources and Environmental Management committees for the maintenance of natural resource remediation infrastructure and the Water and Sanitation Management Team (WSMT) responsible for the sustainable operation and maintenance of water supply and sanitation services. To support the mobilization, sensitization and awareness raising efforts at the cluster and community levels, District Department of Agriculture Extension Agents (AEA) and other technical staff will be trained by TA teams (Training of trainers) to conduct the mobilization, sensitization campaigns and support the cluster planning. PROSPER PCU teams will monitor and exercise oversight functions over these personnel and their activities.

Community mobilization and sensitization

The DDA with RDA and TA support will anchor the community mobilisation activities through young professionals and partner community development associations and the master trainers where relevant. Capacity building and sensitization activities will, in particular, target the poor, women, youth and PWDs with the aim of raising awareness on the potential market and livelihood opportunities and the benefits of collective action. The activities will include i) communication campaigns in the communities including social media and rural radio programmes; ii) capacity building of youth volunteers to organise small group meetings and house visits to raise awareness of target households about the benefits of PROSPER activities and how to participate in these; iii) meetings with local authorities, agribusinesses and private operators and selected institutions and service providers; (iii) special communication events on market days, harvest days, as well as sensitization events targeting producers and their organizations (iv) visits to more mature well established RIs including Community Development Associations, Cooperatives, FBOs and marketing associations (discussed in depth below). These sensitisation sessions will be conducted in tandem with awareness raising sessions on livelihood opportunities and specialised coaching on entrepreneurship.

Mobilisation of Rural Institutions

PROSPER will initially target rural community institutions at the level of the target command area. Examples of RIs are the Atuba-Agumishe Community Livestock and Crop Farmers Association in Bawku area and the Namalteng Integrated Development Programme in the Upper East Region of Ghana. These are classified as Community Development Associations (CDAs). Though CDAs have a multi-sectoral approach, they are well established RIs, and present in most villages. However, capacities, scope and outreach of these institutions vary. Other types of RIs include Farmer Based Organisations (FBOs), Village Saving and Loan Groups, Faith Based Organisations, etc. PROSPER will strengthen RIs when these have been assessed to be weak or do not meet the targeting criteria. The project will encourage the formation of new RIs in communities within the programme clusters that do not have the relevant RIs to serve as programme partners as indicated by the results of the survey that would have been carried out at the beginning of the project. The strengthening and formation of RIs will emphasise the targeting criteria comprising more than 50% members with access to land of 1 ha or less and 50% women, 60% youth and 10% people with disability. In the case of MSMEs the criteria will be enterprises with fewer than 9 employees. During the selection of beneficiaries, vulnerable groups (including landless, marginalised groups, the poorest of the poor, women, youth,

etc) within the clusters will be identified. Efforts will be made to incorporate them in existing or newly formed RIs. The PROSPER teams at the PCU in collaboration with the DDAs and TA support will give special attention to mobilisation and strengthening of the RIs in the target clusters.

Cluster Planning

For each participating cluster, the Project team at the district level and TA support will facilitate the collaborative development of a bespoke community-driven Cluster Plan (CP). Each CP will set out local priorities for communal socioeconomic investments and identify potential production and related business opportunities that may be realized by RIs and MSMEs under Component 2 and/or with community resources. The CP will inform the agenda for PROSPER action in each cluster, focusing on investments responding directly to climate change mitigation and adaptation, and supplementing any existing development plans of local authorities or other development partners. The CP will underpin the local three-year PROSPER-community partnership and remain with the cluster leaders and Local Authorities as a live document to guide development planning during and after the three years. The scope of Cluster planning is depicted in Box1.

Box 1: The Scope of Cluster Planning

Purpose

Development of bespoke community-driven cluster plans

Stakeholders

- ✓ Cluster traditional leaders
- ✓ Cluster Influencers
- ✓ Leadership of existing RIs

Resource Persons

- ✓ Regional PROSPER Team Representative
- ✓ District Project Team (Planning Officer, Crops Officer, EPA and other agencies relevant to SECAP and ESMF implementation etc)
- ✓ PROSPER Climate Change Specialist and Safeguards Expert and Gender and Vulnerability Expert, Value Chain Officer
- ✓ TA support

Planning Areas

- ✓ Review existing local development plans
- ✓ Identify priorities for communal socioeconomic investments responding to climate change mitigation and adaptation
- ✓ Identify potential production opportunities
- ✓ Identify business opportunities

Capacity building of rural institutions, enterprises and households

This action entails bolstering both the governance and management structures and the technical capacities of active rural bodies, (including farmer/producer-based organisations and other economic interest groups such as Saving and Loan Groups following VSLA model²⁷ and MSMEs), and thereby

²⁷ Saving and Loan Groups following VSLA model are not necessary a village level association or group. However, it follows the same concept of internal mobilisation of funds, and lending to members.

their capacity to function as effective VC partners. It is envisaged as a purposeful major investment in human resource capital to develop a more conducive environment for the economic activities of the rural population. Within this drive to grow the rural economies by expanding business activity for groups, the poverty focus of PROSPER entails extending the group-based opportunities (and membership) to substantial numbers of vulnerable and economically marginalised people. The CP will identify and include the capacity training requirements for all RIs operating in the cluster.

The programme of training, skills development and related demonstrations will be delivered by district implementation team with support by other district extension services and backed up by regional team, MoFA technical departments and other line ministries as well as PROSPER technical assistance. In preparation for the work, the project will reinforce the technical skills of public service frontline field staff, reorient to a modern business approach to farming including the adoption of climate-friendly agronomic practices and natural resource remediation. The action will be launched with an awareness-raising workshop in each district on opportunities for youth in and around the smallholder agriculture sector and the PROSPER value chains. Cluster-level surveys will identify groups and MSMEs, both pre-existing and potential, interested in and likely to benefit from capacity building. The group identification process will be gender sensitive with a special focus on women, youth and PWD. The content of ToT for frontline government agencies responsible for capacity building of RIs is depicted in Box 2.

Box 2: TOR of ToT for District Staff and other government agency staff to Train RIs and MSMEs

Estimated number of institutions to be trained over the life of PROSPER: **4,500 RIs and 800 MSMEs.**

A. Organisational Development and Good Agronomic Practices Focus

a. Purpose: Strengthen the governance and management structures and the technical capacities of RIs and REs and their members, through training and coaching to enable them to become sustainable, effective and efficient organizations.

b. Resource Persons

- ✓ Technical Departments of MOFA (DCS, DAES, WIAD), MESTI (EPA)
- ✓ PROSPER Technical Assistance

c. Curriculum for Organisation Development and Good Agronomic Practices

- ✓ Group organisational skills
- ✓ Registration with Department of Cooperatives, DDA
- ✓ Climate-smart agriculture practices
- ✓ Demonstration on conservation agriculture
- ✓ Good agronomic practices
- ✓ Open and operate bank accounts
- ✓ Undertake Farming as a business

B. Financial and Entrepreneurial Skills of RI and MSME

a. Purpose: Strengthen the capacities of RIs and REs to attain effective and efficient entrepreneurial and financial management skills to optimise revenue generation while instituting sound administration, accounting and financial management systems.

b. Resource Persons

- ✓ Business Advisory Centres (BACs)/Business Resource Centres (BRCs)
- ✓ PROSPER Rural Financial Specialist
- ✓ PROSPER Technical Assistance

c. Curriculum for Entrepreneurial and Financial Management Training

- ✓ Financial literacy, including record keeping
- ✓ Entrepreneurship and business management
- ✓ Financial and Bank Literacy
- ✓ Commercial and market operations
- ✓ Assess, negotiate, and implement contracts with service providers
- ✓ Access inputs, services, and finance
- ✓ Develop business plans to access finance
- ✓ Implementing business plans successfully
- ✓ Open and operate bank accounts

The DDAs will lead an extension campaign organised around group organisational skills, climate-smart demonstrations and practical training sessions on topics such as conservation agriculture, agronomic practices and “farming as a business” tailored to the local agroecological conditions and main VCs in the cluster. Financial literacy, orderly record keeping and the basics of business conduct will be addressed to complement instruction on the technical aspects of sustainable production. Emphasis will be placed on the need for a marketing plan for every produce: “production with a purpose”. An estimated 4,500 RIs and 800 MSMEs will be trained over the life of PROSPER. Off-farm, the training

will center on the remediation and proper management of the depleted shared NRs which are key to the livelihoods of farming communities. Best practices in soil and water conservation, tree planting and NRM, (to be supported in many target clusters with remedial works under subcomponent 1.2 below), will be shown to be beneficial to all the present and future users of the landscape. The capacity-building campaign will extend to non-producer economic interest groups who will be given training on enterprise development, particularly value addition and support services. Many will be Youth-based and start-ups stimulated by the project.

Household nutrition and healthy diet.

Alongside the measures to build the capacity of target groups to increase and sustain incomes and to sustainably manage their NRs, PROSPER will deliver an inclusive community-wide nutrition and healthy diet agenda to benefit all households, in synergy with the promotion of climate and nutrition-sensitive farming and vegetable cultivation. This initiative enables smallholder famers to derive optimum health benefits from the crops they produce for food and for sale, by improving the nutritional value of the food consumed.

This initiative will promote dietary changes on the ground as a counterbalance to the drive to produce food for sale, shifting attention to the nutritional value of the food consumed. It will start with a Participatory Needs Assessment in each target community, which entails training on household methodologies (HHM) and domestic financial literacy for up to 1,400 selected households throughout the project life cycle. The Gender Action Learning System (GALS) as part of HHM will be introduced to enhance Gender Equality and Women's Empowerment (GEWE) in PROSPER. GALS will create a sense of unity and cooperation within self-selected families to develop a vision and strategy to get themselves out of poverty. A Knowledge, Attitude and Practice (KAP) study will be conducted to deepen understanding of the local issues around nutrition and diet, and to serve as a baseline for specific trainings and the development of a Social Behavior Change Communication (SBCC) strategy. At the center of nutrition activities will be a household education programme that will be delivered by peers through care groups. One of the vehicles for improved nutrition will be the establishment of demonstration nutrition gardens to grow healthy diversified diets for consumption and for sale. The nutrition garden will be accompanied by dedicated training on post-harvest management, nutrition education and SBCC for the beneficiary communities. The above households will serve as a pathway for transferring nutrition related information and best practices to other target households in the project areas.

Strengthening of extension services

Extension Services at the district level received a boost in the last four years in terms of the numbers of Agricultural Extension Agents (AEAs), which increased from 1,586 officers in 2016 to 4,286 in 2020. This improved Extension officer to farmer ratio from 1:1,900 to 1:709. Under the support of the Modernising Agriculture of Ghana (MAG) funded by Global Affairs Canada, over 3,367 motorcycles were supplied to AEAs to enhance their mobility and delivery of services. The MAG programme also retrained and reoriented AEAs to "on market-oriented agriculture" to broaden their skills beyond agronomic and production techniques to include post production agricultural activities.

Under Prosper, AEAs will be further strengthened during the project implementation to be effective in community mobilization, delivery of extension on agronomic practices, value chain promotion, natural resource management and gender and vulnerability targeting. Training of trainers will be provided to AEAs and district and regional officers of agriculture on enterprise development and natural resource management.

To ensure the effective delivery of extension services, PROSPER will support the DDAs with motorcycles, laptops and protective gear. To establish a good database for FBOs for targeting and

tracking, the project will fund a study to assess FBOs and categorise them into a database to be updated regularly.

The training and orientation of AEAs and agriculture officers will be provided by the TAs.

Technical Assistance (TA) for sub-component 1-1

TA in the form of individual consultancies will be provided to support DDA, RDAs and other extension staff. The level of TA will be around 6-9 man months per region for four years which is the peak implementation period for component 1-1 activities. The TAs are expected to cover the following tasks:

- Provide guidance to extension staff on targeting and reaching out to communities and mobilization
- Targeting and target groups
- Provide guidance regarding consultation and cluster formulation
- Provide guidance regarding formulation of cluster plans
- Nutrition activities

Detailed ToRs will be included in this PIM.

Box 3: OUTLINE MOU WITH RDA and DDA AS KEY IMPLMETING PARTNERS

1. PROSPER MOU with DDA

a. Purpose: Formalise the cooperation between PROSPER PCU and the District Department of Agriculture for the implementation of PROSPER capacity building and training of RI and RE in the districts.

b. Obligations of District Department of Agriculture and District Implementation Team with support from TA. Following project agreed implementation arrangements:

- ✓ Prepare District AWPB for PCU review and endorsement
- ✓ Identify all the relevant RIs and REs in the District (existing or potential) for the training. Provide list and justification to the PCU for review and approval
- ✓ Organise sensitization and awareness creation on PROSPER and provide agreed training in the communities
- ✓ Conduct training in the following thematic areas:
 - Organisational development of RIs and REs
 - Climate Smart Agriculture/Conservation Agriculture
 - Good Agricultural Practices
 - Harvesting Post-Harvest Management and Marketing
 - Food safety, quality, standards, weights and measures
 - Operational efficiency
 - Farming as a business
 - Financial literacy, following implementation arrangements under sub-component 2-2.

c. Obligations of PROSPER

- ✓ Provide TA to District implementation Teams
- ✓ Review and approve the District level draft submissions
- ✓ Provide the financial resources to the various activities agreed upon by both parties. Budget items include:
 - Extension Agents fuel and allowance for lunch for field days (no top-up, honorarium or DSA for district teams) DSA is only allowed for resource persons from central level as needed
 - Training logistics and material
 - Fuel for transportation of resource persons to training sites
 - Facilitation of registration and certification of RIs and Res
 - Demonstration activities
- ✓ Coordinate, supervise and control implementation and delivery of the ToT to DDA resource persons

2. Prosper MOU with RDA

a. Purpose: Formalise cooperation between PROSPER PCU and Regional Directorate of Agriculture (RDA) to enable the later monitor and supervise the District Directorates of Agriculture in carrying out project activities.

b. Obligations of RDA

- ✓ Monitor and provide guidance to the District Directorates of Agriculture in carrying out PROSPER activities

Subcomponent 1.2 Development of socioeconomic infrastructure.

This development activity seeks to realize some of the “public goods” investments prioritized and chosen by local communities through the Cluster Planning process. Three complementary types of climate-resilient infrastructure are eligible: Off-farm/watershed works and hazard mitigation measures; Feeder roads and farm tracks; and Communal social infrastructure. The investments aim to improve the sustainability of NR-related livelihoods and to stimulate socioeconomic advancements in the participating clusters.

The NR remediation infrastructures may comprise soil and water conservation structures, such as contour bunds, reforestation and shelterbelts, bench terraces, tied ridges, water harvesting and storage ponds, as well as climate change mitigation measures in line with local conditions. The District Assembly will undertake all procedures as appropriate to acquire/lease any land needed for construction. PROSPER envisages expanding and rehabilitating strategic road networks (feeder roads and farm tracks, culverts and small bridges), as well as shared domestic water supply structures (boreholes with hand or solar pumps), sanitation facilities and waste management systems, and alternative/green energy schemes (including resource and energy recovery from waste).

Each capital investment plan will include appropriate management, operation, maintenance and ongoing financing arrangements, with overall responsibility resting with the community. Agreements will be reached between the District Assemblies and the cluster leadership for the post-construction management of installations by various community gender-balanced committees, building on previous local norms and the organisational training delivered under Subcomponent 1.1. The off farm/watershed works and hazard mitigation infrastructure and the Feeder Roads/Farm tracks will be funded 100% by the project. For water supply, it is normal for communities to make a small contribution of up to 5% of the capital cost. For household toilet systems, the project pays for the concrete slab or digni-loo, while the beneficiaries excavate the pits and build the superstructure with their own resources.

Off-farm/watershed works and hazard mitigation infrastructure will be community-managed. The infrastructure for NR remediation and environmental protection will be managed and maintained by a Natural Resources and Environmental Management Committee to be established under the project. Feeder roads and farm tracks will be maintained by the Department of Feeder Roads, who will be involved in implementation to enable them to take over post-construction maintenance. Water harvesting, water supply and waste systems will be managed by a Water and Sanitation Management Team (WSMT), a statutorily recognised body operating under the auspices of the District Assembly Works Department. Water will be sold at the tap and revenue raised will be used to maintain the supply systems. Sanitation and waste management systems will be at the household and maintained by the households. Environmental sanitation and waste disposal and recovery systems will be coordinated by the WSMT and supervised by the District Assembly Works Department. The Environmental and Social Safeguards (ESS) process is a framework for identifying and evaluating potential environmental and social impacts of infrastructure interventions, as well as providing for mitigation and management safeguards during implementation. Essentially the environment and people should not be worse off as a result of the project. The ESS presented in this design document has assessed PROSPER to be Category B and recommends the preparation of site-specific Environmental and Social Management Plans (ESMP) for all physical interventions, which will be done. However, the impacts associated with the proposed categories of socioeconomic infrastructure are minimal, site-specific and can be managed without resulting in any irreversible damage to the environment. The waste management interventions improve the environment.

Three complementary types of climate-resilient infrastructure are eligible: *Off-farm/watershed works and hazard mitigation measures*; *Feeder roads and farm tracks*; and *Communal social infrastructure*.

The identification of common ownership infrastructure under PROSPER will be initiated during the preparation of NRLIPs and subsequently ranked through further investigations to establish the pipeline of priority communal projects. The selection and prioritization of public infrastructure will be based on agreed criteria, which will be made available to the stakeholders by the project. The infrastructure identified for implementation shall form part of the District Medium-Term Development Plan (MTDP). The District Assembly undertakes all processes to acquire the land area via Lease or Free Hold (involving survey and production of cadastral plans and issuance of formal title from the Lands Commission). The implementation of socioeconomic infrastructure activities will commence with the procurement of consultancy services for engineering design and supervision of works. Following acceptance of the designs and bid documents, a contractor is competitively selected to undertake the installation and construction of the relevant infrastructure works that have been designed. Where necessary, an environmental and social management plan is developed by the project in collaboration with the Environmental Protection Agency (EPA) and/or the Environmental Division of the Ghana Health Service (GHS).

1.2.1 Objective Ranking System for Infrastructure

Criteria for selection of socioeconomic infrastructure needs involve addressing the following:

- i. Is the infrastructure critical for the value chains selected for the cluster?
- ii. Will the infrastructure benefit the smallholder farmer?
- iii. Are there viable post construction management arrangements?
- iv. Availability of litigation free land for the infrastructure identified
- v. The infrastructure will be captured under the District Assembly Annual Maintenance plan
- vi. Will the MMDAs provide the oversight and monitoring outputs to sustain the infrastructure?

1.2.2 Off-farm/watershed works and hazard mitigation measures

Natural resources remediation aims to preserve productivity and ecosystem integrity regarding the water, soil, plants, and animals within a watershed, thereby protecting and restoring natural resource integrity for environmental, social, and economic benefit.

Strategies and practices that protect the resource base comprise agroforestry, expanded tree cover on fragile slopes, constructing soil and water conservation structures for the control of soil erosion, preservation of water resources and biodiversity in the environment.

The identification of infrastructure for environmental remediation will be part of the NRLIP process. The process for selecting natural resource remediation interventions in communities comprise three steps as follows:

- (i) Site selection that is premised on level/risk of degradation of the natural resource
- (ii) Rapid micro-watershed assessment that combines a quick science-based assessment by experts along with participatory assessment by local stakeholders
- (iii) Identify priorities for specific micro-watershed interventions, based on stakeholder review and consensus

Natural resource and environmental remediation infrastructure includes all mechanical or structural measures that control the velocity of surface runoff and thus minimize soil erosion and retain water where it is needed. The physical interventions to control runoff include but not limited to, contour bunding, bench terraces, tied ridges, contour fallows, windbreaks, stream buffers, grassed waterways, earthen embankment, gully control structures, trenching, diversions, ditches, stone terraces and water retention pits. The choice of soil and water control infrastructure will depend on the natural resource challenges facing the community. Some of the most common off-farm/watershed works and hazard mitigation measures are described below.

a Contour Bunding

Contour bunds are narrow-based earthen embankments constructed at intervals across the slope of the land on a contour dividing the length of the slope into pieces to: reduce the velocity of runoff water, impound water for increased soil moisture and prevent or minimise soil erosion and land degradation. Applying a simple bunding design formula²⁸ on an area with moderate rainfall (800mm per year) with moderate loamy soil and 3% land slope yields bunds with *bottom width=2.4m; Height 0.75m, Top width=0.45m, Side slope=1:2. The horizontal spacing between bunds is 30 m and the length of each bund per ha is 333 m.*

The average cost of constructing the contour bunds is about **US\$ 3,000 per ha**. The cost of engineering design and construction supervision is 10% of the construction cost.

b Planting of protective grass (Vetiver)

Vetiver is a grass with deep root system that provides structural strength to soils to minimise soil erosion, gully formation, soil nutrients loss, roadside & riverbank erosion, river and lake pollution, and groundwater depletion. The idea is to plant continuous hedges of Vetiver on the contour lines or along rivers and roads so that the leaves of vetiver filter the runoff while the deep roots retain the soil and help water infiltration. The cost of purchase and planting vetiver grass is about **US\$ 500 per ha**.

c Gabions

Gabion structures are made with boulders packed closely in wire mesh cages. They are constructed in gullies for retention of debris and soil accumulation without ponding. The cages are constructed from mild steel wire for general engineering purposes complying with BS 1052. Stone filling for gabions consist of hard durable rock free from weathered or decomposed parts - 120 to 80mm in size. Cost is estimated at about **\$150.00 to \$450.00/m3** of protection (Average is US\$ 300/ m3). This includes the baskets, assembly and filling the baskets, stone fill (may vary depending on location and availability).

1.2.3 Feeder roads and farm access tracks

This socioeconomic infrastructure includes the construction or rehabilitation of rural roads and farm tracks (90 km) to facilitate the movement of goods for farmers involved in agribusiness agreements to markets and for aggregators to access produce in the farms. This intervention includes the construction of culverts, small bridges and other appurtenances required for the conveyance of storm water from the roadway. PROSPER will support the identification, design and supervision, preparation of bidding documents, construction and/or rehabilitation of the selected road infrastructure. The project will provide 100% financing, however the District Assembly/Department of Feeder Roads, the public agency responsible for rural roads, must demonstrate that it will provide necessary maintenance, by including the roads in their maintenance plans.

The project provides criteria for selection of feeder roads and farm access tracks to the Cluster animators and planning teams, which shall include the Department of Feeder Roads. The teams apply these criteria in the selection of roads and farm access tracks to be constructed or rehabilitated under the project. The selection proposed and validated by the project teams shall be included in the District Assembly Consolidated Plan and Budget. Selection criteria for feeder roads and farm access tracks must include but not limited to the following:

- i. Roads opening up to major farming sites and irrigation sites;

²⁸ Vertical Intervals VI = (S/a + b)0.3 where S is land slope (%), 'a' is constant = 2 for low rainfall or 3 for heavy rainfall, 'b' constant = 2; Horizontal Intervals HI = VI/S*100; Length of Bund per ha LB = 100S/VI.

- ii. Roads opening up to block farmlands for grains and cereals under rainfed conditions (acreages = 500 acres or more);
- iii. Roads that require bridges to make them usable will receive less priority; this condition is due to the current limited funds;
- iv. Economic viability-benefits to community, employment generation, in particular the livelihood of women and children;
- v. Environmental impacts can be mitigated at an affordable cost;
- vi. Selection criteria for farm access tracks must include but not limited to the following:
 - o Link up to a feeder road;
 - o Link up to water management schemes, to large block farms, aggregation sites and other project intervention sites

1.2.4 Communal Social Infrastructure

a. Domestic Water Supply and Sanitation

Communities with poor access to water for domestic use or trek long distances to fetch water may be supported by the project to improve access to water supply. The identification of the need for water supply will take place during the preparation of NRLIPs. Community members convened to discuss and identify their developmental needs may include the provision of domestic water supply and sanitation/waste management facilities. The staff of the District Works Departments (DWD) from the District Assembly shall participate in the discussions to educate the community on the water supply and sanitation opportunities available, technology choice and level of service. Approval of the specific request for water supply provision, is contingent on meeting the requirements of a selection criteria. Community pre-selection checklist criteria include the following:

- Level of poverty;
- Existing water and sanitation facilities, their condition and distances/proximity
- Water and sanitation coverage
- Water related diseases prevalence
- Performance of existing community-based organisations
- Number of self-help projects completed in the last five years;
- Evidence of bank statement showing an initial deposit, as required.

Following a community pre-selection for a water supply facility, technical assistance support is provided for the community to prepare a water supply system proposal, which shall be appraised for implementation under the project. The eligibility criteria in the Appraisal Checklist include:

- Documentary evidence that proposed facility and the sites belongs to the community
- Technical and environmental feasibility of proposed civil works and goods
- Evidence that the community reached consensus over technological choice and service level desired
- One year O&M financing deposited in the community bank account
- Procedures for O&M and tariff collection prepared and adopted
- Plans for improved hygiene, environmental protection of the water supply facility
- Gender-balanced representation in the Water and Sanitation Management Team (WSMT), whose members are trained and formally recognised by the MMDA
- Proposed facilities meet national technical and environmental standards

b. Water and Sanitation Management Team (WSMT)

Communities benefitting from water supply and sanitation facilities shall elect a gender balanced Water and Sanitation Management Team, (WSMT), which shall be involved in planning,

implementation of the water and sanitation sub-project. They shall sign off on completed works and community development activities on water, sanitation and hygiene.

The Water and Sanitation Management Team (WSMT) comprises of a gender balanced team that is democratically elected from a beneficiary community. The WSMT's persona is derived from the statutory powers of the District Assembly Works Department. The WSMT is responsible for the proper operations and maintenance of boreholes fitted with handpump or limited reticulated piped scheme (comprising borehole fitted with solar powered submersible pump connected to a high-level tank and a battery of taps). The WSMT:

- i. Retains staff and service providers that operate the water system and collect revenue from consumers of water;
- ii. Monitors the services provided by its employed staff or a private operator (in the case of reticulated pipe schemes);
- iii. Keeps proper financial records on revenue and expenditure, and reports to the community as required;
- iv. Submits regular reports to the District Assembly Works Services Department;
- v. Undertakes hygiene education and sanitation promotion; and
- vi. Proposes tariffs or user fees in accordance with Community Water and Sanitation Agency (CWSA) guidelines to guarantee sustainable delivery of services.

c. Sanitation and Waste Systems

The focus on sanitation is to create awareness for sustained behavioural change to ensure the following:

- i. Safe confinement and disposal of excreta and other wastes
- ii. Safe handling and use of water
- iii. Personal, domestic, and environmental hygiene
- iv. Regular hand washing with soap, particularly at critical times

The project will generate demand for improved sanitation products and services through sensitisation sessions at the community level. With regards to household sanitation facilities, the project will provide support to poor households which are unable to afford the costs of constructing a toilet. This support will be limited to core elements of a basic household latrine, such as the slab, or digni-loo unit with the rest of the costs to be financed by the household itself.

d. Technologies for Domestic Water Supply and Sanitation Systems

The choice of domestic water supply and sanitation systems comprise the following technologies:

A. Limited mechanised borehole: Average cost per system – US\$ 20,000-35,000

In accordance with the guidelines provided by the Community Water and Sanitation Agency (CWSA) the limited mechanised system shall be constructed for rural communities with populations larger than 1,200 people. The works for this technology comprise:

- i. Borehole drilling and lining (up to 60m)
- ii. Construction of well head assembly with flow meter
- iii. Laying of pipeline from wellhead to High-Level Tank
- iv. Install solar submersible pump in borehole
- v. Install High-Level Tank capacity of 10,000 litres.
- vi. Install 2 to 4 standpipes close to the High-level Tank

B. Borehole fitted with handpump: US\$ 8,000

The CWSA guidelines propose the construction of a borehole fitted with a handpump for communities with population from 300 to 1,200. One borehole serves about 300 persons. The works for this technology comprise:

- i. Borehole drilling and lining (up to 40 m)
- ii. Construction of concrete apron around borehole with drainage ditch or a soak away pit
- iii. Install handpump

Sanitation systems

C. Ventilated Improved Pit Latrine (US\$ 100)

The VIP latrine is suitable for household of up to 15 persons. The VIP latrine consist of stabilised pit, improved concrete slab, improved superstructure, vent pipe. Flexible choice of material for the superstructure: Sandcrete blocks, bamboo/palm fronds, wooden boards, sand, cement, PVC pipe.

D. Digni-Loo Latrine (US\$ 85)

Digni-Loo toilet is the latest addition to the household sanitation technologies, which is visually appealing and easy to install and maintain. It comprises a plastic slab and substructure that combines functionality, safety, affordability, and reusable. Flexible choice of material for the superstructure: Sandcrete blocks, bamboo/palm fronds, wooden boards, sand, cement, PVC pipe.

II. Development of value chains

Component 2: Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains. The expected outcome is: Smallholders and small businesses draw greater benefits from the increasing market outlets for agricultural produce through comprehensive financial, capacity and marketing support.

Whereas the first component will invest in the human, physical and natural resources of the target communities, the second component is concentrated on investing in the “private goods” of the population to bring about a sustained uplift in the earning capacity of agricultural producer groups and related enterprises. The aim is to expand business activity both within the target communities and in lasting agreements with other actors in the selected VCs.

Agricultural value chain describes the full range of activities required to bring a product or service from conception, through the different phases of production, delivery to final consumers and final disposal after use. Under the PROSPER programme, products which will be focused on are rice, maize, soya, cashew, shea, and poultry. These products will be upgraded to offer more value to the stakeholders. Upgrading a value chain means acquiring the technological, institutional and market capabilities that allow resource-poor rural communities to improve their competitiveness and move into higher-value activities. Upgrading is the process of trading up, trading in higher value markets or items. Small businesses will be empowered to take advantage of the increasing market demand for agricultural produce.

Component 2. Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains

Subcomponent 2.1 Sustainable marketing linkages and business development.

This practical and intensive developmental activity is aimed at generating enduring partnerships between producers engaged in climate-resilient farming and larger-scale agribusinesses within locally appropriate forms of robust and equitable contract relationships in the private sector. PROSPER itself will not enter business relations with the parties at any stage. The project will concentrate on those

eligible RIs and MSMEs that demonstrated interest and potential in the Component 1 capacity building interventions. Group eligibility for different windows of PROSPER support centres on meeting membership criteria regarding the minimum proportion of specified disadvantaged groups: women, female and male youth, PWDs and landless or near-landless households. These criteria allow for and, for practical reasons, encourage a minority of non-eligible members with productive land holdings of up to 10 ha in each group.²⁹

This sub-component will identify the existing markets for the chosen products under the value chains, strengthen and increase their outreach to the target households. The purpose of agricultural marketing is to distribute agricultural commodities from producers to users and consumers. Market participants may engage in moving, storing, grading and processing the commodity in the expectation that this will enhance its value to consumers. Although these marketing services incur costs, producers, consumers and the overall economy gain where the benefits of specialized production and exchange exceed the costs of marketing and allow greater volumes and prices for producers and greater volumes and lower prices for consumers.

PROSPER will support about 100,000 participants in total. Around 50 percent of them will benefit from sub-component 1-2. The strengthened will serve as platform to reach out to all the members along the value chain to benefit from agribusiness partnership and improved marketing infrastructure.

Preparatory studies and assessments:

As an essential prerequisite to the investment, PROSPER will build on the value chain analysis conducted during project design and assess further the potential for increasing the real demand for the produce from areas remote from the main markets. It will examine in depth the status and characteristics of selected national value chains (soya, rice maize, cashew, shea and poultry) and map the VC actors located close to the target communities, particularly the first stage market linkages between producers and others in the chains. The general presumption is that most smallholder farmers and their groups have no established marketing arrangements and interact opportunistically with buyers and middlemen only as and when they harvest a surplus. The number and location of private sector operators in the project area, including larger agribusinesses working with contracted outgrowers, is not well documented. PROSPER will commission a detailed structural examination of each VC, including an estimation of the value added at each link, to provide a sound platform for project interventions

PROSPER will recruit TA to carry out a detailed value chain analysis and associated information gathering. The analysis will be conducted at the Regional level and will touch base strongly on the district level and the selected clusters. It will determine key players and actors and will collect detailed information. . The TA will work closely with DDAs, BRCs/BACs and other key entities in the areas.

Promotion of linkages between producers and value chain actors.

Business Advisory Services (BAS):

PROSPER will support developing formal marketing partnerships between agribusinesses (export-oriented and local) and target beneficiaries. Through these partnerships, agribusinesses will incentivise target RIs and MSMEs to increase their income by improving the quality and quantity of produce.

PROSPER will also recruit TA to support Business Advisory Services to be provided by the BRCs/BACs. PROSPER will enter into MoU agreement with the BRCs as a BAS.

²⁹ However, for reasons of equity and to avoid any elite capture of benefits, strict rules will limit any material provision of inputs to RI members to a standard package sufficient to cultivate 1 ha.

Indicative criteria for the TA include presence in the selected region including districts where the selected clusters are located and past experience in preparing bankable BPs

With the support of the Business Advisory Centres (BACs)/Business Resource Centres (BRCs) and DDAs, the project will engage with VC actors in each participating district with an information-gathering and analysis exercise. An initial assessment will be conducted of the organisational status and maturity of the targeted groups (RIs and MSME), building on the cluster profiling at project inception, (Component 1.1), in terms of their organisational proficiency, level of capitalization, acquired skills in financial management and potential to establish business agreements with VC actors such as traders and processors.

Maturity indicators	Entry level (all groups passed this level to benefit from sub-component 2-1) (tier 1)	Less-mature RIs/MSMEs (tier 2)	More-mature RIs/MSMEs (tier 3)
Organisational skills	New / inexperienced group	Loose organisation, some evidence of joint activity.	Experienced and structured group.
Level of capitalization	No internal capital	Less than 500 cedis per member on average.	500-1,500 cedis per member in average. Regular saving practices.
Skills in financial management	No skill	Groups with internal small loan system, little/no experience with formal financial system	Group with a bank account, some experience in credit management.
Potential to establish business agreements.	No experience	Some experience with difficulty to develop partnership	Regular and successful partnerships.

The groups will be categorized broadly into two streams going forward with project support: those needing more time and coaching to consolidate their organisational and financial capacity to engage in business; and those deemed ready to advance to formal business arrangements with larger VC actors and external financial services. This objective evaluation will be instrumental in proper targeting and sequencing to access further project support and appropriate financial services.

It is expected that 50% of the total number of beneficiaries targeted under Component 1 (50,000 people) by PROSPER will qualify for assistance under this Subcomponent. Among those, the marginalised, poorer and most vulnerable RIs (composed of more than 50% members with access to land of 1 ha or less and 50% women, 60% youth and 10% people with disability) and smaller MSMEs (fewer than 9 employees) progressing from Component 1 and meeting organisational proficiency requirements, minimum level of internal savings and acquired skills in financial management will be offered training sessions backed up by demonstrations and events at the cluster level on climate risk mitigation, resilience and integration into value. Particular attention will be paid to potential MSMEs dedicated to women, youth and PWDs. Meetings will raise awareness, share information, bring together potential partners, and seek to conclude RI and MSME agreements with VC actors. These beneficiaries will be assisted later in the preparation of a basic climate-friendly Business Plan (BP) to aid the consolidation of their income-generating activities and consideration for financing, (see below).

The relatively better-off RIs that: (i) have a larger proportion of well-off beneficiaries (less than 50% of the members have access to an area of 1 ha of land and no more than 10% have access to 5-10 ha of land) and a lesser proportion of vulnerable people (40% women, 30% youth and 5% PWDs); and (ii) meet the organisational and financial literacy requirements, (including a bank account with an adequate level of savings), will be offered a more advanced version of the trainings and demonstrations leading towards the establishment of business partnerships in each target district. MSMEs (with up to 29 employees) will be engaged in the same developmental processes if their business can be shown to contribute to increasing the offtake from the primary target group and extending the reach of the VCs in remote locations. These beneficiaries will be assisted later in the preparation of a more advanced version of an orthodox Business Plan to support an application for external commercial credit. Those less-mature RIs and MSMEs that perform well in the entry level scheme are able and encouraged to progress to this advanced level activity.

The outcome of this activity is the establishment of formal market linkages between group of capitated RIs and standalone MSMEs and offtakers, value adders, aggregators, etc.

Training modules development.

The BAS will train the target RIs and MSMEs and guide them to develop business plans (BPs), form marketing linkages with buyers (exporters, processors, wholesalers) and develop business plans and start affordable credit linkages with Participating Financial Institutions (PFIs) to implement the BPs. It will also help the RIs and MSMEs with the right targeting profile to benefit from the PROSPER MG facility.

The TA will support PROSPER in developing a set of training modules based on the project design and other VC assessments. These modules will focus on a range of topics, such as:

- Training of RIs and MSMEs on climate risks and integration into BPs /e
- Training of RIs and MSMEs on VC linkages and green bankable BPs
- Demonstrations on climate risks and green BPs
- BRCs/BACs support for Partnerships creation between RIs, MSMEs and VC actors /f
- Demonstrations dedicated for women and youth on climate risks/green BPs
- Partnerships creation between RIs, MSMEs and VC actors /g

PROSPER will organise a series of Training of Trainer (ToT) workshops for preparing a group of “master trainers” from BRCs, DDAs and regional Departments who can further roll out these training and capacity building inputs to the target households in the future.

PROSPER will identify groups of RIs in the clusters of communities identified under sub-component 1-1.

Contract agreement and partnerships:

PROSPER aims to support smallholder farmers to enter into inclusive commercial partnerships with other value-chain actors. This can either be done through public-private producers’ partnerships, and or direct contractual agreements. The aim of these partnerships is to secure volumes of sales and agreed pricing mechanisms (either fixed or spot), to facilitate finance and access embedded services from agribusiness on improved productivity and quality, as well as promote value-addition processing. Some of the other areas PROSPER will invest to support market development linkages between producers and buyers are provided below. PROSPER will facilitate certification of producers to appropriate professional certification agencies such as the Foods and Drugs Authority to ensure standards are met. PROSPER may support in meeting cost for certification against (i) clear assessment

in the business plan that certification will be an advantage for production and marketing and (ii) presence of clear marketing agreements (formal and informal) for certified produce.

Business plan (BP) development:

The centrepiece of the third activity is the generation of a sound, achievable and fully costed plan appropriate to the resources and realistic prospects of each concerned entity. For the less-mature RIs and MSMEs , which meets the poverty criteria referred to above, a simple but achievable BP will be prepared with the support of BRCs, BACs, DDAs and PFIs as available. The Cluster Committees from Component 1.1 will be strengthened and upgraded to include PFIs and other VC actors to participate in BP development and realisation. BPs will be developed by multiple RIs and standalone MSMEs with the prerequisites of potential formal market linkages (supported by the project or pre-existing), proper organisational skills and an adequate level of internal capital. Each basic BP should include inputs, simple tools and equipment, and whatever other cost items are required, set against a realistic estimate of returns. For individual MSMEs, the BP will centre on income-generating services and activities related to primary production, such as land preparation, simple value addition or crop aggregation, and may include limited working capital. All simple BPs should be green in design and address effectively climate and NR degradation risks and impacts. The simple BPs will be evaluated by an independent agent/service provider (to avoid elite capture or any risk of political interference) and, if acceptable, used to support a request for support through a Matching Grant window, (detailed under Subcomponent 2.2). Access to this MG window will be limited to the very poor groups and MSMEs with less than nine employees and meeting the targeting criteria (with regard to percentage of women, youth and PWDs described below:

- The marginalised, poorer and most vulnerable RIs composed of more than 50% members with access to land of 1 ha or less
- 50% women (some selected value chains such as shea will target 100% women)
- 40% youth for RIs and 60% youth for MSMEs
- 10% people with disability

As mentioned above smaller MSMEs (with nine employees and less) will be targeted. These MSMEs should have similar percentages of women, youth and PWDs referred to above.

Both above mentioned RIs and MSMEs should have progressed from Component 1 and meeting organisational proficiency requirements, minimum level of internal savings and acquired skills in financial management. They should be at least at tier 2 level (referred to in the table above).

For stronger RIs and MSMEs meeting at least the overall targeting criteria by the project, the project will provide the opportunity for professional support by technical assistance and the BACs/BRCs in close collaboration with the PFIs in preparing a fully-fledged BP and facilitating access to affordable finance, (see Subcomponent 2.2 below).³⁰ The strengthened Cluster Committees will support the process. The PFIs themselves will be receiving capacity building and mentoring support from PROSPER to extend their outreach and are expected to engage fully with their potential customers early in the Business Planning stage. The first category of advanced BPs will include groups of RIs partnering with an agribusiness/value chain actor. It may include inputs and simple tools for the participating RIs as well as working capital and elements such as mills, machinery, vehicles, equipment and minor infrastructure for the agribusiness. Another category of full-fledged BPs will include individual MSMEs with up to 29 employees. The full-fledged BP for MSMEs will be larger and more sophisticated than those under the basic ones and would similarly cover working capital requirements. Each BP should

³⁰ The concept of supporting “flexibility to achieve sustainability” in financing rural poor people is central to IFAD’s new Inclusive Rural Finance Policy, with less emphasis on commercial (market-priced) finance at the entry level.

be green in design and address effectively the climate change adaptation and mitigation challenges and NR degradation risks. The successful advanced BPs will be eligible for support by the Blended Finance Facility, (detailed under Subcomponent 2.2).

The above groups will meet at least the following minimum criteria:

- The smallholders RIs composed of more than 50% members with access to land of 2 ha or less
- 40% women
- 30% youth
- 5% people with disability
-

As mentioned above MSMEs (with twenty nine employees and less) will be targeted. These MSMEs should have similar percentages of women, youth and PWDs referred to above.

Both above mentioned RIs and MSMEs should have progressed from Component 1 and meeting organisational proficiency requirements, minimum level of internal savings and acquired skills in financial management. They need to be meet the requirements for tier 3 level (referred to in the table above).

For PROSPER, the imperative is to promote and expand businesses operating an aggregator-primary producer model that is prepared to engage with the IFAD target RIs and related enterprises to become their interface with the market. This VC chain development is key to moving the sector on from the failing unsustainable smallholder farming systems.

The PCU will make an open call for business plans (BPs) from groups of RIs in the programme area. There will be two types of business plans; one for MG financing (simple Business Plan and one for BFF financing (full-fledged Business Plan. The project will also cater for green investments and so business plans will be required for them. Business Development Services (BDS) will support the above different target groups and assist them in preparation of bankable business plans

The BDS will support the beneficiaries' groups coming together with an Agribusiness partner and standalone MSMEs to prepare a BP.

Contents of the BPs:

The pre-requisite of the BPs is that it will be simple enough so that the RIs will have technical command to manage and that the planned activities will translate in livelihood increase. The content of the BP will include i) institutional details about the leadership, member composition and activities of the RI or MSME as relevant ; ii) the description of the business concept/business model along with the background and rationale for selecting it; iii) details of target beneficiaries, particularly women youth and PWDs, along with socio economic category and projected increase in outreach of benefits over 3-5 years; iv) operational details outlining how the business will be operated and managed; v) marketing and market development plans for establishing the necessary contractual arrangements; (vi) market-oriented production plans and measures for improved production efficiencies, addressing the effects of climate change and sustainable use of natural resources (further elaborated and implemented under Component 2.2); vii) projected revenue and profitability over 3 to 5 years and revenue retention and reinvestment plans; viii) financing needs and sources of finance for meeting all organizational and technical capacity building requirements; production needs; market development and marketing plans and working capital requirements; and ix) impact on the income level, and nutrition and resilience of the target households. The BP will be green and prepared in accordance with the Operational Manual for the IGREENFIN with regard to green investments. This Operational Manual of the IGREENFIN is considered part of PROSPER PIM. This will be a requirement for all BPs including the simple (for the MG window) and full-fledged ones (BFF window).

The project will make sure an offtaker will be part of the full-fledged BP arrangement.

BP development process:

Groups of RIs or standalone MSMEs interested in the business plan will submit a concept note prepared with the assistance of extension officers in the community. . For full-fledged BP, an offtaker could be part of the process. The concept note will be 1-3 pages long and will present a summary of the business idea, expected number of beneficiaries and their economic category, expected level of financing required, sources of finance, key risks and plans for mitigating these. TA will be provided for the preparation of the two types of BPs.

The strengthened Cluster Committees including PFIs will participate in the development of the BP

Business Plan Review:

PROSPER will recruit an independent agent to conduct review of simple BP for the MG window. The independent agent should have capacity whether the simple BPs are green and meet criteria for climate adaptation and mitigation.

For the BFF process, the PFIs will make the decision regarding whether the full-fledged BP for the BFFs are successful or not. The evaluation process will include the climate officer in the PCU and the project unit in APEX BANK to ensure that the successful full-fledged BP meets the GCF and PROSPER requirements regarding being green and meet the adaptation and mitigation requirements.

All BPs (simple and fully fledged) should demonstrate that the proposed activities and investments comply with the following eligibility criteria: bankable; social inclusiveness (generation of benefits to women, youth, very poor and poor households, PWDs); market prospects; show job creation prospective; no duplication of previous similar support to the same group; increasing livelihood, climate mitigation and adaptation measures integrated as per project and GCF requirements, resilience and nutrition security for target households; and financial and organisational feasibility; and it should be green.

The business plans will be assessed based on the following criteria: i) Readiness and capacity: previous business history and financial performance; existing activity, capacities and group cohesiveness; ii) business plan quality: identification of market needs, prospective clients, realistic targets and pricing, etc.; iii) projected profitability/cash flow: the business plan should include a multi-annual cash flow analysis, including profitability indicators and demonstrated savings capacity for Operation and Maintenance and asset replacement; funding sources: clear specification of public and private funding sources; demonstrated contractual and 5-Ps of marketing arrangements linkages: number and coverage of pre-agreed contracts, volume of sales, embedded services. One of the very important factors is presence of mitigation and adaptation factors and that the BP can be classified as green. Additionally, the RIs/MSMEs should show proof that they have the required financial literacy, saving and required organisational skills..

Financing business plan implementation:

PROSPER MG facility will support the simple BPs which is prepared by groups of RIs that classify as poorest groups described in the targeting section of the PIM. The MG facility will support the simple BPs from standalone MSMEs (up to 9 employees. No direct support to VC actors will be provided from the MG facility.

The full-fledged, described above from groups of RIs that are classified as poor and standalone MSMEs (up to 29 employees) will be financed from the BFF and channelled through PFIs. Groups of RIs should submit the BP in partnership with an agribusiness, aggregator, nucleus farmer, etc.

PROSPER will support APEX BANK through establishing a BFF that will be financed in part from IFAD and GCF. The PFIs will access credit at preferential interest rates and flexible collateral terms in order to implement the approved BPs of selected firms. PROSPER will collaborate with the Bank of Ghana and ARB – APEX Bank to deal with universal banks and Savings and Loans Companies and community banks. Funds will be lodged at the ARB Apex Bank (after a MoU is developed) for participating institutions to access after they had entered into agreement to be part of the programme.

Subcomponent 2.2 – Access to rural financial services

The project objective under this sub-component is to support realization of the Business Plans for number of groups coming together and to facilitate lasting access to suitable financial resources for the beneficiaries as they engage in agro-business. The financial instruments PROSPER are designed primarily to target the most vulnerable producers and VC actors, youth and women in particular as well as PWDs, and also to promote climate change adaptation and mitigation and sustainable natural resources management.

PROSPER financial services are structured around three instruments appropriate to the various situations prevailing in rural areas as regard capacities and professionalization. The three instruments are: 1) Saving and Loan Groups (VSLA model), for sparking saving habit within communities, 2) a matching grant (MG) fund for capitalizing RIs that engage in commercial agriculture, and 3) a blending finance facility (BFF) operated as a refinancing fund for PFIs, for ensuring a sustainable access to financial services. These instruments form a global graduation process by which beneficiaries will be able to increase their access financial resources over time as they progressively build their financial and management capacities and develop their business relationships with other VC actors. It is expected that the most vulnerable people will be able to climb the graduation ladder over the course of the project starting with building saving capacities (VSLA model), then benefiting from a grant as to improve group capitalization, up to having access to affordable credit through the BFF for their sustainable development. At the same time, more mature and advanced groups of beneficiaries already involved in agro business agreement with offtakers and aggregators, will be able to have direct access to MG and/or BFF without going through the whole process from the start.

An initial assessment of the maturity of the targeted groups will be conducted alongside the group profiling to be commissioned at project inception (Component 1.1). Groups will be evaluated against their organizational skills, level of capitalization, their skills in financial management and their ability to establish business agreement with VC actors such as traders, processors. They will finally be categorized into three tiers depending on their maturity level (from tier 1 for the weakest to tier 3 for the most advanced). This will be instrumental in a proper targeting.

PROSPER shall work with selected rural banks in the project area under the auspices of the ARB Apex Bank. The Banking services shall include savings and granting of loans. For savings, the participating financial institutions will be encouraged to open accounts for RIs in the project area and do cash pick-up under compulsory savings scheme.

The core endeavor of the financing the subcomponent is to provide credit that will allow beneficiaries to accomplish their investment plans for production improvement and marketing development. The BFF will finance successful full-fledged BPs. The PFIs will obtain approval from the Project unit at the APEX-Bank and the PCU for the pipeline to be financed.

Expected outcomes: 100,000 farmers and rural beneficiaries (through RIs and local MSMEs) are integrated in the formal financial system and have lasting access to adapted and affordable financial services to develop their agri-businesses, including green investments. Out of these, the majority will be members of RIs (approximately 90,000). The above number will include as well non RI members

who will also be identified either in areas where existing RIs are few or don't meet the targeting criteria³¹. The project will then integrate non RI members into RIs to expand outreach and ensure project benefits achieve the intended target group. Around 10,000 will come from entrepreneurs and employees of MSMEs active in the project area around the selected value chains.

Achievement of this outcome will be measured by the following key indicators:

- 100,000 men and women farmers, entrepreneurs and employees of MSMEs (100 % of total direct beneficiaries) have developed culture saving and have deposited savings on a collective bank account.
- 20,500 men and women farmers and entrepreneurs (including MSMEs employees) of the MG facility
- 23,965 men and women farmers and entrepreneurs access formal financial services (credit from the BFF) mainly through RCBs to invest in their agri-business and for improved climate resilience. This target will include up to 30% of those benefited from the MG facility.
- Promotion of savings: the Saving and Loan Groups (VSLA model).

The Ghana financial sector review shows that a large majority of small farmers are still excluded from the formal financial sector and having access to proper financing solutions is deemed to be one of the major constraints that prevent them from developing their production and increasing livelihoods. Fundamentally, lending to small farmers is considered risky by the financial institutions as they demonstrate weak capacities in terms of farm management and financial management, compounded by the inherent risks associated with agricultural businesses in a climate change context that may undermine their ability to repay their loans.

For the bottom tier of the targeted beneficiaries, PROSPER will support the creation of Savings and Credit Groups, based on the VSLA model. The objective are to promote the saving habit and culture as a way to increase self-financing capacities for farmers and other VC actors, thus reducing dependency to external resources; and to build internal capital in order to reduce the need for and cost of credit in the longer term.

Village Saving and Loan Groups are informal autonomous groups of 20 members in average that decide to come together to save little cash on a regular basis in a safe box to face future cash needs and access small loans to realize income generating activities. These groups base their activities on trust, accountability, and transparency in all transactions.

Through PROSPER, members of tier 1 groups (farmers from RIs and entrepreneurs/employees from MSMEs) will be encouraged to save around 30 to 100 cedis per month per member³². After one year, groups will be linked to PFIs and assisted to open an interest-bearing bank account to deposit their savings and develop their credit worthiness. As they form the group and start transactions, members will be trained in financial literacy and banking activity management along the way. Village Saving and Loan Groups (Village Saving and Loan Groups) are considered a first step towards inclusion in the formal financial system. Savings deposited will constitute an initial capital that will be leveraged in subsequent investment in equipment on credit, particularly with the support of the project (see below). PFIs will be trained in product development to incentive groups to keep saving.

³¹ Extra poor beneficiaries of less than 1 ha and vulnerable groups (women, youth, PWDs) will also be the focus of selection from outside the existing RIs pool.

³² With an ideal objective to save about 1,000 cedis over the year, which is in line with the average cost of an input package for the targeted VCs (such as inputs for one hectare or other typical models). Such amounts have been tested and validated by a number of projects in Ghana. Assessment of BPs will be based on whether activities are suitable for levels of saving per member beneficiary.

Considering the intensive support that is needed to help form and develop the groups (three training sessions spread over one year + mentoring on a regular basis), a system of volunteers will be used to rapidly roll out the model on a large scale. As a first solution, PROSPER will replicate groups existing in the neighbourhood that were supported by GASIP and other projects in the same target districts. Volunteers from those groups will be identified to become trainers and mentors. In other districts, volunteers will be identified within the community³³, with a focus on women leadership. Training of trainers for those volunteers will be organized for building capacities in the communities. At mid-term, PROSPER will train RCBs' staff to become trainers, with the view to transferring to banks the responsibility of the Village Saving and Loan Groups coordination and support, as part of their strategy to attract savings and leverage that source of liquidity. Groups will be primarily identified through the initial group profiling to be conducted under component 1.1. PROSPER will favor groups formed with members carrying out same activities to become VSLA (production, trading, processing etc.). The programme will focus on woman and youth groups as a matter of priority.

Going forward, best performing groups will be supported towards developing business planning capacities. Over the project duration years, PROSPER will target to create / strengthen 5,300 Village Saving and Loan Groups (100,000 members) building on the target RIs and MSMEs in the 8 targeted regions. After the period of one year, groups will be assessed partly on their level of savings on their bank account, participation of members and their commitment to develop their business activities as well as their organisational skills. Additional criteria to move to business planning support from the project is that the groups should have achieved milestones with regard to improving their internal structure and organisational skills. The best rated groups will graduate to preparing a simple Business Plan under PROSPER subcomponent 2.1 and benefiting from the matching grant fund. It is expected that 50% of the groups will qualify at this stage (2,650 groups stemming from RIs and MSMEs).

Matching grant fund

As a second stage, PROSPER will operate a matching grant fund³⁴ with the goal to capitalize RIs, which achieved tier level 2 toward raising their production and value addition capacities as part of a business agreement with VC actors (nucleus farmers, offtakers, processors, traders, aggregators, agroindustry, etc.). It is expected that, with enhanced capacities, groups will become more reliable in the eyes of potential partners in the VC, and this will favour their inclusion. At the same time, PROSPER will promote adoption of innovative, climate smart and resilient technologies and practices to achieve financial and environmental sustainability in the context of climate change and natural resource depletion.

Under the MG window, the group has to consist of 50% at least very poor beneficiaries (please see the targeting section). Such group (RI/ Village Saving and Loan Groups) should consist of at least 50% very poor beneficiaries who have one ha or less and should meet additional minimum vulnerable group membership criteria i.e., women, youth, and PWDs. This additional criterion will depend on the category of the matching grant and value chain under consideration.

Besides, the MG will also target MSMEs of up to 9 employees. Grants provided to such enterprises will be targeting BPs from ones with large concentration of vulnerable target group, especially the youth. Youth target will be 60%, women 50% and PWDs 10%.

From a process perspective, the matching grant will be allocated to a group of about 5 RIs with 15-25 members each. Beneficiary RIs (qualified Village Saving and Loan Groups and other existing RIs from the tier 2) will be selected on the basis of the common simple BP that has been developed with the support of the programme under component 2.1 among the partnering RIs that have been involved in the BP preparation within the identified geographical clusters identified at project start-up.

³³ Interesting experience from the RUFIN project by IFAD in Nigeria could be leveraged in that regard.

³⁴ The MG account will be directly managed by PROSPER management unit.

The MG fund will help partnering groups and individual MSMEs finance their investments described in their simple BP as a one-off support. Items that could be considered under the MG scheme include: inputs, working capital, small equipment (for example conservation agriculture tools, processing machinery, solar pumps, etc.) and TA on agronomic practices such as pruning/mulching for cashew trees. However, heavy equipment will be excluded (no tractors or infrastructure) to avoid any risk of elite capture. Such machinery will be supported through different windows. Quality inputs will be made mandatory to provide a robust solution for input financing (especially selected seeds with climate resilience). However, groups of RIs will be free to decide on simple equipment that best fits with their needs. Crop insurance from GAIP and agricultural risk guarantees from GIRSAL would also be promoted to be part of the investment plan.

Three MG categories are proposed, covering the 6 focus VCs. The level of grant/contribution required varies as follows:

Table 3: The matching grant scheme³⁵

MG category	Target	Value chain	Range of MG 000 US\$	Beneficiary Contribution	
				Whole Group Cash +In-kind 000 US\$	Per Farmer Cash (US\$)
Group of Rural Institutions (50-100 beneficiaries) for poultry, number of beneficiaries is 25-50).	RIs with 50% or more very poor farmers with less than one hectare of land. The RIs should also meet specific criteria for women, youth and PWDs that depend on the target VC. 40% women, 30% youth, 15% PWDs for rice, maize, soy, cashew and poultry. For	Rice, Maize, Soy	10-50	10-50	20 - 100
		Cashew	50- 100	50 -100	200 (over 4 years)
		Shea, Poultry	10 – 30	1.5-4	30 -50

³⁵ The matching grants ranges for groups of RIs are based on specific assumptions with regard to total number of beneficiaries, no of Rural Institutions participating in the Business Plan, area to be cultivated. During implementation, the above table should be used as guidance regarding the maximum amount per single beneficiary to guide the process and not as guidance regarding the limit of matching grant regardless of number of beneficiaries per Business Plan. Additionally, it is strongly recommended to limit the upper limit amount of MG per beneficiary (for group of RIs receiving MG for production) to equivalent of MG share of one hectare or upper limit the beneficiary have access to but no higher than one hectare of support (one hectare is not an entitlement for every beneficiary in the RI). The limits for MSME (9 employees and less) are based on examples and should be used as guidance for the process.

	shea 100% women, 40% youth and 10% PWDs.				
MSME (standalone) (average 8 employees)	Eligible standalone MSMEs less than 9 employees The MSMEs should also meet specific criteria for women, youth and PWDs that depend on the target VC. 50% women, 60% youth, 10% PWDs for rice, maize, soy, cashew and poultry. For shea 100% women, 40% youth and 10% PWDs.	All VCs	15 – 20	3.5 – 5	N/A
Nutrition (Group of 20 farmers)	Most vulnerable people, women, youth, PWD 60% women, 40% youth, 10% PWDs	Small ruminants, Vegetable Gardens, etc.	5 -12	0.5 – 1.2	25 - 70

Selection criteria for clusters' BBP will include:

- Most vulnerable farmers are targeted, for RIs they should have at least 50% of their members access to 1 ha of land or below in addition to the above percentages of women, youth, PWDs,
- Confirm acceptable organisational capacity, at least tier two from financial literacy / saving mobilization point of view,
- The BP should demonstrate how investment will translate into higher livelihoods (with a focus on women and youth),
- RIs should apply within marketing linkages arrangements that include other RIs and a value chain actor (offtake agreement between the RIs and a VC actor); partner offtakers and aggregators are expected to be involved in inputs distribution,

- Simple BPs should include green inputs, technologies, and practices. This evaluation process will ensure applying the guidelines in the IGREENFIN Operational Manual (attached to the PROSPER PIM) regarding green matching grants.
- RIs should demonstrate minimal technical knowledge as to manage equipment,
- RIs should demonstrate business management capacities and commitment for developing commercial agriculture,
- Each RI should have a bank account.

For standalone micro or very small enterprises, the BP does not need to include producers but linkage with farmers and other VC actors will be encouraged and assessed on a case by case basis. These simple BPs will not include heavy machinery but rather simple activities such as simple machinery for land preparation, animal feed from crop residues, aggregation, inputs provision, etc. Working capital could be of the simple BP and the MG support. Focus of the simple BPs for MSMEs will remain the six target value chains.

Finally, for women, youth and PWD groups targeted under the “Nutrition Window”, no simple BP will be required for small income-generating schemes focused on promoting diversification towards nutrition and food security (for example, kitchen gardens).

The following tables shows objectives per category.

Table 4: Objectives of the matching grant fund per category

RI	Group of RIs	# of RIs per group	RI Total	Farmers/FBO	Beneficiaries total
Rice	36	5	180	20	3,600
Maize	36	5	180	20	3,600
Soy	44	5	220	20	4,400
Poultry	46	5	230	10	2,300
Cashew	20	5	100	20	2,000
Shea	30	5	150	20	3,000
Total	212		1,060		18,900

MSMEs	Nb	Employees/MSME	Beneficiaries total
Rice	32	8	256
Maize	32	8	256
Soy	32	8	256
Poultry	32	8	256
Cashew	32	8	256
Shea	32	8	256
Total	190		1,536

Nutrition	Groups	Farmers/Group	Beneficiaries total
Off-season vegetable production	90	20	1,800
Post-harvest management (preservation/conservation)	30	20	600
Small ruminants (goats)	35	20	700
Poultry - egg production	35	20	700
Small processing	35	20	700
Total	225		4,500

Going forward, groups of RIs will be assessed against the realization of their simple BPs and capacity to expand business with their offtaker partner. The best rated clusters will qualify to graduate with the project towards preparing a full fledged BP under component 2.1 and having access to an affordable loan from PFIs through the BFF. It is expected that 50% of the beneficiaries of the MG window would graduate to prepare ABP and 30% would actually benefit from the credit line.

The Matching Grant will provide green grants in accordance with the IGREENFIN Operational Manual. This manual is considered a part of this ROSPER PIM (this document) and it will apply to both GCF and IFAD financing for the BFF.

The PCU will have a dedicated climate/safeguards officer and social inclusion officer who will support the process of ensuring the grants from the MG facility are in accordance the operational manual of the IGREENFIN (attached to this PIM). The climate/safeguards officer will be specialised in specialized in climate finance and will run the day-to-day activities of the MG facility in coordination with PROSPER and utmost attention will be placed on these aspects during supervision. The MG facility will be supported by the project's M&E core team, which will report on the number and amounts of loans that are verified as "green" against the GCF criteria. This will be verified dueing supervision missions.

The Blended Finance Facility (BFF)

The BFF will be proposed as a third step for tier 3 most advanced and mature groups (groups of RIs and MSMEs) that have the potential to develop further commercial agriculture³⁶. Groups that are classified as tier three with proper structure and structurally strong will qualify for the BFF window since the project start³⁷. The BFF will provide an affordable financing solution to the target groups to invest on a larger scale (heavy equipment, working capital, inputs, TA) and grasp other business opportunities. A number of tier 2 groups that doesn't qualify for the MG window because of the poverty criteria may be considered as well for direct access to BFF credit financing.

Under the condition of being linked with offtakers, they would have access to credit at a concessional rate for financing a more sophisticated BP with a strong focus on adaptation and mitigation in face of the climate change impacts on small agriculture.

The BFF can support the following groups:

- Less poor and mature groups of RIs in the geographical clusters along the target VCs will have to come together (for example 10 RIs with 200 farmers) to develop and finance a full-fledged BP. The group of RIs will be closely linked to a VC actor / offtaker that will be part of the full-fledged BP.
- Larger standalone SMEs of up to 29 employees, whether they benefited from the MG window or not³⁸, provided that they are appropriately structured and that they qualify as tier three. They would also be eligible to present a standalone full-fledged BP.
- For a group of RIs partnering with value chain actor / offtaker (private party), the detailed full-fledged BP will be prepared in coordination with the private party. It would typically include inputs, mills, warehouses, expansion of plants, cooling facility, crop insurance, agricultural risk guarantee etc., as well as measures for addressing climate adaptation and mitigation in accordance with GCF and PROSPER requirements and ensuring the BP is green. Clusters will be free to include any investment in line with the full-fledged BP purpose and goal. A cash contribution of minimum 25% of the cost of the infrastructure (to be borne by the private

³⁶ Only for the 6 main VCs: rice, maize, soya, poultry, cashew, and shea.

³⁷ A number of tier 2 groups that doesn't qualify for the MG window because of the poverty criteria may be considered as well for direct access to BFF credit financing but they have to graduate to tier 3 first.

³⁸ At the time of benefiting of the MG, they should have complied with the targeting criteria.

party) and 50% contribution from the farmers. It is expected that the PFIs will factor in the profile of the Value Chain Actor / offtaker in their decision making process to finance the full-fledged BP or not. The Actor will be the main guarantor through credit history, collateral in addition to the savings mobilized by the RIs participating in the respective ABP.

- For a standalone SME full-fledged BP, a minimum own contribution of 30% will be required.

Table 5: The BFF credit scheme³⁹

No	BFF loan category	Value chain	Range of Loan 000 US\$	Private Party / Value Chain Actor	Beneficiary Contribution	
					Whole Group Cash +In-kind 000 US\$	Per Farmer Cash (US\$)
1	Group of Rural Institutions (100-200 beneficiaries)	Rice, Maize, Soy	100-300	20-40	25-150	40 - 150
		Shea, Poultry	50- 100	10-50	20-40	30-200
		cashew	750-1200		200-300	300
2	SME (standalone) (below ABP 30 employees)	All VCs	30 – 130			N/A

Table 6: Objectives of the BFF

RI	Group of RIs	# of farmers per group	Farmers Total
Rice	17	200	3,400
Maize	17	200	3,400
Soy	18	200	3,600
Poultry	18	100	1,800
Cashew	8	500	4,000
Shea	18	280	5,040
Total	96		21,240

MSMEs	Standalone MSMEs	# of people per MSMEs	Farmers Total
Rice	14	25	350
Maize	14	25	350
Soy	15	25	375
Poultry	14	25	350

³⁹ The BFF loans ranges for groups of RIs are based on specific assumptions with regard to total number of beneficiaries, no of Rural Institutions participating in the Business Plan, area to be cultivated. During implementation, the above table should be used as guidance regarding the maximum amount per single beneficiary to guide the process and not as guidance regarding the limit of BFF loan regardless of number of beneficiaries per Business Plan. Additionally, it is strongly recommended to limit the upper limit amount of the loan per beneficiary (for group of RIs receiving BFF loan for production) to equivalent of BFF loan to two hectares or to the land they have access to but not higher than two hectares (two hectares is not an entitlement). The limits for MSME (29 employees and less) are based on examples and should be used as guidance for the process.

Cashew	26	25	650
Shea	26	25	650
Total	109		2,725

The BFF will provide green loans in accordance with the IGREENFIN Operational Manual. This manual is considered a part of this ROSPER PIM (this document) and it will apply to both GCF and IFAD financing for the BFF.

The BFF will operate as a refinancing facility that will continue beyond PROSPER closure to provide sustainable access to affordable finance for groups to maintain and develop activities in the future. It will be established at and managed by the ARB Apex Bank that will provide wholesale liquidity on concessional terms to partner financial institutions (PFI) to on-lend for smallholder agricultural production and MSMEs development. This arrangement will leverage existing derisking tools (GIRSAI guarantee, GCX warehouse receipts and other market enhancing instruments). The BFF will address key bottlenecks, including the risk averse nature of FIs in Ghana, lack of affordable liquidity in the banks and high interest rates for producers.

Partner PFIs that will be selected to channel BFF financing to beneficiaries will have to commit to offering a concessional interest rate, to be agreed to with the project to ensure a reasonable return to RCBs but making sure it is maintained below the 10% targeted beneficiaries can afford. Details on the structuration and functioning of the BFF are provided below.

When a beneficiary group presents a profitable business plan⁴⁰ (including green and climate technologies) vetted by the PFIs and applies for a loan, the bank/FI will approve the loan based on its own due diligence selection criteria and credit committee decision, since the bank will have to bear the associated credit risk⁴¹. In doing so, the PROSPER team in the APEX Bank (including climate and safeguards & social inclusion specialists) will be involved in applying the IGREENFIN Operational Manual Guidelines (which is part of this PIM) regarding Green financing/ loans. The Banks will ensure they abide by the provisions of that manual.

However, partner RCBs will have to apply GCF criteria (in the IGREENFIN Operational Manual) regarding the green investment purpose. Training will be proposed by PROSPER to PFIs for them to integrate these criteria into their due diligence process. More generally, IGREENFIN technical assistance to RCBs staff will be deployed by PROSPER towards climate change capacity building and financial product development.

The Project, APEX Bank and partner financial institutions will report on the IGREENFIN indicators regarding how much of the BFF loans (GCF and IFAD loans) are considered green in accordance with the criteria in the IGREANFIN Operational Manual.

At mid-term, along with a sound study of the market for green financing instruments, a review will be undertaken of the strategic management of the BFF to make recommendations on how the refinancing fund might be promoted and developed to ensure that the liquidity continues to revolve. In preparation of the project closure, the objective is to institutionalize the BFF and arrange for periodic replenishment in anticipation of loss and inflation. The review would recommend a mechanism for accessing additional international private funds and assess the current capability of the Apex Bank to do so.

⁴⁰ With technical assistance under component 2.1.

⁴¹ As a first assumption, the partner offtaker will be the loan obligor and credit manager on behalf of RIs. To be confirmed. Flexibility will exist in the scheme for most advanced and capitalized clusters/MSMEs to borrow directly from the RCB without guarantee from anchor offtaker.

The table below summarizes the graduation process with highlighting of the key features of the financial instruments used at each stage.

Table 7: The graduation process

Financing instruments	Target	Financial support from PROSPER	Non-financial assistance
SCG (Village Saving and Loan Groups)	4,500 groups / 90,000 members; 800 MSMEs / 10,000	None	Training of trainers + capacity building in financial literacy and banking activities management.
Matching grant	212 groups of 1,060 RIs (18,900 beneficiaries) + 192 MSMEs (1,536 beneficiaries) + 225 vulnerable groups (4,500 beneficiaries)	Grant against beneficiary contribution	Support to market linkage, business development and green investments will be provided under SC 2.1. Coaching and mentoring to realize BBPs and expand business. Technical assistance (agronomy) will be provided as part of the business plan developed by clusters.
BFF	96 groups of RIs (21,240 beneficiaries) and 109 MSMEs (2,725 beneficiaries) (up to 30% from the MG recipients could benefit as well from the BFF loans)	Credit at a concessional interest rate from partner RCBs leveraging concessional line of credit provided by the project.	Training on market linkage, business development and green investments will be provided under SC 2.1. Coaching and mentoring to realize BPs and expand business. Technical assistance (agronomy) will be provided as part of the business plan developed by clusters.

Structuring of the Blending Finance Facility (BFF)

The technical guidance on the process and the details of the loan blending are intended to guide the initial PROSPER project design. This includes the relations with the financial institutions and the key features of their strategies and priorities in the context of the project, the selection criteria for the financial institution that will take part in the on-lending of the blended facility, the main steps to disburse the funds to the financial institutions, the composition and the cost calculation of the blended facility, and the blending option chosen to channel the concessionality to the beneficiaries⁴². The basis of the guidance below is in line with IFAD's experiences, and it is tailored to the local context of Ghana. It is expected that the inception phase as well as the project team will further tailor this guidance in view of the latest demand and supply assessment.

Relation with Financial Institutions:

- **Products:** The financial institutions will be able to finance the beneficiaries targeted under the PROSPER program through their existing products offer (being agricultural loans, loans for SMEs, individual loans, group loans, etc.). The financial institutions will be supported to bundle their financing into loans allocated to clusters, MSMEs, or offtakers. This type of

⁴² The cost calculation includes an Excel file so that further adjustment can be done and automatically calculated.

bundling for allocation to aggregated borrowers, will reduce operational and transaction costs and risks by leveraging on local knowledge for self-selection of individuals with reliable character and business plans. This may however require some support to the financial institution in adapting their disbursement and repayment procedures, and legal responsibilities of each party for repayment and in case of default.

- **Selection of the final beneficiaries/clients:** Some minimal requirements will exist, to finance the targeted geographical locations and the targeted value chains. An exclusion list will also be put in place so that activities that are not suitable are excluded⁴³.
- **Interest rate for the final beneficiary/clients:** it is expected that the pricing of funding provided to the final beneficiary will be lower than the market rate, as the interest rate of the fund lent to the financial institution is significantly lower than the market rate – more details are provided in the table x.x below. It is to be noted however that this will be negotiated by the project with partner FI. As per the table X.X below regarding the selection criteria of the FIs, a concessional IR to beneficiaries will be a key selection criterion.
- **Guarantee:** It will also be possible for the financial institution to keep the rate lower than the market rate taking into consideration the guaranty that will be provided by GIRSAL with support from PROSPER (see details below) – thus decreasing potential risk costs for the financial institution (mainly provisioning and write-off costs).

Table 8 below describes some key features of the targeted financial institutions (rural and community banks), and some key implications for the project. It is to be noted that the financial institutions will require significant support for market development, institutional diagnosis, and technical assistance – since their capacity and interest in agricultural and green financing seem to be limited (the status of green financing including the capacity and interest of financial institutions in agricultural and green financing will be verified during the market assessment phase of the project). The Rural Community Banks (RCBs) and the Savings and Loans (S&L) targeted under this program have different profiles and should therefore be approached in a different manner under this project.

Table 8: Situation Analysis of the partner FIs, strategies and priorities

Key features	Implications for the project
Invest significant portion of their portfolio in government bonds, partly as a result of regulatory requirement. ⁴⁴	Support to assess and implement new technologies and capacity building to decrease operational costs (and profitability) while providing small loans in rural areas.
Little knowledge and interest in green products.	Training and coaching through pilot studies to coordinate market development and/or assessment, and institutional assessment.
Negative experience with agriculture, most notably with high PAR.	Capacity building on green investments to adapt products and develop loan appraisal techniques to take into consideration cashflow needs.
Most of the financial institutions primarily targeted under this program have a limited size (being mainly Rural Community Banks - RCBs), and are owned and managed by their members.	The RCBs will be more flexible in the products and processes to apply to the beneficiary under this project. The S&L are expected to be less

⁴³ Refer to the selection criteria for potential investments in Annex 25 of the IGREENFIN 1 Funding Proposal

⁴⁴ See for example the financial statement of the Rural Community Bank FIASAMANBANK available here:

https://fiasemanbank.com.gh/?page_id=138

The Savings and Loans (S&L) organizations are on average larger in size and operate on more commercial basis.	flexible in applying the requirements set by this project.
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The table below shows some selection criteria that could be used while shortlisting the most attractive financial institutions (Rural Community Banks) for the PROSPER project. It includes some specific weighting/importance. The criteria with the highest weighting include the rural focus of the financial institution, the share of its agricultural portfolio, and the types of products and services that it offers (which should be as suitable as possible to the targeted beneficiaries by PROSPER). It is to be noted that the information currently available about the RCBs shows that some of them may rate high on the rural focus, but their experience with agriculture will generally be limited and therefore their product offer may not be suitable for agriculture/green financing. In this context, the APEX has communicated to IFAD that they would be willing under the PROSPER project to deploy their due diligence to identify a few RCBs that have higher exposure in agriculture.

Table 9: Selection criteria for the institutions

Category	Criteria	Weighting %
1. Outreach capacity	1. Rural focus. The financial institution (FI) operates within or close to the locations of the targeted regions of focus (North and Middle belts). The FI has a significant footprint in the targeted areas, which guarantees outreach capacities. The FI operates close to the value chains of focus (Rice, Soy, Maize, Poultry, Cashew, Shea).	30%
	2. The financial institution staff (e.g., credit officers and risk analysts) has an exposure to agriculture, especially in the value chain of focus, with a strong base of smallholder clients. The financial institution has a sizeable loan portfolio (at least more than 5M USD, and ideally more than 10M USD) so that it can effectively on-lend between 800k and 2.1M USD per year for green loans.	20%
2. Ability to commit liquidity with the view to increasing the multiplier factor	3. The financial institution is willing to provide loan products and lending rates that are favorable to the proposed lending scheme and ability to invest its own liabilities in the lending scheme. .	20%
3. Rating and quality of management,	4. The financial institution operates as a going concern i.e., it functions without the threat of liquidation for the foreseeable future.	10%
	5. The financial institution has effective risk control policies and procedures.	10%
	6. The financial institution has strong environmental and social safeguard, and governance policies.	10%

The table below describes the main steps to launch the Blended Finance Facility (BFF), including the central role that the APEX Bank will play. The Apex Bank will perform the dual role of Fund Manager and Wholesaler. The steps include details about the financial institutions that will be targeted. BFF will be accessible to both Apex Bank RCB network members and other qualified FIs with a good rural outreach network. The blended facility will be available for the financial institutions that have an existing relationship with the APEX. It is expected that those will in most cases be their members and

shareholders (the Rural Community Banks RCBs)⁴⁵, but it is not excluded that some other types of financial institutions that engage with APEX (especially savings and loans) will also want to have access to the facility provided by IFAD.

The targeted financial institutions will be approached with a “summary teaser” (two-pagers) about the PROSPER project. This teaser should include the growth opportunity (high level market growth potential), the funding available, guarantee provided, and grant funding available for technical assistance. An introductory meeting with the top management will be organized, ideally in-person and including senior experts from the PROSPER team. Following this, the financial institutions will be encouraged to share a letter of intent for the APEX (with cc to PROSPER/IFAD), in which they should explain/justify why APEX should select them for this program. APEX will then choose five to ten financial institutions for the actual pilot, depending on the individual outreach capacity of each FI. A set of selection criteria of the financial institution has been defined (section x.x). The APEX will be required to perform due diligence on the financial institutions (mainly RCBs, but also including other qualified FIs for market growth, expansion, and diversification) prior to funding them. The due diligence will also include an assessment of the technical capacities of the financial institutions, to support them in identifying their technical assistance needs. It is expected that the program will first support the financial institutions with a market assessment, to identify its most attractive development opportunities for the targeted financial institutions. Thereafter the financial institutions will be assessed in view of the market opportunities identified, so that specific technical assistance needs are narrowed down, and capacity building plans are designed. This initial phase of market development is expected to take at least six months per financial institution, and it may take up to 24 months for all the selected financial institutions.

The BFF will have a dedicated unit in the ARB Apex Bank specialized in climate finance safeguards to run the day-to-day activities of the BFF in coordination with PROSPER and utmost attention will be placed on these aspects during supervision. The BFF will be supported by the project’s M&E core team, which will report on the number and amounts of loans that are verified as “green” against the GCF criteria in the GCF Logframe on a yearly basis.

Table 10: Main steps to disburse the fund to the institutions

Steps	Duration (in months)
1- Sensitization of the APEX and partner financial institutions.	1-3
2- Supply: Market Assessment, with focus on the demand side.	1-3
3- Demand: Long list (15 to 25) of the partners based on the outreach capacity of each. Shortlist the partner FIs ⁴⁶ , and assessment against the selection criteria.	1-3
4- Demand: Institutional assessment of the shortlisted FIs, to identify gaps that requires strengthening in their operations in order to grow sustainably their green portfolio.	1-3
5- Match supply and demand: Produce reports (merging market assessment with institutional assessment, and presenting some growth figures), present and discuss them with the FIs. Agree on targets, and list of actions to support those, including some capacity building.	1-3
6- Execute capacity building actions	4-8

⁴⁶ The number of FIs that could potentially qualify under the criteria defined is to be assessed and validated jointly with the Apex at the beginning of the project.

7- Monitor usage of funds	9-18
8- Organize workshop to share lessons learned between the institutions.	1-3

The composition and the cost calculation of the blended facility

The cost, margin and interest rates presented in the two tables below have been thoroughly discussed and iterated in several discussion with the APEX and different IFAD departments and experts. Those discussions led to use in parallel three different methodologies⁴⁷ to estimate an acceptable level of cost and margin for the different stakeholders. At the end of the process those methodologies converged to similar results – most importantly a cost to the final beneficiary of approximately 9.5%, taking into consideration acceptable margins for the APEX and the RCBs.

- **Legal and Fiscal:** APEX acts as the investment manager of the fund (Fund Manager). APEX is therefore legally responsible for its legal and fiscal aspects.
- **Economic:**
 - o The funds are disbursed in various tranches, upon completion of milestones (performance-based disbursements).
 - o As shown in the table X below, the funds lent to the selected financial institutions are expected to have an interest rate that will be the average between the funds provided by PROSPER (GCF IGREENFIN 1 resources at approx. 0% to 1% and IFAD resources at 2%) and the average cost of other funds for APEX (approx. 12%) – thus taking the average cost of the fund to approximately to 2%.

Table 11: the composition of the fund

Fund lines	Interest rate	Amount	Cost of fund Total	Average cost of fund ⁴⁸
1) GCF highly concessional loc for climate mitigation (aka, Functional line of credit for climate mitigation)	0%	\$6.9 m	0m	
2) GCF highly concessional loc for climate adaptation (aka, Functional line of credit for energy for agriculture)	1%	\$13.9 m	0.139m	
3) Contribution from the APEX own resources. the PFIs (RCBs plus other qualified FIs)	12% ⁴⁹	\$1.25 m from Apex \$1.25 m from other PFIs	0.3m	2%
4) Other investors (private capital)/ other co-financiers (development partners), as possible ⁵⁰	4%	\$1m	0.04m	

⁴⁷ The tables X and X present a first simple methodology for project design high level estimates. The annex X presents a second methodology used in the private sector to provide funding facilities in the context of public / private partnership. A third methodology has been used by APEX, in their standard planning internal templates.

⁴⁸ for the blended fund managed by the APEX

⁴⁹ The rate of 12% has been defined based on the rate that the APEX and the RCBs get when buying government bonds of Ghana.

⁵⁰ In the initial phases of the project other investment partners will be approached to see if they could also invest in the project. Given the low interest rate that is required under this project by the final beneficiaries (below 10%), it will be important to approach development funds that have access to highly subsidized private

5) IFAD concessional loc to complement (fill the demand-supply gap)	2%	\$14m	0.28m	
Total	NA	38.3m	0.759m	

The table below shows how the interest rate would evolve based on the average cost of fund and the margin of the APEX and the RCBs, and the costs of a guarantee instrument.

It is assumed in this case that APEX would have a margin of approximately 2% on its loan. Thereafter the margin of the retail FIs (RCBs plus other qualified FIs) could be approximately 4.5% and would therefore need to be added to the interest rate applied to the retailers. In addition, it is expected that the APEX will subscribe to a guarantee instrument from GIRSAL, where the IFAD will also contribute up to 0.5%. In addition, it is possible that customers will include in their business plan to subscribe to a crop insurance (provided for example by the risk management instrument of the Ghana Agricultural Insurance Pool - GAIP) – this may be subsidized separately as part of the PROSPER project. This will take the interest rate charged to the customer to approximately 9.5% - which is significantly cheaper than the market rate offered by RCBs and other FIs to their agricultural customers.

Table 12: Estimates of the cost of the final beneficiaries

Elements	Average Weighted Annualized Cost of Funds	Cost of fund APEX	Average Weighted Annualized Cost of Funds (including cost of fund APEX)	GIRSAL / APEX Credit Guarantee Premium ⁵¹	IFAD Contribution on Insurance ⁵²	Interest Rate for On-Lending to RCBs and S&Ls	Margin of the RCBs	Interest rate applied to the clients (farmers)
Cost	2.0%	2.0%	4.0%	0.5%	0.5%	5.0%	4.5 %	9.5%
Reference	a	b	1=a+b	2	3	4=1+2+3	5	6=4+5

The project structure and fund flows

It is envisioned that IFAD / PROSPER will receive a GCF loan and grant from through IFAD. IFAD / PROSPER will channel the funds to the Ghana APEX. The APEX will on-lend to partner retail financial institutions that will in turn on-lend to the target groups. The partner financial institutions will receive highly concessional loans from the APEX institution. A due diligence and selection process will be done in accordance with the criteria defined above. A TA Facility (TAF) managed by an IGREENFIN 1 Project Management Unit hosted at Apex will provide TA /capacity-building support to all project stakeholders, including to ensure that products will be designed in accordance with market needs, and in view of the institutional assessment. Details of the TAF-supported activities will be in line with the wider IFAD and GCF programs implemented in the region. Specifically, TAF will assist the financial institutions to design products that have interest rates that are sustainable for the targeted recipients

funds, and/or ensure that the volume of fund they on lend remains marginal in the blend (1m for example) – to avoid increasing the price to the final beneficiary. The project will consider approaching in this context the Ghana's Securities and Exchange Commission, which is developing a Green Bonds Market and its risk management instruments.

⁵¹ Cost for partial credit risk guarantee instrument - GIRSAL

⁵² Cost for crop insurance instrument - GAIP

(while also ensuring sustainable financial return for PFIs, as per the table X above). TAF will carry out monitoring to ensure that funds are disbursed.

Blending option chosen to channel the concessionnality to the beneficiaries

It is expected that the Comparative Financial Advantaged (CFA) will be transferred by the FI to the client in the form of an investment grant and in the form of a concessional loan i) Concessional Loan from PFI – interest rate will be subsidized with project funds, ii) investment grant funded by the project. In addition, it is also expected that the smallholders will contribute to the project through the loan disbursement requirements managed by the partner financial institutions. For example, as per the procedure of the financial institution, this should include a contribution in the investment in the business investment of approximately 10% to 20% of the loan provided, in addition of the fund mix displayed above in table X.

The model / blending structure is proposed based on the demand and supply analysis in Ghana, taking into consideration the level of concessionnality needed for smallholders to invest in the equipment/ technology, sustainability of identified PFIs, ease of implementation an investment grant mechanism vs subsidizing the interest rate, risk of market distortion considering products already available on the market, ease of monitoring the use of the funds, sustainability of the scheme after the project ends, marketing consideration, capacity/resources of the type of partners, maturity of the FIs in providing agricultural and green loans. – see the table 13 below. In the case of Ghana, it is expected that the level of concessionnality will require investment grants in addition of concessional loans, because of the low level of interest of the farmers in green technology / low level of maturity of the demand for the green products and the limited capacity/resources of the type of partners (RCBs & S&L) selected, and their low maturity in providing agricultural and green loans⁵³.

Table 13: Evaluation of the local market

Elements	Evaluation
Level of interest of the smallholders to invest in the green equipment/ technology / maturity of the demand for the green products	Low
Sustainability of the identified financial institutions	Medium
Ease of implementation an investment grant mechanism vs subsidizing the interest rate	Medium
Risk of market distortion considering products already available on the market	Medium
Ease of monitoring the use of the funds	Medium
Sustainability of the scheme after the project ends	Medium
Capacity/resources of the type of partners	Low
Maturity of the FIs in providing agricultural and green loans	Low

Potential for synergy with AAFORD

The Affordable Agricultural Financing for Resilient Rural Development (AAFORD) project is a recent project developed by IFAD in Ghana. AAFORD will establish another Blended Finance Facility (BFF) with different modalities and features through the Bank of Ghana and ARB Apex Bank to make concessional credit and results-based grants available for loans and supporting risk mitigation instruments (such as guarantees and insurance) for AAFORD-targeted beneficiaries. The expected outcome is expanded availability of affordable finance and market-enhancing instruments directed to smallholder production and key intermediaries.

⁵³ To ensure that green loans are validated and to avoid greenwashing risks, the eligibility criteria of the green loans are clearly defined in the GCF's project Operational Manual, which is the equivalent of the PIM.

Considering the similarity of the AAFORD approach with that of PROSPER (the use of BFF through ARB Apex Bank, and the support to risk-mitigating instruments), there is an evident need for collaboration and coordination, with concern for complementarity and synergies. As for the rural finance activities, both projects concur to build a stronger and more conducive financial sector that provides affordable and sustainable financing resources to support smallholder farmers across value chains and districts in Ghana.

The areas of potential synergies between AAFORD and PROSPER would include:

- Initial financial sector landscape assessment: the current landscape for agricultural lending should be mapped in detail and PROSPER would be able to build on AAFORD implementation arrangements and the role of the ARB Apex Bank, as part of establishing the BFF,
- Leveraging and complementing AAFORD demand survey and assessment of existing financial institutions in common areas of intervention,
- Bundling of TA and capacity building sessions for the Apex Bank staff involved in the management of the two BFFs,
- Reducing management cost through economy of scale,
- Development of a credit product for agriculture including derisking instruments as part of PROSPER exit strategy.

Digital Finance

As the financial needs of every farmer are different, PROSPER's activities may help financial agencies leverage technology to create and get the data metrics which would add value to their services while at the same time advise them on curating new schemes and plans to engage with farmers in a better way.

The implementation steps for Digital Finance

- The PROSPER digital finance strategy provides beneficiaries with the savings and insurance products. A comprehensive farmers data available with PROSPER Platform will be synergized with the financial data (credit requirements, profiles, insurance and savings etc).
- For this, a tender will be called for inviting financial institutions who may be interested in offering savings product for the poor farmers, digitally. And probably insurance will be introduced for both crops and animal husbandry based on the need
- The winner gets the opportunity to partner with the PROSPER project.
- PROSPER project will provide the capacity to the farmers and to the institutions as how to backstop the farmers. And the institutions will be responsible for providing a platform and the product.

Component 3. Project management and policy engagement

Subcomponent 3.1 Project management PROSPER will be facilitated by an implementation support structure embedded in the host GoG agency providing liaison, physical and financial project management, reporting and accounting, proactive knowledge management and learning activities, and monitoring and evaluation functions.

Subcomponent 3.2 Policy engagement The GoG policy environment for rural economic development (which is broader than agricultural sector development) advances incrementally, but still contains operational contradictions such as the simultaneous provision of both commercial agricultural credit and highly subsidised inputs. Evidence-based policy dialogue and evolution is by nature a long-term process and even the eight-year time frame of PROSPER may be regarded as too short to make much progress. However, the project is being launched in the context of a global climate emergency and environmental catastrophe; “business as usual” is not an option. PROSPER is de facto a full-scale trial of green/climate finance and it is expected that much will be learned about this novel instrument. It is highly likely that the knowledge gained will influence policy development during and long after implementation.

IFAD brings considerable knowledge to the development partnership from a long-term constructive presence in the country and region. The Fund is an active participant in the Agricultural Sector Working Group (ASWG) established between the GoG, development partners and other key stakeholders such as businesses, financial institutions, NGOs and farmers. The ASWG is chaired by MoFA, to exchange knowledge and identify issues requiring policy refinement and decision-making to improve programme implementation and sectoral development. It has proven an effective instrument for cooperation with previous developmental initiatives. The GoG organizes an annual Joint Sector Review under the auspices of the ASWG. PROSPER through this subcomponent will continue to support the GoG to drive agriculture and rural development.

PROSPER will promote an enabling policy environment that will help achieve the project’s goals and objectives through the provision of technical assistance, high-level round-table discussions, policy dialogue fora, conferences and advocacy as appropriate, underpinned by analytical work and knowledge management products from the experience of IFAD and other development partners. The project will commission ad hoc studies on policy issues related to the IFAD Ghana COSOP and the scope of PROSPER. South-South Triangular Cooperation (SSTC) instruments will be used as a tool for advancing the policy agenda and for the dissemination of the results.

The intention is to provide GoG with a high-quality policy support facility on salient issues, starting with the policy ramifications of PROSPER’s large-scale trial of the new financial sector product “climate/green finance” as a potentially important development instrument in Ghana in coping with climate change. Creating incentives for FIs and private sector to invest in green and climate resilient agricultural value chains, without which the private sector is unlikely to borrow at scale to remediate NRs at landscape level that have long been neglected, under-invested, over-exploited and regarded as “free goods” by traditional agriculturalists and pastoralists.

Other topics of policy engagement would include: (i) barriers to private investment in the value chains, such as domestic value addition of cashew nuts, and regulation of domestic and international trade in agricultural commodities; (ii) support ongoing efforts for public expenditure review in the rural economy and effectiveness of subsidy schemes; (iii) access to productive land for women and youth; and (iv) availability of financial services for smallholders and MSMEs.

Chapter 4: Project implementation structure and responsibilities

Project management and coordination

Implementation structure & staffing

MoFA is designated as the **Lead Project Agency**. The MoFA has overall responsibility of agricultural development in Ghana. It has its head office in the capital, Accra. The Ministry has the Minister as the political head and the Chief Director as the head of technical services. The Ministry through the Directorate of Agricultural Extension Services (DAES) will directly supervise and have oversight of the project implementation. In addition to the DAES, the Agribusiness and the Monitoring and Evaluation Divisions of the Policy Planning Monitoring and Evaluation Directorate (PPMED); the Animal Production Directorate (APD), the Veterinary Services Directorate (VSD) and the Crops Services Directorate of MoFA will be involved in the implementation of the project. The specific role of each Directorate is outlined below.

MoFA is designated as the **Lead Project Agency**. The ministry will have the overall responsibility for the implementation of PROSPER and will ensure linkages to other relevant Ministries, Departments and Agencies, such as the Ministry of Finance, the Ministry of Environment, Science, Technology and Innovation (MESTI), the MoTI, the Ministry of Local Government and Rural Development (MLDRD), the Environmental Protection Agency (EPA), the Agricultural Extension Services Directorate of MoFA and the Departments of Agriculture at the Regional and District levels. These Ministries and agencies will provide overall strategic direction and oversight to the project implementation. PROSPER implementation will involve private sector and community level technical level service providers and will leverage on on-going projects implemented by public sector and NGOs.

MoFA will establish a **Project Steering Committee** (PSC) to provide overall oversight and policy direction to the project implementation. It will be chaired by the Chief Director of MoFA and will include representatives of all relevant ministries and agencies (MoF, MoFA, MoTI, MLGRD), Bank of Ghana, ARB-Apex Bank and representatives from the project area. Members shall include representatives from the financial sector, private sector non-state actors' representatives (such as NGOs) and representatives of youth and women who operate along the relevant agricultural VCs as practitioners or advocates. The PSC will meet at least twice a year, and as necessary. The main responsibilities of the steering committee will include: (i) providing strategic and policy guidance to the Project Coordination Unit (PCU) for implementation and coordination of activities; (ii) ensuring overall conformity with government policies and strategies; (iii) reviewing project progress and performance; (iv) approving the Annual Work Plan and Budget (AWPB); (v) resolving implementation problems or conflicts; and (iv) assisting the PCU in obtaining government assistance to the project when needed. A PSC Technical Committee (PTC) will be constituted at the central level comprising members drawn from the PSC. The PTC will serve as a standing committee empowered to meet whenever needed to resolve implementation bottlenecks that cannot be settled at the zonal level and requires immediate attention.

PROSPER's Project Coordination Unit (PCU) will be responsible for the project implementation, based in the project area rather than Accra to ensure effective implementation and coordination. The PCU will operate within the supervision of the Agricultural Extension Services Directorate (DAES), which will provide oversight and strategic direction. A Project Coordinator will head the PCU's day to day operations, assisted by central technical and operations support teams and as defined in the PIM. The responsibilities of the PCU will include the overall coordination of the activities implemented under the project and the implementation of Component 3: Project management and policy engagement. The PCU will have overall fiduciary, environmental and social safeguards and climate change, including gender and vulnerability (GBV/EASH/VAC), responsibility for project implementation,

including consolidation of project accounts, preparation of annual financial statements, disbursements, consolidation of Annual Work Programme and Budgets (AWPB) and procurement plans; quarterly financial and comprehensive safeguards and climate change reports; consolidation of progress reports; organization of annual audits in line with IFAD's guidelines; assistance for supervision, implementation support and other missions, including inter-cycle; promotion of transversal themes such as gender, youth and vulnerability; and preparation and updating of Project Implementation Manual and other required manuals.

Key implementation partners will include MoFA departments, MoTI, NBSSI including BRC and BACs, MESTI, GCX, GIRSAL, GAIP. The PCU will arrange for developing MoUs with all these entities as well as DDAs, RDAs and other technical departments in partnering line ministries.

From a safeguards and climate change standpoint, the PCU will embed a dedicated team of Safeguards and Climate Change Specialist (SCCS) and a Social Inclusion, Gender and Vulnerability Specialist. To ensure consistency with national regulations, the PCU Safeguards, Climate and Gender and Vulnerability (SCGV) team will work in tandem with the Ministry of Environment EPA Division to ensure consistency and compliance of the project implementation. The SCGV team will be supported by the Lead International IFAD Safeguards and Climate Change Consultant to quality review their work and ensure consistency and compliance with triggered/relevant safeguards standards, and to strengthen their capacity skills to fulfil their respective roles and responsibilities.

IGREENFIN: the grant proceeds will be anchored within PROSPER's PCU, which will budget for two additional headcounts to manage IGREENFIN. PCU staff working on IGREENFIN will undergo an annual performance evaluation in line with the PCU's performance assessment policy and procedures.

ARB Apex Bank:

ARB Apex Bank will provide oversight and supervision to the Rural and Community Banks (RCBs) participating in the Project. The BFF will be disbursed through the RCBs to the deserving beneficiaries and the former will ensure recovery and reporting.

In coordination with the BoG, PROSPER will partner with the ARB Apex Bank in the management of the BFF. ARB APEX Bank has signed a commitment to contribute \$2,5 million of its own resources in providing funds to beneficiaries of the programme. PROSPER will also leverage on partnerships already developed by other IFAD projects such the REP, GASIP and AFFORD with the Rural Banks to implement this activity.

A Unit will be established at the ARB Apex Bank, headed by an investment analysts and supported by two Field Officers. In addition, to support the Unit in ensuring that loan proposals are climate and environmental safeguards compliant, two experts comprising a Climate and Adaptation Officer and Environment and Social Safeguards Specialist will work in the unit and will be funded from the IGREENFIN-I Grant. The Unit will report the PROSPER PCU.

Project Staffing:

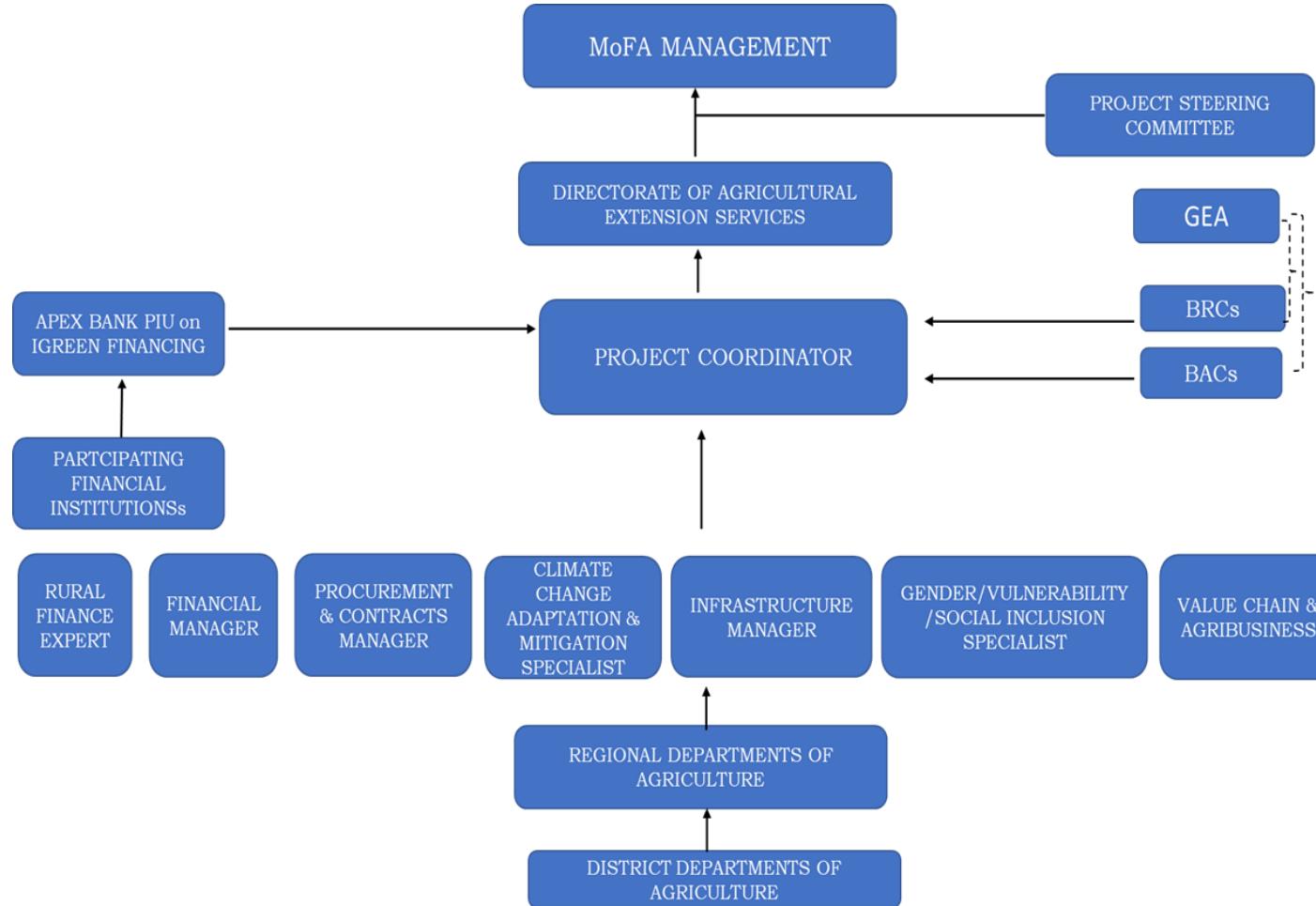
The staff of the PCU shall comprise a National Project Coordinator, a Senior Policy and M&E Manager and Assistant, a Financial Manager supported by two Project Accountants – one each for IFAD and GCF accounts -, a Procurement and Contract Manager, a Senior Climate Change Adaptation and Mitigation Specialist, two Manager, an Infrastructure Manager, One Senior Value Chain/Agri-Business Expert with two others, a Rural Financial Services specialist, a gender/vulnerability/social inclusion specialist, a Geographic Information System specialist, other professional and support staff as needed for the implementation of the Programme. The responsibilities of each position are detailed below. The PCU staff shall be hired by the Lead Project Agency competitively and in accordance with criteria

and procedures to be developed in agreement with the Fund. The appointment of such personnel shall have IFAD's prior no objection. The ToRs for project staff are provided in Annex 1.

Key project staff namely the Project Coordinator, Financial Controller, KM/M&E Manager and Officer, will be following on progress of meeting the triggers for the replication phase, including filling of the financing gap, Government and beneficiary contributions are met and recorded timely, key MoUs with implementing partners established and progressing well, and satisfactory arrangements in place with regard to the operation of the Matching Grants and Blended Finance Facility. These tasks will be reflected in the ToR of the above mentioned key staff

The M&E/KM Manager and officer will support the Coordinator in following the progress towards meeting the triggers for the expansion phase. They will also in coordination with the Climate/Safeguard and Social Inclusion officers in the PCU and PROSPER team in APEX Bank follow up on meeting the green investment criteria for the grants and loans from the Matching Grant Facility and BFF.

Roles and responsibilities (Organogram)



Supervision missions, Mid-Term Review and Completion

PROSPER supervision will be carried out directly by IFAD. One Supervision Mission and one follow-up mission will be undertaken each year. Implementation Support will focus on planning, gender, vulnerability and targeting, procurement, financial management, safeguards and climate change risks management, M&E, partnerships and the integration of activities within the governance framework. Such support will be a continuous process with frequent communication and engagement with MoFA, the PCU and other relevant stakeholders. The first Implementation Support mission will occur soon after start-up. The frequency, composition of Supervision and Implementation Support Missions will be based on implementation requirements and MoFA requests. During the initial two years of implementation, one full supervision mission and one partial supervision mission will be carried out to ensure close follow-up on meeting the triggers for the replication phase. The supervision report will contain a dedicated section on progress for meeting the triggers; such as meeting in-kind financing and timely reporting and satisfactory progress of implementation. Portfolio stocktakes will be used to address cross cutting issues that are affecting satisfying conditions for starting the replication phase.

The Supervision and Implementation Support Missions and MTR will follow closely the compliance of the investments by the BFF and MG facility with IGREENFIN Operational Manual (attached to this PIM) guidelines about green investments (loans and grants).

Mid-term Review. The MoFA, as the lead project agency, IFAD and implementing partners will jointly prepare and carry out the Mid-term Review (MTR) at the end of Project Year 4. The MTR will be based on, *inter alia*, the PDR, SECAP, Procurement Plans, Reports of Supervision and Follow Up Missions, AWPBs, Progress Reports, Financing Agreements, evolving government policies and strategies, and additional data from various commissioned studies. The MTR findings will be communicated promptly to the implementing agencies and, in consultation with the GoG and partners, and the project design and financing agreements adjusted as needed to remove constraints and achieve the PROSPER objectives. The GoG will ensure that the MTR recommendations are implemented within the specified time and to the satisfaction of IFAD.

Project Completion Review. The MoFA, as the Lead Project Agency, will be responsible for organizing the preparation of a Project Completion Review (PCR) to be submitted to the Fund after the Project Completion Date but in any event no later than the Financing Closing Date. A completion evaluation would be conducted, as an input into the PCR through a formal survey undertaken by a neutral agency with no previous involvement in project implementation. The PCR will focus on PROSPER costs and benefits, the achievement of development objectives, risks, impact on beneficiaries and communities, partner performance and lessons learned.

Planning, budgeting & reporting

Preparation for implementation and start-up

The IFAD country office (ICO) will take the following steps to ensure PROSPER readiness for implementation: i) Preliminary mapping and identification of the clusters of communities will be carried out with the support of GASIP and REP; ii) Off-takers, financial institutions, RIs and BACs/BRCs (operating in the PROSPER project area) with good track record of partnership with GASIP and REP will be identified and oriented and prepared to partner with; iii) REP, through existing partnership with the BoG and ARB Apex Bank will support the swift initiation of the BFF; v) MOFA has experience of partnering with other donor projects including IFAD; vi) sensitize the donor community and prepare them for PROSPER partnership in relevant areas; vii) continuously work with authorities to fulfil conditions prior to board approval; and viii)

ensure that the budget for year one and procurement plan is available by the effectiveness date and set up the team prior to the start-up.

Annual Work Programmes & Budgets

Planning will follow current practices for the IFAD-funded projects in Ghana. The main tool for PROSPER will be the Annual Work Plan and Budget (AWPB), prepared annually using a participatory bottom-up approach after consultation with the implementing partners of the various activities and based on the investment forecasts agreed and validated during the preparation processes.

The AWPB will include, among other things, a detailed description of the planned activities and required budget, specifying implementation responsibilities, required inputs, expected outputs, performance indicators and corresponding targets. It will also entail a procurement plan and a narrative explaining the implementation of project activities against predefined targets (refer to the PIM for specific content of the AWPB). The AWPB will be in line with the Logical Framework (LF).

The PCU will ensure overall coordination and efficiency of the planning process. Once the priorities have been set at the regional level and activities defined, the AWPB will be compiled and submitted to the PSC for review and approval. The PSC will ensure the inclusion of PROSPER under the national budget. It will be sent to IFAD for review and no-objection 60 days prior to the start of each implementation year.

Monitoring and evaluation (M&E)

The M&E and Knowledge Management (KM) Unit will be responsible for all M&E and KM activities, including the development of the M&E system, for generating comprehensive and reliable information to support planning and decision-making. The M&E system will provide information on implementation progress and constant feedback to facilitate the identification of problem areas, the implementation of risk mitigations planned, evaluating the performance of implementing agencies and assessing achievements on outputs, outcomes and impact.

Staffing for M&E

The M&E and KM at the PCU will comprise of one KM/M&E manager and one KM/M&E officer and one KM/MIS officer, with responsibility for i) liaising with extension services to collect and analyse data, ii) preparing monthly reports on progress and results achieved and iii) identifying implementation issues arising from monitoring activities. Indeed, staff from the extension services, as well as technical consultants will have a key role in collecting the data from the field and reporting to the KM/M&E officer. Data verification and consolidation will be done by the KM/M&E officer and sent to the KM/M&E Manager at the PCU.

The M&E/KM Manager and officer will support the Coordinator in following the progress towards meeting the triggers for the expansion phase. They will also in coordination with the Climate/Safeguard and Social Inclusion officers in the PCU and PROSPER team in APEX Bank follow up on meeting the green investment criteria for the grants and loans from the Matching Grant Facility and BFF.

Local talent will be trained in M&E activities yearly to ensure that the project remains on track and achieves its strategic objectives. MOFA participated to the Advancing Knowledge for Agricultural Impact (AVANTI) initiative to analyse Ghana's agricultural and rural development sectors' capacities for Results -Based Management (RBM) and to measure the sectors' achievements against the SDGs. Moreover, the M&E staff in MOFA participated to the Program in Rural Monitoring and Evaluation (PRiME) training, organised by IFAD and the

Centers for Learning on Evaluation and Results (CLEAR). Lastly, IFAD has supported the establishment of a Programme Delivery Unit at MoFA to build capacity for M&E, improve learning and sharing, coordination and reporting among all sector programmes in the Ministry, strengthen the oversight responsibility of its on-going development Programmes for impacts, including PFJ. Capacities built by the AVANTI and PRIME initiatives, as well as through the Delivery Unit, will benefit PROSPER and the overall quality of M&E.

An early task of the M&E and KM Unit will be to establish an M&E Plan including a matrix to identify indicators, data sources and periodicity of reporting for the agreed indicators. The reports will be directed at the Project Coordinator, but may be shared with the Project Steering Committee. Provisions have been made under the Project Management Component for office equipment and supplies that may be required.

Implementation support and training for M&E/KM will be provided by IFAD regularly. Quantitative and qualitative information will be collected at beneficiary level by the extension service staff and consultants, using M&E indicators that have been developed by the M&E unit based on the M&E plan and M&E matrix.

Results Based Approach and Managing for Impact.

The results-based approach will account for progress against AWPB targets and beneficiary impact. Service providers, contractors, and beneficiary groups will be the prime sources of data emanating from grass roots activities.

A Project M&E matrix, including the whole range of indicators PROSPER will report on, will be prepared in a participatory manner as part of the start-up activities and in line with the Logical framework (Log frame).

Managing for impact means responding to changing circumstances by adapting the Project to achieve its intended objective. It is only possible if there is reliable information about the progress of activities and their outcomes, the context in which activities are taking place and the reasons for success and failure. Table 14 below illustrates how to manage for impact.

Table 14. Managing for Impact

Elements	Projects that manage for impact	Projects that do not manage for impact
A focus on poverty	The implementing partners, including primary stakeholders, collect data on impact and meet regularly to verify whether the Project is reaching the expected objective.	The Project leaves impact assessment to outside organizations and only focuses on monitoring the implementation of activities.
A learning environment	The PCU, their partners and primary stakeholders regularly and openly discuss progress and problems. People feel safe enough to share their ideas and observations with higher authorities and peers.	The PCU focuses only on implementing activities, without asking if they are relevant to local poverty needs. The PCU and their partners feel their ideas and observations are not valued and do not speak up when they see things going wrong. Primary stakeholders are rarely asked their opinions.
Effective operations	The M&E Unit has set up a clear system for tracking staff performance, equipment use,	It is unclear what PCU staff should be doing, when and where. Vehicles and other

	etc. People know about their responsibilities and deadlines, and have access to the resources needed to perform. The managers allocate sufficient budget and are building capacity where needed.	resources are poorly coordinated and often not available on time. No efforts are made to fill capacity gaps.
A supportive M&E system	The Project manager has quick and easy access to information about outcomes and impact. Information is shared regularly with all stakeholders; up-to-date information, graphs, pictures about Project progress is available at the PCU office. Studies are undertaken to explain any emerging problems. Project reports make interesting reading and inform about the good and bad achievements, and how improvements will be made.	Few people know what the Project has achieved to date. There is little evidence about whether all activities are leading anywhere. M&E is seen largely as an external reporting function. Project reports are uninteresting, not analytical and exaggerate success while not mentioning problems. Little information is shared with Project stakeholders.

In order to best mobilize resources and build partnerships, implementers have to redirect the implementation strategy when problems arise. Guiding the strategy is largely about asking the right questions-and getting answers-at the right moment (Table 15).

Table 15. Five strategic M&E questions to manage for impact	
Relevance	Are activities improving the beneficiaries' situation? Are they in line with the target group's priorities? Why or why not?
Effectiveness	Have Projects outcomes, outputs and activities been achieved? Is the intervention logic correct? Why or why not? Are we doing what's needed to maximize impact?
Efficiency	Are resources used in the best possible way? Why or why not? What could we do differently to maximise impact at an acceptable and sustainable cost?
Impact	To what extent has the Project contributed towards poverty reduction (or other long-term goals)? Why or why not? What unanticipated positive or negative consequences did the Project have? Why did they arise?
Sustainability	Will there be continued positive impacts after the Project funds run out in 4-5 years? Why or why not?

Setting up the M&E system. Setting up an M&E system involves six steps:

1. Establishing the purpose and scope - Why do we need M&E and how comprehensive should our M&E system be?
2. Identifying performance questions, information needs and indicators - What do we need to know to monitor and evaluate the Project in order to manage it well?
3. Planning information gathering and organizing - How will the required information be gathered and organized?
4. Planning critical reflection on processes and events - How will we make sense of the information gathered and use it to improve results?
5. Planning for quality communication and reporting - What, how and to whom do we want to communicate in terms of our Project activities and processes?
6. Planning for the necessary conditions and capacities - What is needed to ensure that the M&E system actually works?

These steps can be used when initiating a new Project or when revising and expanding the M&E system of an existing Project.

While developing the M&E system, the M&E and KM Unit has to keep in mind IFAD requirements provided in the Project Design Report and other sections of this Project Implementation Manual.

An effective M&E system will create an historical overview of efforts made, problems faced, results delivered and lessons learned at outputs, outcomes and impact level. It will be used to deepen and share knowledge about factors that influence Project results and thereby help to improve implementation approaches.

The M&E system will be developed within the first year of implementation by the M&E and KM Unit, with the assistance of IFAD. During the initial years, the M&E system will inform on how Project activities are being implemented and what adjustments are required; later on it will serve as a tool to assess achievement of outcomes and impacts.

The role of M&E in IFAD Projects

The following table summarizes the expected M&E tasks to be performed during the different stages of IFAD's Projects life cycle.

Phase	Tasks
Early design phase (formulation and appraisal)	<ul style="list-style-type: none">• Establish the scope and purpose of the M&E system.• Indicate key performance questions and indicators, plus associated monitoring mechanisms.• Identify organizational arrangements for M&E.• Develop terms of reference for M&E staff.• Indicate the process for how M&E is to be established during start-up.• Establish an indicative M&E budget.• Document the above in the M&E matrix.
Start-up prior to loan effectiveness	<ul style="list-style-type: none">• Revise performance questions, indicators and monitoring mechanisms after reviewing the Project strategy.• Organize training with staff and partners likely to be involved in M&E.• Initiate baseline studies, as appropriate.

	<ul style="list-style-type: none"> • Prepare a Project implementation manual with key staff.
Start-up after loan effectiveness	<ul style="list-style-type: none"> • Review Project design in relation to M&E with key stakeholders. • Develop a detailed M&E plan, taking into consideration existing mechanisms with partners. • Put in place necessary conditions and capacities for M&E to be implemented.
Main implementation	<ul style="list-style-type: none"> • Ensure information needs for management are met. • Coordinate information gathering and management. • Facilitate informal information gathering and communication. • Support regular review meetings and processes with all implementers. • Prepare for supervision missions. • Prepare for and facilitate the annual Project review. • Conduct focused studies on emerging questions. • Communicate results to stakeholders. • Prepare annual progress reports.
Mid-term review (MTR)	<ul style="list-style-type: none"> • Collate information for the mid-term review. • Facilitate the internal review process to prepare for the external review process. • Help respond to MTR feedback. • Adjust the M&E system, as necessary.
Phasing-out and completion	<ul style="list-style-type: none"> • Assess what the implementers can do to sustain impact and sustain M&E after closing down - and implement these ideas. • Hold workshops and do field studies with key stakeholders to assess impacts. • Identify lessons learned for the next phase and/or other Projects.

Operational Results Management System (ORMS)

ORMS is a full-fledged IFAD online system which stores data on all IFAD Projects. It builds on interconnected templates for the online presentation, analysis, reporting and approval of Project design, supervision and completion documents, as well as Log frames and related targets and indicators. Data entering will be done at IFAD level, yet the Project will provide information on Project achievement on an annual basis, through the update of the Project Log frame. At the beginning of each year the M&E and KM unit will compile the progress of all Log frames indicators and send it to IFAD upon request. Of particular importance are the Log frame Core Indicators (CIs), which consist of a set of new and improved output and outcome indicators to measure the more recurrent results achieved through IFAD operations. The CIs and related measurement approaches have been developed to be consistent with and complementary to IFAD's impact assessment programme, thus ensuring that the

performance of IFAD operations is measured across the results chain, i.e. at the output, outcome and impact levels.

Development of Electronic Management Information System (MIS)

The M&E will be developed in the form of a Management Information System (MIS), i.e. a web-based platform for data storage, retrieval and reporting. The MIS would necessarily be aligned to the information needs identified in the M&E plan developed by the M&E and KM Unit, as well as those identified in future. The electronic MIS will serve as a centralized repository of data for all operational, performance and impact indicators for Project interventions. It will serve as a one-stop system on which personnel at various levels within the organizational structure can rely for real time data as well as timely, accurate, and consistent reports on the status of implementation of interventions. The MIS will provide additional benefits by focusing the activities of the various teams, providing visibility on these activities and improving reporting capabilities.

Beneficiary Database

A database of programme beneficiaries will be established by the PCU for use at regional and central level. It will be integrated into the MIS system and will include detailed information about each beneficiary (socio-economic indicators such as age, gender, targeting category, HH level assets and land size and farming activities). The database will be consolidated by the M&E unit at the PCU and will be utilized for different purposes, including sampling for the different surveys, tracking the beneficiaries outreach as well as selection of beneficiaries to visit during the supervision missions.

Geo-referencing

PROSPER will adopt the geo-reference methodology, embedded in the M&E plan of the program and the MIS. The integration of GIS information in the MIS will improve analysis capabilities and help implementing partners gather and use data and generate the necessary indicators required to measure progress or otherwise. The extension services staff will be responsible for ensuring that the different Project sites and interventions are georeferenced. To a minimum, construction works will be geo-referenced, along with FBOs, demonstration plots and other relevant interventions in each cluster.

Progress Reporting

Progress reports are to be prepared semi-annually and annually and should address:

- quantitative and qualitative progress made in implementing the Project and achieving its objectives;
- amount of money spent on implemented activities;
- problems encountered during the reporting period;
- steps taken or proposed to be taken to remedy these problems, and
- proposed activities and progress expected during the following reporting period.

The main functions of the progress reports are:

- review current progress compared to planned activities, and expenditure compared to budget;
- provide overall status information on the Project since the start, in terms of physical progress and total expenditure;
- identify problems during the reporting period and required corrective actions;
- analyse strengths and weaknesses, opportunities and threats;
- discuss quantitative and qualitative progress made in achieving overall objectives; and

- *provide strategic direction for the next planning cycle.*

Preparation of Progress Reports.

The PCU will submit a progress report to the Project Steering Committee and IFAD. The final reports will be submitted, no later than 31 July and 31 January respectively, in line with the format and content described below:

Section A – Introduction: this section will include a brief summary of the Project objectives and the design features, as described in the Project Design Report. The same section can be used for all future Progress Reports, with minor changes as necessary.

Section B - Executive Summary: this section will include a brief summary of the report, highlighting the Project performance to date, trends, reasons for discrepancies with initially set targets and objectives (if any), problems encountered (if any) and proposed action.

Section C - Detailed Report: This section will include the following:

Current progress - a summary of the most important aspects of Project implementation to date, including any issues surfaced and suggestions for resolution. It will concisely describe and highlight: progress on all components including physical works, actual costs incurred vs. estimates, financing received from IFAD and GOG, large procurements carried out, disbursement performance, critical studies undertaken, technical assistance and training received (numbers of participants -male and female - and information about the socio-economic status of individual participants). It will assess performance in reaching and benefiting the intended target groups, in particular the poorer, as well as gender equity in participation.

Sources and uses of funds - a table on the opening cash and bank balances, listing of sources and amounts of funds received, expenditures by Project component in line with the IFAD loan/ grant withdrawal schedule in the respective agreements and the cash and bank balances.

Statement of use of funds by expenditure type - tables listing expenditures by component, expenditure type and disbursement categories. An important feature of these tables will be the comparative listing of the actual expenditure figures with the estimates from the latest Annual Work Plan & Budget (AWPB), showing any variation and providing appropriate explanation. The tables will include the total estimated base costs of Project components and expenditure categories, as per the appraisal report.

Output monitoring report - physical progress and related expenditures on output indicators. If there is any variation between current targets and targets set at design, appropriate explanation will be provided.

Procurement report (updated Procurement Plan) - updated Procurement Plan at grant effectiveness and all key procurements made on behalf of the Project, as well their status as at the end of the reporting period. The procurement report will also include all key procurement of works, vehicles, equipment, goods and consulting and other services undertaken by the Project since start up.

Other Relevant Aspects:

Organization and Staffing: the progress report will include the latest Project organization chart, including names, titles and sex of all staff. Any change in the senior management structure and Project compensation details will be reported here.

Accounts and Audit: this part will describe the status of the PCU's books of accounts, preparation of quarterly accounts, accounts readiness for annual audit and progress or completion of the audit (during the appropriate quarter). Where audits have been completed, key findings, observations, qualifications and recommendations of the auditors will be provided here.

Compliance with conditionality/legal covenants: compliance with all stipulated conditions included as covenants in the loan agreement. Problems relating to non-compliance of any legal covenant will also be highlighted with suggested resolution.

Monthly progress reports

The PCU shall produce a monthly progress report covering the key issue related to implementation in each region. The following sections will be included in the monthly progress reports:

- Introduction and summary of achievement against planned activities in the AWPB.
- Physical progress: the list of indicators under the M&E matrix including the actuals for each month and the cumulative against the AWPB and Project targets.
- Financial progress: financial table showing the actual expenditures by activity, in comparison with the AWPB targets and the appraisal targets.
- Key Issues for the month and recommendations: any issues related to delays in implementation or any obstacles that require management attention.

Surveys

Three surveys will be done at the beginning of the project, halfway through implementation and at the end of the project life, namely the Baseline, Mid-term and Completion Survey. The methodology to be used is the IFAD's Core Outcome Indicators (COI) Measurement Methodology, which provides a specific guide and tools to measure project's outcome Cls.

Baseline Study

Baseline data on Project beneficiaries and non-beneficiaries will be collected within three months after PROSPER has entered into force. The objective of the baseline assessment will be to provide the necessary benchmarks on indicators prior to the Project intervention to aide easy and proper impact assessment. It will provide quantitative and qualitative data for effective tracking of outcome level indicators. The evaluation of the effectiveness and impact of the Project will draw on the database created at baseline and during the monitoring process, supplementing it as necessary with data on Project impact, and reviewing the combined information over an extended period to assess achievements.

The Baseline Study will provide baseline data for all Project indicators, including those in the M&E Matrix and the Log frame. The survey will cover both beneficiary villages as well as control villages with a representative sample size. The goal of the baseline study is to understand the level of poverty, agricultural activities, community development and gender inequality in the Project area, with special focus on women and youth.

The survey should: (i) focus on key indicators measuring the outcomes and impact of the planned activities, as described in the Project's Log frame; (ii) not duplicate existing available data; (iii) not require an excessive amount of interviewees time; (iv) generate accurate and reliable results based on sound statistical best practice, and; (v) allow disaggregation by gender, age, and targeting categories. Baseline data will be used by the Project management and M&E unit to compare effectiveness of interventions on a regular basis. They will set the basis for proper measurement of mid-term performance and impact at completion, as well as for possible ad-hoc studies.

The Baseline Study will be conducted by a specialized firm, with the following tasks:

Review Project design documents, particularly Log frame indicators within the relevant context of their use and value;

Develop a detailed sampling and design methodology. The sample should be a mixture of future possible beneficiaries and non-beneficiaries and representative of Project areas.

Decisions on the final sampling strategy should be made in consultation with IFAD. Power calculations for optimal sample size will have to be performed based on poverty measures. The household questionnaires shall use MS Excel or another software which will be incorporated in the final report in English. The questionnaire will be tailored to Project objectives (using Log frame indicators as well as socio-economic, livelihoods and nutrition indicators). Data analysis and report writing will be in English.

Data to be captured should include but not limited to the following categories and modules:

Household

Demographics
Nutrition and Food security
Poverty levels
Income, expenditure and consumption
Household enterprises
Shocks and coping strategies
Asset ownership

Community

Basic information
Community needs, actions & achievements
Access to basic services
Communal resource management
Economic activities
Agriculture activities
Communal organization
Organizations and institutions in the communities
Stakeholders' and activities
Farm and off-farm activities

Farming and Production

Average plot size
Land ownership
Land usage
Land allocation
Plot details
Labour details
Market details
Farm inputs
Details on other farm inputs
Agricultural activities
Agricultural production Stats
Sales and storage
Livestock and crops
Machinery
Details on farmer groups and associations
Insurance and other services available
Access to extension services

Control group: In order to better understand the attribution of the Project interventions on beneficiaries, a control group (counterfactual) will also be used. This group will be identified

based on similar characteristics of the beneficiaries (nearby locations with similar demographics). However, care would be taken to ensure that this group does not include future indirect Project beneficiaries.

The firm will be responsible for collection/analysing data from secondary sources that would allow for the benchmarking of the key indicators in the Project targeted area which will be the basis for the comparison during the impact assessment/completion survey.

Thematic surveys. Thematic surveys will be undertaken periodically by Project staff and will cover a small sample of beneficiaries of a specific project activity (e.g. recipients of matching grants) to measure the impact generated. Overall, the exercise is expected to take no more than 1 month and can be implemented by Project staff and extension officers, with or without external support. The main objectives of the survey are to:

- measure changes happening at the household level in terms of livelihoods during the Project life;
- assess targeting efficiency;
- provide evidence of Project success or failure; and
- provide timely performance information necessary to undertake corrective actions.
- Thematic surveys will be conducted after mid-term and will provide information on “why” and “how” some outcomes were or were not achieved.

Mid-term Study

The PCU will carry out a mid-term review of the Project implementation at the end of Project year three (Mid-term Review), to evaluate the overall progress of Project implementation in achieving its goals and objectives and make recommendations for the remaining Project period.

In particular, the Mid-term Study will:

- review the achievements of each Project component and sub-component visa-vis Project Design Report estimates, including their financial and physical progress;
- assess the validity and relevance of Project goals, objectives, and strategies, taking into account the implications of evolving public policies and the country's socio-economic circumstances;
- review the effectiveness of participatory approaches and targeting, focusing on constraints for reaching the poorest and the adequacy and effectiveness of support to women beneficiaries;
- assess the post Project sustainability of the assets and other development outcomes created through Project support;
- identify the critical factors and constraints that have inhibited timely Project implementation, both in global terms and by component and sub-component, including the institutional and socio-economic policy issues, in addition to any other external factors unforeseen at design;
- examine the arrangements for Project implementation, co-ordination and management, including the roles and responsibilities of all key players at the national, regional and local levels, in particular assess the adequacy, the overall effectiveness and the institutional;
- review the adequacy of existing policies and procedures governing the Project's financial management, external audit, liquidity and the use of the special account facility, and staff training needs and make practical recommendations to improve the effectiveness and efficiency of Project co-ordination and management;
- examine the efficiency and overall adequacy of the arrangements for annual planning, budgeting, and the flow of funds;

- assess the efficiency of procurement and disbursement procedures, and make recommendations to redress any constraints encountered with a view to ensure the timely delivery of goods and services required for the Project;
- examine the effectiveness of the M&E system, in particular its capacity to collect and analyse data and information, and report on the performance of the Project in line with the key performance indicators highlighted in the Project's results framework;
- examine the need, nature and scope for adjustments or reorientation of Project design and implementation strategy, and propose practical recommendations for corrective remedial measures by component and sub-component to be carried out during the remaining or extended period of implementation with a view to achieve the Project goals and objectives;
- critically examine Project costs and financing plan by component, subcomponent and categories, bearing in mind any revisions to the physical and financial targets;
- assess the effectiveness of supervision process in terms of implementation support, its timeliness and ability to identify and deal with problem issues, the adequacy of its expertise mix, and effectiveness in following up on its recommendations; and
- evaluate the important lessons learnt in the course of Project implementation and highlight their implications on future Project activities

The Mid-term Study will largely be based on, inter-alia, the Project Design Report; Environmental and Social Impact Assessment Reports, Procurement Plans, the Reports of Supervision and Follow Up Missions; the Project's Annual Work Plans and Budgets; Progress Reports; Financing Agreements; evolving government policies and strategies; and additional data and information collected through commissioned studies.

The Mid-term Study will include extensive field visits and consultations with key implementation agencies at the national, regional and local levels, in addition to interacting and conducting interviews with beneficiary households in the Project area. The findings of the study will be communicated promptly to the implementing agencies and discussed jointly between the GOG and IFAD.

On the basis of the study's conclusions and recommendations, necessary adjustments will be made in the Project Design and the Financing Agreements to remove constraints and put the Project on track to achieve its objectives. The GOG will ensure that the recommendations resulting from the Mid-term Study are implemented within the specified time and to the satisfaction of IFAD.

Completion Study

The Completion Study will use the same questionnaires used for the Baseline Study, to allow for comparison against baseline results. The parameters used in the analysis will be beneficiary status, gender of the household's head and geographical location.

The Completion Study will assess the Project impact using the same indicators as the Baseline Study. The key elements of the Study will include the socio-economic characteristics of the Project primary target group and the status of social and economic infrastructure.

The Study will be aimed to measure the changes brought about by the Project in the socioeconomic development of its beneficiaries. It is anticipated that the Study will combine a formal household sample survey with a more qualitative and in-depth study. The Study will also compare the socio-economic situation of beneficiaries and the control group, in order to better attribute the impact to the Project. A detailed analysis will be undertaken of the changes observed between the Baseline Study and the Completion Study. Where possible, a panel data structure will be used, i.e. some of the beneficiaries interviewed during the Baseline Study will also be included in the sample of the Completion Study.

Knowledge management, learning and communication

Knowledge Management, learning and communication is the integrated approach of identifying, capturing, evaluating, retrieving and sharing information. It involves the use of knowledge taking into account 5 interconnected functions:

- Learning and Adaptation: seeking regular feedback, learning lessons to improve performance, regular reviews for collective decision making, documentation of decisions that lead to change, flexibility for the use of knowledge and innovation.
- Learning oriented M&E: setting benchmarks, indicators and learning question; collective qualitative and quantitative data, analyzing data, monitoring process, continuous follow up of progress and performance.
- Internal and External Communication: internal communication to support learning, foster teamwork and joint responsibility, culture of feedback and appreciation, creating visibility and advocacy, sharing lessons across Projects and organization.
- Innovation and Experimentation: sourcing new ideas and innovations, seeking and embracing new opportunities, enriching new ideas through Communities of Practice, groups of people who focus on particular aspects, and trying out new ideas.
- Information management: electronic archives with reports and lessons, capturing and documenting information, systematizing and organizing information, packaging information to suit the targeted audience into websites and blogs as well as keeping data banks.

The Integrated Knowledge Management and Learning System

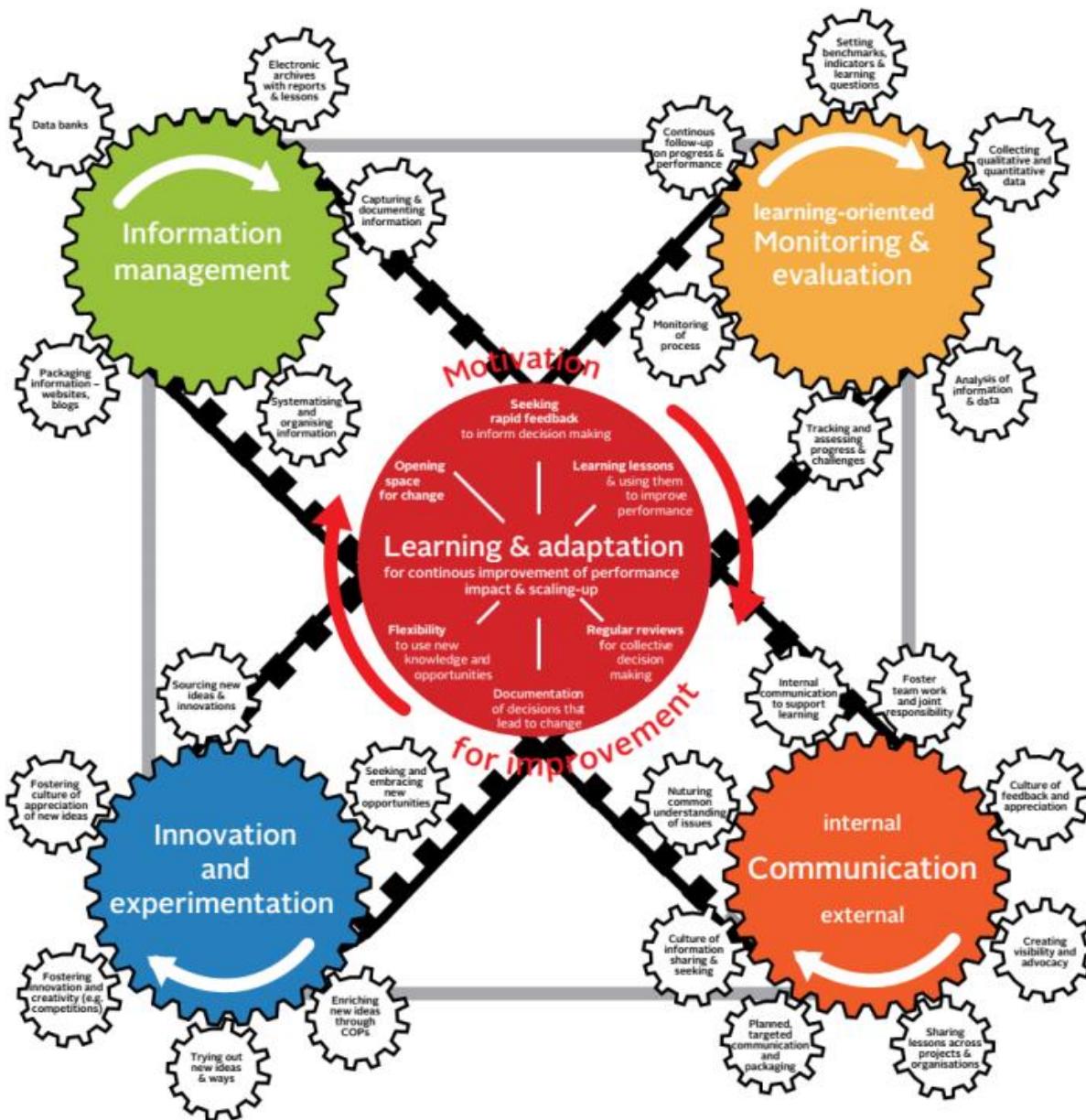


Figure 1. Integrated Knowledge Management and Learning System

In addition to refining and carrying out the KM strategy, the project managers will ensure:

- (i) PROSPER's visibility;
- (ii) the inclusion of KM indicators in the M&E system;
- (iii) inclusion of KM-related activities in the AWPB;
- (iv) integrated information management systems set-up, for example, electronic archives;
- (v) clarity of KM-related roles and responsibilities in the PCU and related GoG structures;
- (vi) facilitation of internal project learning; and
- (vii) exchanges with other projects and agencies operating in Ghana, organizing workshops, producing a website, publications, videos and other activities to disseminate results, attract interest of other partners, and replicate/scale up tested and documented innovations.

In order to enhance the learning process and the dissemination of results, a knowledge management and communication strategy (KMC strategy) will be developed and integrated

into the management of the PROSPER, with the aim of capturing and disseminating lessons obtained from implementation progress for the purposes of programme maturity, sustainability and creating awareness on project activities and services.

Targeted audiences will include potential beneficiaries among selected districts (in accordance with each of PROSPER stages along the gradual and differentiated approach), collaborating institutions, as well as the wider donor community in Ghana (DPs and PSWG groups) and political dialogue platforms such as the ASWG. Also, the staff involved in day-to-day project implementation (PCU and MoFA personnel) will be a target audience of knowledge sharing events and products.

Areas of knowledge defined as priority for this project include good practices on climate adaptation and mitigation, farming as a business, green sustainable infrastructure interventions and natural resource remediation, practical/achievable green business plans, green/climate finance, access of producers and MSMEs to rural financial services, and effective M&E tools for project staff. The strategy will be reviewed and revised annually by conducting a knowledge audit to identify key needs and opportunities as well as specification of activities to be included in the work plan and budget. On those basis target audience, priority topics and knowledge products will be confirmed or adapted to address the needs identified through project-specific data

PROSPER's KMC strategy will be guided by two strategic pillars:

Pillar 1: Knowledge Harvesting, Storage and Processing. In order to ensure that knowledge generated is used and applied, the strategy will promote information harvesting, storage and processing to adapt to its users. Resources will be made available to harvest, store, process and disseminate information to stakeholders that need it, and to ensure best use of knowledge generated by other initiatives in Ghana and the region. Electronic databases, will be made accessible through the programme website. PROSPER will finance additional hardware and software, so as to better maintain and disseminate data, and library services for document acquisition and storage at various work stations.

Pillar 2: Knowledge Sharing and Learning Partnerships. After information is captured, there will be value addition through interpretation and analysis, drawing on information from other sources, and adapting it for use by a range of partners. The knowledge sharing and learning instruments to be deployed are as follows: (i) studies and publications on lessons learned; (ii) case studies documenting successes and failures; (iii) publicity material including newsletters, radio and television programmes; (iv) formation of national and regional learning networks; (v) periodic meetings and workshops to share knowledge and lessons learned; (vi) /extension liaison/feedback meetings; (v) study tours; (vi) preparation and distribution of technical literature on improved agricultural practices, including crop and farm budgets; and (vii) the routine supervision missions, mid-term review and Project completion report. Special efforts will be made to incorporate stakeholders at district and community level in the learning partnerships to ensure that they contribute to and benefit from the sharing of knowledge.

These two pillars fall under IFAD's Knowledge Management & Learning (KM&L) framework pillars of information management, learning oriented monitoring and evaluation and internal and external communication principles. PROSPER's KMC pillar number 1 is aligned to information management, and learning oriented monitoring and evaluation while pillar number 2 is aligned to internal and external communication pillar under the IFAD's KM&L framework.

In order to optimise PROSPER's benefits, stakeholders at the district, regional and national levels need to know about the achievements of the Project and the value it creates. There are multiple benefits to be derived from communicating effectively about how the Project is addressing the needs of the target population.

The knowledge management strategy will capture and disseminate knowledge at various levels and will focus on issues that will be deemed to be critical during Project implementation.

To begin with, the priority will include the following: i) generating linkages among partners through transparency; ii) managing and sharing information, knowledge and experiences; and iii) conducting analysis that can provide the evidence base for policy interventions.

Knowledge products from earlier stages of implementation will be an important tool to accompany the transition to later stages of PROSPER and for the process of incorporating a larger number of districts as implementation progresses. These products will include, for example, brochures, reports, seminars, and other knowledge sharing events. Mechanisms include: the use of surveys and green/climate reporting defined as part of the M&E system with information collected from the field; and the identification and selection of project "champions"/most successful cases to share their experience "in first person" with others. After the MTR/towards project completion, PROSPER will promote beneficiary knowledge and experience sharing events with other groups in similar value chains and focus on identifying potential activities for scaling-up.

The output of the MIS will be used to inform knowledge management initiatives and will be disseminated within and beyond the intervention zone through existing information sharing networks and forums. After MTR and towards project completion, PROSPER will encourage the organization by beneficiary rural institutions of knowledge and experience sharing events with other groups working on similar value chains in former project areas. Also after MTR and towards project completion, PROSPER's KMC strategy will focus on identifying potential areas for scaling-up and collaborating with the development of the programme's Exit Strategy

SSTC and IGREENFIN

PROSPER will participate in, contribute to and benefit from SSTC activities under IGREENFIN regional activities concentrated on the generation and dissemination of practical and technical knowledge in the context of the escalating climate emergency. Ghana (with Burkina Faso, Côte d'Ivoire, Mali and Senegal) is part of the first phase of the IGREENFIN programme, to be extended subsequently to six more countries in West and Eastern Africa, all under the GCF Great Green Wall Umbrella Programme. The ambitious IGREENFIN agenda mirrors most of the key KM purposes of PROSPER – climate-related know-how/knowledge creation and dissemination in the region, with a strong focus on responding to climate change in semi-arid areas and the promotion of synergies between countries tackling similar developmental challenges independently.

PROSPER will engage in IGREENFIN regional SSTC activities through, inter alia, experience-sharing and fact-finding visits and support for and entries in the annual Sahel and Great Green Wall Award event rewarding the best green business plans produced by women and youth entrepreneurs. PROSPER will collaborate with these interrelated structured and participatory learning programmes in the region which will provide opportunities for knowledge exchanges, the sharing of experiences and awareness raising about successful practices and pilots that can be scaled up, for instances, in agricultural adaptation, value chain development, and the

needs of private sector investors and access to productive land. PROSPER will also play a part in the IGREENFIN establishment and maintenance of an integrated regional M&E systems. Other possible areas for SSTC cooperation will include policy agendas that are best tackled through regional collaboration such as developing a common conducive commercial environment for cashew production, processing and trade, and regulation of domestic and international trade in agricultural commodities.

Chapter 5: Project cost and financing

Project costs

The total project costs, for eight-years, are estimated at USD 147.3 million or GHS 1.2billion. The base cost amount to USD 133.1 million or GHS 827.6 million, equivalent to 90.3% of total costs. Physical and price contingencies at USD 14.2 million account for about 11% of base costs or 9.7% of total costs. Investment costs of USD 135.1 million represent 91.7% of total project costs and Operating costs only 8.3%. (Project costs by component/subcomponent are presented in Annexes 3 and 4.)

PROSPER Component 1: Development of rural institutions and socioeconomic infrastructure totals USD 30.9 million or 23.2% of base costs and comprises two subcomponents: (i) *Capacity building of rural institutions, enterprises and households*; and (ii) *Development of socio-economic infrastructure*. *Component 2: Strengthening the benefits for smallholders and small operators around agricultural value chains* totals USD 90.8 million or 68.2% of base costs and comprises two subcomponents: (i) *Sustainable marketing linkages and business development*; and (ii) *Access to rural financial services* (including the green finance through IGREENFIN I). The third support component is related to *Project Management and Policy engagement* at USD 11.2 million (8.6% of total base cost) and comprises two subcomponents: (i) *Project Management*; and (ii) *Policy engagement*. The total project cost is divided into USD 46.4 million in foreign currency, USD 84.7 million in local currency (excluding taxes) and USD 16.2 million of taxes.

Project financing/co-financing strategy and plan

The **financiers/co-financiers** of PROSPER are Government, IFAD (IFAD 11 and IFAD 12), Green Climate Fund (GCF) (Grant, Adaptation and Mitigation), participating financial institutions (PFIs), private sector and beneficiaries (RIs, MSMEs and local communities). The financing plan by component is summarized in Table 1 below. PROSPER will be financed from IFAD 11 (USD 52.5 million, 35.6% of project total cost) and IFAD 12 (USD 22.7 million or 15.4% of the total). The IFAD share of project costs will relate to: works; equipment and materials, goods, services and inputs; consultancies; training and workshops; grants and subsidies, salaries and allowances.

Government of Ghana's contribution is estimated at USD 22.5 million (15.3% of total costs) mainly in the form of tax exemptions and GoG staff costs. Beneficiaries' in-kind and cash contribution is estimated at USD 19.3 million (13.14% of total costs), mainly through Business Plans. PFIs and the private sector represent USD 4.8 million or 3.3% of total costs. GCF will contribute to the BFF facility.

Table 1: PROSPER project costs by component and financier⁵⁴
(Thousands of United States dollars)

⁵⁴ To be shown by subcomponent in final version.

Republic of Ghana
PROSPER
Components by Financiers

(US\$ Million)	GCF				GCF				Bene-ficiaries	Private Sector			The Gov't			Total				
	IFAD 11	IFAD 12	Adaptation	Mitigation	GCF Grant	PFI	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%				
A. Development of Rural Institutions and Socioeconomic Infrastructure																				
1. Capacity Building of Rural Institutions, Enterprises and Households	4.8	42.6	2.5	22.0	-	-	-	-	0.5	4.8	-	-	-	-	-	3.5	30.6	11.3	7.7	
2. Development of Socioeconomic Infrastructure	17.4	71.9	3.2	13.1	-	-	-	-	-	-	-	-	-	-	-	3.6	15.0	24.3	16.5	
Subtotal	22.3	62.6	5.7	15.9	-	-	-	-	0.5	1.5	-	-	-	-	-	7.1	19.9	35.6	24.1	
B. Strengthening the Economic Benefits for Smallholders and Small Operators Around Selected Agricultural value Chains																				
1. Sustainable Marketing Linkages and Business Development	1.5	11.0	6.5	48.8	-	-	-	-	1.4	10.3	-	-	-	-	-	4.0	29.9	13.3	9.0	
2. Access to Rural Financial Services	25.7	29.9	4.3	5.0	13.8	16.1	6.9	8.1	1.1	1.3	2.3	2.7	19.3	22.5	2.5	3.0	9.8	11.4	85.8	58.2
Subtotal	27.2	27.4	10.8	10.9	13.8	13.9	6.9	7.0	2.5	2.5	2.3	2.4	19.3	19.5	2.5	2.6	13.8	13.9	99.1	67.2
C. Project Management and Policy Engagement																				
1. Project Management	3.0	24.5	6.1	49.3	-	-	-	-	1.6	13.3	-	-	-	-	-	1.6	12.8	12.4	8.4	
2. Policy Engagement	0.0	14.7	0.2	50.7	-	-	-	-	0.1	19.5	-	-	-	-	-	0.1	15.0	0.3	0.2	
Subtotal	3.1	24.2	6.3	49.4	-	-	-	-	1.7	13.5	-	-	-	-	-	1.6	12.9	12.7	8.6	
Total PROJECT COSTS	52.5	35.6	22.7	15.4	13.8	9.3	6.9	4.7	4.7	3.2	2.3	1.6	19.3	13.1	2.5	1.7	22.5	15.3	147.3	100.0

Expenditure categories. The most important investment expenditure categories are *Credit, Guarantee Funds* (USD 62.1 million, 42.2% of total costs) and *Civil Works* (USD 23.4 million, 15.9% of total costs). *Grants and subsidies* stand at USD 19.3 million, (13.1% of total costs), *Equipment and goods, including vehicles* USD 2.8 million (1.9%), *Consultancies* USD 12.4 million (8.4%) and *Training and workshops* at USD 14.2 million (9.6% of the total). In terms of recurring costs, *Salaries and allowances* constitute USD 10.1 million, (6.8% of total costs and 82.1% of recurrent costs), with a significant portion as an in-kind contribution from the GoG. Table 2 summarizes the project expenditure accounts.

Table 2: PROSPER expenditure accounts by financiers

(Millions United States dollars)

Republic of Ghana

PROSPER

Disbursement Accounts by Financiers

(US\$ Million)	Global Environment Accounted by Financiers										Global Environment Accounted by Financiers									
	GCF		GCF		Beneficiaries		Private Sector		he Gov't		Total									
	IFAD 11	IFAD 12	Adaptation	Mitigation	GCF Grant	PFI														
Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%					
1. Civil works	16.9	72.2	3.0	12.8	-	-	-	-	-	-	-	-	-	3.5	15.0	23.4	15.9			
2. Equipments, Goods and Vehicles	1.0	27.9	1.5	41.9	-	-	-	-	-	-	-	-	-	1.1	30.2	3.6	2.5			
3. Consultancies	3.1	25.1	5.5	43.9	-	-	-	2.0	16.1	0.0	0.3	-	-	1.8	14.6	12.4	8.4			
4. Training and Workshops	5.6	39.6	5.8	40.9	-	-	-	2.0	14.4	-	-	-	-	0.7	5.0	14.2	9.6			
5. Grants and Subsidies	11.6	60.0	1.0	5.0	-	-	-	-	-	6.7	35.0	-	-	0.0	-	19.3	13.1			
6. Credit/Guarantee Funds	12.2	19.7	2.5	4.0	13.8	22.2	6.9	11.1	-	2.3	3.7	12.6	20.2	2.5	4.1	9.3	15.0	62.1	42.2	
7. Salaries and allowances	0.7	7.1	2.9	28.9	-	-	-	0.7	7.0	-	-	-	-	5.7	57.0	10.1	6.8			
8. Operating costs	1.3	60.3	0.5	24.7	-	-	-	-	-	-	-	-	-	0.3	15.0	2.2	1.5			
Total PROJECT COSTS	52.5	35.6	22.7	15.4	13.8	9.3	6.9	4.7	4.7	3.2	2.3	1.6	19.3	13.1	2.5	1.7	22.5	15.3	147.3	100.0

The projected component expenditures by year are shown in the following table.

Table 3: PROSPER project costs by component and year
(Thousands of United States dollars)

Republic of Ghana PROSPER Project Components by Year -- Totals Including Contingencies (US\$ '000)	Totals Including Contingencies								
	2022	2023	2024	2025	2026	2027	2028	2029	Total
A. Development of Rural Institutions and Socioeconomic Infrastructure									
1. Capacity Building of Rural Institutions, Enterprises and Households									
Enterprises and Households	786.3	1,211.1	1,615.5	2,769.0	2,162.4	1,172.9	958.4	622.0	11,297.6
2. Development of Socioeconomic Infrastructure	26.5	2,321.3	4,561.1	4,942.0	5,040.8	3,634.7	3,707.4	30.7	24,264.5
Subtotal	812.8	3,532.4	6,176.6	7,710.9	7,203.2	4,807.6	4,665.9	652.7	35,562.1
B. Strengthening the Economic Benefits for Smallholders and Small Operators Around Selected Agricultural value Chains									
1. Sustainable Marketing Linkages and Business Development									
Development	924.6	1,548.9	2,082.7	2,613.7	2,544.8	1,889.2	1,043.4	663.9	13,311.1
2. Access to Rural Financial Services	465.9	11,483.9	13,402.8	15,149.0	16,792.2	15,285.4	12,229.6	954.1	85,762.8
Subtotal	1,390.5	13,032.8	15,485.4	17,762.6	19,337.0	17,174.6	13,273.0	1,617.9	99,073.9
C. Project Management and Policy Engagement									
1. Project Management									
23.6	1,814.3	1,074.6	1,779.4	1,625.5	1,759.4	1,523.4	1,392.0	1,402.8	12,371.3
2. Policy Engagement	72.7	35.9	36.6	77.5	38.1	26.9	27.4	338.7	
Subtotal	1,837.9	1,147.3	1,815.2	1,662.1	1,836.9	1,561.5	1,418.9	1,430.2	12,710.0
Total PROJECT COSTS	4,041.2	17,712.5	23,477.2	27,135.7	28,377.1	23,543.7	19,357.7	3,700.8	147,346.0

Disbursement

The proceeds of the financing will be used for eligible expenditures as defined in the Financing Agreement and in line with the disbursement allocations specified in the relevant section of the Financing Agreement. IFAD will make an initial deposit to the Designated Account (Authorized Allocation). The ceiling for the Authorised Allocation will be specified in the Letter to the Borrower (LTB) issued for PROSPER. The funds will be disbursed into a US Dollars Account at the Central Bank of Ghana and will be operated by the PCU.

The proceeds from the Designated Account shall be used exclusively to finance the Project's eligible expenditures as will be stipulated in Schedule 2 of the Project Loan Agreement. The ceiling for the Authorised Allocation will be specified in the Letter to the Borrower (LTB) issued for PROSPER. The funds will be disbursed into US Dollars Account at the Central Bank of Ghana and will be operated by the PCU. Funds shall be periodically transferred from the Designated Account to the Programme Operational Account (GHS) for the purpose of financing the Programme's eligible expenditures financed by IFAD.

Funds shall be periodically transferred from the Designated Account to the Programme Operational Account (GHS) for the purpose of financing the Programme's eligible expenditures financed by IFAD. The regular signatories to the Designated and Programme Accounts will be the Project Coordinator and the Finance Manager as Cat A and B signatories respectively. However, Chief Director of MoFA and the Director of Finance (MoFA) will be the alternate Cat A and B signatories respectively in the absence of the regular signatories. The same arrangements will be applicable to funds allocated by co-financiers. Government approved fund-flow processing would be used to accelerate cash-flow.

Report based disbursement method will apply for the project. Other methods of disbursement will include advances, direct payments and reimbursements. Payments made

against advances would be secured against bank guarantees by a commercial bank and/or bonds acceptable to IFAD. Training will be provided to accounts staff on IFAD procedures and all processes documented as part of the PIM and outlined in MOUs with districts.

Summary of benefits and economic analysis

The PROSPER target beneficiaries are producers, investors, MSMEs and households located in the project area. Farmers were expected to benefit directly from the project, including women and youth. In addition, MSMEs and RIIs will take advantage of positive externalities brought by the project. Indirect beneficiaries will include local institutions and the families of workers employed directly by the project. Finally, the targeted areas will benefit from a general uplift in the local economy driven by the growth in activities. It is important to note that the PROSPER targeted population lives in precarious and relatively disadvantaged conditions in areas with high levels of transaction costs and limited market access. They are highly exposed to the negative impacts of climate change.

The main benefit stream analysed is the income and profits derived from business activity in the three principal commodity value chains: soya, rice and maize. Other significant non-financial benefits include improved access with feeder roads and farm tracks, enhanced productive potential from on- and off-farm and watershed works and natural resource remediation, secure drinking water supplies and other communal assets, increased tax revenues and enhanced nutrition security. These benefits, which are not included in the calculation of the ERR, consolidate the economic profitability of the PROSPER and contribute to the justification of the investments made.

Economic analysis based on ten models elaborated for the principal production modes funded by PROSPER, under very moderate assumptions, yields an economic rate of return (ERR) of 21.4%, (see Annex 4). Sensitivity analysis shows this ERR to be robust under different adverse scenarios. A simultaneous increase in costs of between 10% and 60% combined with a decrease in benefits of 10% yields an ERR greater than or equal to the Opportunity Cost of Capital (assumed to be 12.25%). This is an acceptable level given the analysis does not consider other direct and indirect benefits including such significant environmental benefits as improved soil fertility, reduced erosion, tree cover and better long-term management of the NR base.

Chapter 6: Financial management

A. Financial Management Assessment

1. Methodology. A Financial Management (FM) Assessment was conducted in August 2021 for the “Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER) in accordance with the IFAD’s Project Fiduciary Risk Assessment at Design (2021). The objective of FMA was to provide assurances that the Project will be implemented in an environment with sufficiently strong financial management systems and controls in place such that programme funds are used efficiently, effectively and economically to achieve value for money, programme assets are safeguarded, are well as the provision of accurate, reliable and timely reports to the financiers and other stakeholders. The FMA involves assessing: (i) the inherent risk at country level; and (ii) the project specific risk.

Country Risks

2. In the 2020 survey, the Transparency International (TI) Corruption Perception Index (CPI), Ghana scored 43% (2019: 41%) and ranked 75 (2019:80) out of 180 countries; thus, falling into the countries with medium level perception. Therefore, the inherent risk is considered Medium.

3. The Government has shown commitment to reducing corruption and corruption perception with the enactment of laws and regulations, and the active involvement of Ghana’s Parliament in carrying out its oversight responsibility in the approval of budgets and review of the Auditor-General’s Annual Reports.

4. The legal framework (laws, legislative instruments, policies, guidelines and operational procedures) required to support implementation of PROSPER from financial management perspective include the Public Financial Management Regulations 2019 (L.I. 2378), Public Financial Management Act 2016 (Act 921), the Public Procurement (Amendment) Act 2016 (Act 914), Public Procurement (Amendment) Act 2016 (Act 914), and Public Procurement Act 2003 (663), Public Financial Management (Public Investment Management) Regulations, 2020 (L.I. 2411), and Public Private Partnership Act, 2020 (Act 1039). These are in line with IFAD policies and will be applicable to implementing and managing PROSPER, in addition to other IFAD-specific anti-corruption policies.

5. It is recommended that IFAD would work very closely with the lead implementing agency (the Ministry of Food and Agriculture). Government’s adoption of austerity measures has led to lower spending and irregular contribution of budgetary support form of counterpart funding to existing projects, thus, not meeting some elements of counterpart commitments. In order to mitigate this risk with PROSPER, budgetary support form of counterpart funding has been eliminated with Government contribution limited to tax exemptions, Government staff pro-rata time on PROSPER activities, provision of office space, and auditing services as the main sources of Government counterpart funding to PROSPER. That notwithstanding, during project implementation, the government will be requested to make budgetary contribution to cater for any expenditure that IFAD would consider ineligible.

6. The finance team will be guided by the IFAD In-kind Domestic Financing Technical Note to identify, acknowledge and quantify GoG in-kind contributions that shall include the provision of office space, the provision of audit services, and the staff time of MOFA Directorates that shall implement PROSPER activities in the fields. Beneficiary in-kind contribution shall also be identified, acknowledged and quantified with guidance from the IFAD Technical Note. The referenced IFAD document is available at:

<https://webapps.ifad.org/members/eb/125/docs/EB-2018-125-R-7-Rev-1-Add-6.pdf>

7. Organization and Staffing. Project staff are either seconded from the lead implementing agency who retain their status as public servants with benefits such as social

security contributions, health insurance for their families, and end-of-service benefits, or recruited as consultants and paid gross consultancy fees to enable meet their own financial obligations, including tax obligations, social security contributions, health insurance for themselves and their families.

8. PROSPER shall follow the pattern of IFAD-financed REP and GASIP, and recently closed projects RTIMP and RAFIP, by recruiting the project's professional staff through a competitive process and in accordance with criteria and procedures developed in agreement with IFAD. This is to ensure transparency of the recruitment process as well as reducing the risk of divided attention and lack of focus by project staff where staff are seconded from the lead implementing agency.

9. Budgeting. MMDAs use GIFMIS (the Government's electronic platform and enterprise resource programme) for capturing financial data. The national budgets which are prepared with GIFMIS are submitted by the Ministry of Finance (MoF) to the Parliament of Ghana before the end of November of each year. With the use of GIFMIS by the project, PROSPER's budgets shall form part of the national budgets.

10. Traditionally, IFAD requires at least 60 days to the end of fiscal year as the period of submission of AWPB for approval. If this threshold is maintained, the project shall be able to meet IFAD's requirement but may miss the national submission date. To mitigate this risk, the Financing Agreement shall require that the project's AWPB shall be submitted to IFAD at least 90 days (instead of 60 days) to the end of fiscal year to shall ensure that both IFAD and MoF's review and approval are met.

11. Accounting and Financial Reporting. The government's agency that ensures the control, measurement, analysis and classification of the financial flows of GoG is the Controller and Accountant-General's Department (CAGD). CAGD is also responsible for the development and implementation of sound financial management systems for budget implementation, accounting and reporting on public funds including the facilitation of the usage of the Ghana Integrated Financial Management Information System (GIFMIS) by covered entities. With the support of CAGD, PROSPER will integrate its financial management systems to the national system through the usage of GIFMIS.

12. Internal Audit. The Internal Audit Agency, established by the Internal Audit Agency Act, 2003 (Act 658) is the national institution that carries out internal audits to ensure ensures that the financial activities of MDAs and MMDAs are in compliance with laws, policies, plans, standards and procedures. Staff of the Agency are posted to MDAs and MMDAs, are regularly rotated or transferred. Staff of the agency has regularly audited IFAD-financed projects satisfactorily, albeit, submissions to IFAD are delayed due to reporting channels within the MDAs and MMDAs.

13. External Audit. Annual audits of MDAs, MMDAs and GoG projects are conducted by the Ghana Audit Service (GAS) who are mandated by law to carry out the audits. In a few exceptions, annual audits of projects are outsourced to private audit firms recruited with the approval of the GAS. The GAS has successfully conducted IFAD-financed projects in Ghana since 2014.

Project Level Risks and Mitigations.

14. The introduction of disbursement cap to project annual spending may result in funds not being available when needed to implement activities which poses a risk to project achieving its objectives within the timeframe envisioned at design. This risk is further exacerbated as disbursement cap Information may not be readily available at the time of AWPB preparation. To mitigate these risks, the Project Coordinator must liaise with FMD and PMD through the Country Director to obtain disbursement cap information before completion and submission of AWPB for approvals (Project Steering Committee, IFAD and Parliament).

15. Expected delays in justifying prior advances, particularly, MoFA Directorates of District Agriculture due to the use of the revolving fund mechanism is seen as a risk. This is mitigated by a constant reminder by Programme Accountants and Technical Specialists to implementing partners to justify advances at least once a month. Furthermore, a restriction rule of minimum 80% of advances justified before the release of any new advance shall be applied.

16. The implementing entity has three chartered Accountants and one finalist. All have experience in managing IFAD projects. PROSPER does not need that number of qualified and experienced financial management staff. The excess number of qualified and experienced financial management staff poses a risk of increasing cost significantly for the project. This risk will be mitigated by the engagement of two junior accounting staff to replace two senior accountants on completion of GASIP. Moreover, IFAG will make complete and appropriate staffing a condition precedent to disbursement and throughout the project cycle of PROSPER.

17. Lack of experience in using the national accounting platform – GIMFIS - resulting in late submission and poor quality of the financial reports, as well as challenges to meeting all the reporting requirements of project financiers is another risk identified for the successful implementation of PROSPER. To mitigate this risk, sensitization and migration is planned for the staff of GASIP to use GIMFIS in the current programme before PROSPER start-up to enhance experience before implementation of the new project. Very detailed accounting dimensions will form part of the chart of accounts to enable the system's report generator to pull out carefully defined reporting requirements per financier at project start-up phase, as part of mitigation measures to overcome the identified risk. The GASIP team will use GIMFIS and their current computerized accounting system, iSCALA, concurrently for three months in early 2022 while the customization of GIMFIS reports is underway, and then when all is satisfactorily done, the project will discontinue the use of iSCALA and rely on GIMFIS for financial data capturing, processing and reporting.

Summary of Project Risks

Risks	Inherent Rating	Mitigation Measures	Residual Rating
Organization and Staffing. The implementing entity has excess number of qualified and experienced financial management staff thereby increasing cost significantly.	Moderate	Entity has three chartered Accountants and one finalist. All have experience in managing IFAD project. Two junior Accounts Assistants will be engaged to replace two senior accountants on completion of GASIP. PROSPER will make complete and appropriate staffing a condition precedent to disbursement and throughout project cycle	Low
Budgeting. IFAD disbursement cap may result in funds not being available when needed. Disbursement cap Information may not be readily available at the time of AWPB preparation	Substantial	Project must obtain disbursement cap before completion and approval of AWPB. Project must liaise with FMD and PMD through the Country Director to obtain disbursement cap information during the preparation of the AWPB	Moderate

Risks	Inherent Rating	Mitigation Measures	Residual Rating
Funds flow and Disbursement Arrangements. Delays in justifying prior advances, particularly, MoFA Directorates of District Agriculture	Substantial	Programme Accountants and Technical Specialists shall constantly remind implementing partners to justify advances at least once a month. Restriction rule of minimum 80% of advances justified before the release of any new advance shall be applied.	Moderate
Internal Controls. Contractual arrangements between the project and implementing partners, particularly, the MoFA Directorates of District Agriculture, thereby interrupting fund flow and reporting	Moderate	Contractual arrangements and reporting templates and guidelines for project finances shall be spelt out in MOUs/MOAs with implementing partners and service providers. Quarterly reports shall be required of implementing partners to feed into the Project IFRs.	Low
Accounting and Financial Reporting. Inexperience of FM team in using the national accounting platform (GIFMIS).	Moderate	Sensitization and migration planned for the staff to use in the current programme to enhance experience before implementation of the new project as well as configuring reports to meet IFAD's requirements.	Low
External Audit. Delays in performing and submitting Audited PFS	Low	Joint collaboration with the SAI on auditor's ToRs, and prioritization of performing project audit.	Low
Credit & Guarantee Funds, and Grants and Subsidies. Delays in funds reaching out to beneficiaries after approval of their proposals	Substantial	The performance of ARB Apex Bank and the PFIs will be monitored against a number of KPIs shall be established in their MOUs with PROSPER. These will include the lead time that the APEX Bank credits PFIs accounts and the lead time that PFIs credit beneficiaries' accounts, that	Moderate

Table 2: Analyses of Use of Country Systems

FM Control Area	Use of country systems	Narrative	Institution / Systems used	Risks with using /not using country systems	Inherent Rating	Mitigation measures against identified risks	Residual Rating
1. Organization and staffing	N	<ul style="list-style-type: none"> • Project staff are either seconded from the lead implementing agency who retain their status as public servants with benefits such as social security contributions, health insurance for their families, and end-of-service benefits, or recruited as consultants and paid gross consultancy fees to enable meet their own financial obligations, including tax obligations, social security contributions, health insurance for themselves and their families. • PROSPER shall follow the pattern of IFAD-financed REP and GASIP, and recently closed projects RTIMP and RAFIP, by recruiting the project's professional staff through a competitive process and in accordance with criteria and 	<ul style="list-style-type: none"> • None 	<p>Divided attention and lack of focus by project staff where staff are seconded from the lead implementing agency.</p> <p>Capacity built during the course of project implementation are not retained in the PFM system when staff are recruited from the private sector.</p> <p>Additional costs are incurred to pay market rates of remuneration to private sector employees</p>	Moderate	Recruit staff competitively from the open source and considering public service as an added advantage.	Low

FM Control Area	Use of country systems	Narrative	Institution / Systems used	Risks with using /not using country systems	Inherent Rating	Mitigation measures against identified risks	Residual Rating
		procedures developed in agreement with IFAD. This is to ensure transparency of the recruitment process as well as reducing the risk of divided attention and lack of focus by project staff where staff are seconded from the lead implementing agency.					
2. Budgeting	Y	<ul style="list-style-type: none"> • MMDAs use GIFTMIS (the Government's electronic platform and enterprise resource programme) for capturing financial data. The national budgets which are prepared with GIFTMIS are submitted by the Ministry of Finance (MoF) to the Parliament of Ghana before the end of November of each year. With the use of GIFTMIS by the project, PROSPER's budgets shall form part of the national budgets. 	<ul style="list-style-type: none"> • GIFTMIS • National Budget 	IFAD requires at least 60 days to the end of fiscal year as the period of submission of AWPB for approval. If this threshold is maintained, the project shall be able to meet IFAD's requirement but may miss the national submission date.	Moderate Substantial	The Financing Agreement shall require that the project's AWPB shall be submitted to IFAD at least 90 days (instead of 60 days) to the end of fiscal year to shall ensure that both IFAD and MoF's review and	Low Moderate

FM Control Area	Use of country systems	Narrative	Institution / Systems used	Risks with using /not using country systems	Inherent Rating	Mitigation measures against identified risks	Residual Rating
						approval are met.	
3. Funds Flow / Disbursement Arrangements	Y	<ul style="list-style-type: none"> The project maintains 2 bank accounts each (dollars and cedi) with the Bank of Ghana for IFAD and GCF funds. The accounts are for flow of funds from IFAD and operational purpose. Additional Counterpart Account shall be opened for GoG funds. The default payment accounts shall be the programme accounts in line with Bank of Ghana directives that the Ghana Cedi is the only legal tender in Ghana (Foreign Exchange Act, Act 723, 2006). 	<ul style="list-style-type: none"> Bank of Ghana GIFMIS 	Inaccessibility of online bank statements thus causing delays in tracking activities on the bank account. Limited printout of Bank Statements (once a month, only). Lack of Mobile Money Transfer facility.	Low Substantial	Request Monthly Bank Statement. Transfer funds to a commercial bank to effect mobile money transaction with beneficiaries	Low Moderate
4. Accounting and Financial Reporting	Y	<ul style="list-style-type: none"> The government's agency that ensures the control, measurement, analysis and classification of the financial flows of GoG is the Controller and Accountant-General's Department (CAGD). CAGD is also responsible for the 	<ul style="list-style-type: none"> CAGD GIFMIS Secretariat 	Un-customized reports such as automated withdrawal applications.	Moderate	With the support of Secretariat, GIFMIS will be customised in order to allow the accounting software to	Low

FM Control Area	Use of country systems	Narrative	Institution / Systems used	Risks with using /not using country systems	Inherent Rating	Mitigation measures against identified risks	Residual Rating
		development and implementation of sound financial management systems for budget implementation, accounting and reporting on public funds including the facilitation of the usage of the Ghana Integrated Financial Management Information System (GIFMIS) by covered entities. With the support of CAGD, PROSPER will integrate its financial management systems to the national system through the usage of GIFMIS.				automatically generate financial reporting in line with IFAD requirements and forms	
5. Internal Controls	Y	<ul style="list-style-type: none"> • The Internal Audit Agency, established by the Internal Audit Agency Act, 2003 (Act 658) is the national institution that carries out internal audits to ensure ensures that the financial activities of MDAs and MMDAs are in compliance with laws, policies, plans, standards and procedures. Staff of the Agency are posted to MDAs and 	<ul style="list-style-type: none"> • Internal Audit Agency within the Internal Audit Agency Act. 2003 (Act 658) 	Irregular audit reviews to projects and delays in obtaining final internal audit reports.	Moderate	Internal audit reviews will be explicitly included in both the MoFA Internal Audit Directorate's annual work plan, and the budget of PROSPER.	Low

FM Control Area	Use of country systems	Narrative	Institution / Systems used	Risks with using /not using country systems	Inherent Rating	Mitigation measures against identified risks	Residual Rating
		MMDAs, are regularly rotated or transferred. Staff of the agency has regularly audited IFAD-financed projects satisfactorily, albeit, submissions to IFAD are delayed due to reporting channels within the MDAs and MMDAs.				ICO will liaise with the MoFA Chief Director and Head of Internal Audit Agency to obtain audit reports.	
6. External Audit	Y	<ul style="list-style-type: none"> • Annual audits of MDAs, MMDAs and GoG projects are conducted by the Ghana Audit Service (GAS) who are mandated by law to carry out the audits. In a few exceptions, annual audits of projects are outsourced to private audit firms recruited with the approval of the GAS. The GAS has successfully conducted IFAD-financed projects in Ghana since 2014. 	<ul style="list-style-type: none"> • Ghana Audit Service 	N/A		N/A	

Annex b - Financial Management Assessment Questionnaire at Design

Country: Ghana	Performed by: Daniel Ekow Pasos	
Implementing Entity: Ministry of Food and Agriculture		
Project Name:	Mission Ref.: <i>Detailed Design Mission</i>	Date of review:

About the FMAQ: The FMAQ provides an indicative list of issues and questions to be considered in the FM assessment of a project during the design phase. The FMAQ should be tailored during each assessment to better address specific project circumstances by adapting the questions (adding, deleting, or modifying, as deemed appropriate).

The FMAQ has been designed to primarily assess the Lead Project Agency (LPA), which may be a Government Department and/or a Project Implementing Unit (PIU). Before commencing it is essential to have a clear view of the probable project implementation arrangements, for instance, where the project FM arrangements are administered through a PIU, which primarily uses stand-alone financial systems, the PIU is effectively the Implementing Entity and so focus of the FMA should be on the PIU's FM arrangements. If there is more than one Implementing Entity, an FMAQ should be completed for each entity that will receive and disburse project funds.

Various sets of supporting documentation / reference material may be required to perform the FMAQ effectively, including but not limited to:

- Financial regulations, standards or pronouncements used by the project/entity.
- Evidence of consideration of the work of the Internal Auditor (if applicable).
- Chart of Accounts.
- Project or entity Financial Management Manual (Index page).
- External Audit terms of reference.
- Terms of reference and curriculum vitae for key financial and accounting personnel.
- Copy of most recent audit report (if applicable).

Completing the FMAQ: The FMAQ consists of two main parts, both of which must be completed in full:

- 1) Summary: The findings included in the Summary section may be saved directly online in the Financial Management Dashboard (FMDB), or shared with the Finance by email.
- 2) Detailed findings: The detailed findings must be recorded in the word template as provided below, and either uploaded in FMDB in the respective mission page, or shared with the Finance Officer by email.

Where the FMAQ is performed by an FM Consultant, the Finance Officer and Consultant should ensure that submission requirements are clear.

Summary	Brief description of issues	Inherent (current) Risk H/S/M/L	Proposed Mitigation Measures	(Future) Residual Risk H/S/M/L
Country Risks 1. TI Index (0-30 High; 31-40 Substantial; 41-50 Moderate; 51-100 Low)				
Country Level	Poor linkages between strategic planning and long-term budgeting at sector levels; Expenditure commitments are made outside the approved budget and GIFMIS system which are not supported by cash thus resulting in payments arrears; Unreliability of flow of counterpart funding to LPA to support project	Moderate	All staff, suppliers, and beneficiaries will be informed of IFAD's Policy on Corruption	Moderate
Entity Level	The ability of MoFA and the PCU to effectively coordinate implementation.	Moderate	Strengthened FM capacity of MDAs and MMDAs through ongoing PFM reform & capacity building, supported by funding from multilateral and bilateral donors. Reduced dependency of budgetary support form of counterpart funding. Reliance on tax exemptions	Moderate

			DADUs to strengthen accountability; Needs-based support from PCU with budget preparation and reporting	
2. RSP Score (0-30 High; 31-40 Substantial; 41-50 Moderate; 51-100 Low)		Low		Low
Control Risks⁵⁵				
1. Organization and Staffing <i>Risk that the implementing entity does not have the necessary number of adequately qualified and experienced financial management staff in the national and regional centers, resulting in limited ability to meet the functional needs of the project</i>	The risk that the implementing entity has excess number of qualified and experienced financial management staff thereby increasing cost significantly.	Moderate	Entity has three chartered Accountants and one finalist. All have experience in managing IFAD project. Two junior Accounts Assistants will be engaged to replace two senior accountants on completion of GASIP. PROSPER will make complete and	Low

⁵⁵ While performing the risk assessment, the FM Specialist must keep in mind the fraud risk exposure, i.e.: a) the vulnerability to potential or actual fraud schemes; b) the likelihood of control override, c) the potential existence and impact of incentives and pressures on individuals to commit fraud; and d) assume that there will be an attempt to conceal the fraud. According to IFAD's Policy on Preventing Fraud and Corruption in its Activities and Operations, fraud is defined as "any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party in order to obtain a financial or other benefit or to avoid an obligation". Financial fraud is any action undertaken to gain financial advantage through deliberate deception and falls into three general categories of asset misappropriation, corruption and manipulation of financial statements.

			appropriate staffing a condition precedent to disbursement and throughout project cycle	
2. Budgeting <i>Risk that budgeted expenditures are not realistic, not prepared or revised on a timely basis, and not executed in an orderly and predictable manner, resulting in funds not being available when needed, ineligible costs and reallocation of project funds and slow implementation progress</i>	IFAD disbursement cap may result in funds not being available when needed	Substantial	Project must obtain disbursement cap before completion and approval of AWPB. Project must liaise with FMD and PMD through the Country Director	Moderate
	Disbursement cap Information may not be readily available at the time of AWPB preparation	Substantial		Moderate

<p>3. Funds flow and Disbursement Arrangements</p> <p><i>Risk that funds from multiple financiers disburse with delay due to cumbersome treasury arrangements or inability of project cost centres and service providers to justify prior advances, resulting in delayed implementation</i></p>	<p>Delays in justifying prior advances, particularly, MoFA Directorates of District Agriculture</p>	<p>Substantial</p>	<p>Programme Accountants and Technical Specialists shall constantly remind implementing partners to justify advances at least once a month. Restriction rule of minimum 80% of advances justified before the release of any new advance shall be applied.</p>	<p>Moderate</p>
<p>4. Internal Controls</p> <p><i>Risk that appropriate controls over Project funds are not in place, leading to the inefficient or inappropriate use of project resources.</i></p>	<p>Contractual arrangements between the project and implementing partners, particularly, the MoFA Directorates of District Agriculture, thereby interrupting fund flow and reporting</p>	<p>Moderate</p>	<p>Contractual arrangements and reporting templates and guidelines for project finances shall be spelt out in MOUs/MOAs with implementing partners and service providers. Quarterly reports shall be required of implementing partners</p>	<p>Moderate</p>

			to feed into the Project IFRs.	
5. Accounting and Financial Reporting <i>Risk that accounting systems – including polices and standards – are not integrated and reliable, leading to inaccuracies in financial records and that reasonable records are not prepared, issued and stored, leading to lack of informed decision-making.</i>	Experience in using the national accounting platform - GIMFIS	Substantial	Sensitization and migration planned for the staff to use in the current programme to enhance experience before implementation of the new project	Low
6. External Audit <i>Risk that independent and competent oversight of the Project financial statements is not in place or performed timely leading to possible misrepresentation of the financial results and/or suspension or other remedies due to compliance breaches.</i>	Delays in performing and submitting Audited PFS	Moderate	Joint collaboration with the SAI on auditor ToRs, and prioritization of performing project audit	Low
Overall Rating		Substantial		Moderate

ANNEX C – DETAILED FMAQ

Topic	Brief description of issues	Mitigation Measures	
1.	<p>Organization and Staffing</p> <p>Note: In the case of a Government Department, the FM Specialist (FMS) should initially focus on the status of the country's Public FM (PFM) systems in order to gauge the level of FM risks to which the proposed project may be exposed. Once an understanding of the PFM environment has been ascertained, the FMS should then focus on the project level, paying close attention to the department(s) or unit(s) that will financially administer the project.</p>		
1.1.	<p>Lead Programme Agency (LPA)</p> <p>What entity is the LPA? What is the entity's legal status?</p>	<p>Ministry of Food and Agriculture (MOFA) is the LPA.</p> <p>The LPA is a Government Ministry.</p> <p>How will the project deal with legal issues when they arise such as contract not well or timely executed?</p>	<p>Project Coordinator must develop strong ties with the Project Directorate and the Legal Department of MOFA to rely on them to resolve legal and project management issues.</p>
1.2. b.	<p>Will FM of the project be the responsibility of the LPA or be undertaken within the-PIU?</p>	<p>Financial management will be undertaken within the PCU</p>	
1.3. c.	<p>Has the entity implemented a donor-financed project in the past - if so, provide details.</p>	<p>Yes: The most recent projects include:</p> <p><i>IFAD Financed:</i> Emergency Support to Rural Livelihoods and Food Systems Exposed to COVID-19 (ESRF), GASIP Ghana Agriculture Investment Programme (GASIP), Northern Rural Growth Programme (NRGP) Jointly financed with AfDB. Root & Tuber Improvement & Marketing Programme (RTIMP)</p> <p><i>AfDB Financed:</i> Savannah Investment Programme (SIP), Savannah Zone Agricultural Productivity Improvement Project (SAPIP),</p>	

Topic	Brief description of issues	Mitigation Measures	
	<p><i>World Bank Financed:</i> Ghana Commercial Agriculture Project (GCAP); West Africa Agricultural Productivity Programme (WAAPP).</p>		
1.4. d.	<p>Staffing What is the (proposed) organizational structure of the accounting department? Attach an organization chart.</p>	<p>Finance Manager (as the head of Finance) to be assisted by two Project Accountants, and two Assistant Accountants. See attached marked "<i>Proposed Organizational Structure of the Accounting Department PROSPER</i>"</p>	
1.5. e.	<p>Identify the (proposed) accounts staff, including job title, responsibilities, educational background and professional experience. Attach job descriptions and CVs of key accounting staff.</p>	<ul style="list-style-type: none"> • Hussein Salia, PhD, Chartered Accountant (Finance Manager) 13yrs of IFI experience; 8yrs Non-IFI experience. • Naana Enyema Bawuah, MBA, Chartered Accountant (Project Accountant) 3yrs IFAD experience, 17yrs Non-IFI experience. • Mohammed Bashar ALIU, MBA, Chartered Accountant (Project Accountant) 3yrs IFAD experience, 9yrs Non-IFI experience. • Samuel Adu-Boahen, MSc, MBA, (Project Accountant) 11yrs IFI experience in 4 IFAD-funded/managed projects. • See attached marked 	<p>Finance Manager and two Project Accountants (one each for IFAD and GCF) would be transferred to Field Office when the office is set up. Two Assistant Accountants will be recruited (one each for IFAD and GCF) to support the FM team.</p>

Topic	Brief description of issues	Mitigation Measures	
	<p><i>CVs of key accounting staff</i></p> <p>What's the availability of the FM skill-set required for the project?</p>		
1.6.	Are written position descriptions that clearly define duties, responsibilities, lines of supervision, and limits of authority for all of the officers, managers, and staff?	Yes	
1.7.	Are the project accounts and finance staff trained in IFAD procedures?	Yes	
1.8.	<p>Are any Finance Staff appointed on contract? What is the duration of the contracts?</p> <p>Indicate key positions not contracted yet, and the estimated date of appointment.</p>	Yes	
1.9.	Is the finance and accounts staff adequately qualified and experienced? What is training policy for the finance and accounting staff?	<p>Yes, the finance and accounts staff are adequately qualified.</p> <p>There exists no specific training policy. However, Finance/Accounting staff are constantly trained/updated on Finance and Accounting issues by IFAD FMD / ICO</p>	AWPB will include training opportunities for the FM staff
1.10.	<p>Is fraud awareness training foreseen at project start-up? The objective of such training should be to ensure that finance staff can demonstrate an understanding of the appropriate fraud policies and key risks faced by the project, as well as an awareness of the reporting channels and whistle-blower protection.</p> <p>How frequently is such a training foreseen? (Recommended semi/annual)</p>	<p>Although the finance staff are adequately informed about the IFAD Policy on Corruption and Sexual Exploitation, as a refresher, there would be fraud awareness training for all staff including the finance staff.</p>	Fraud awareness training shall be conducted for all staff including the finance staff.

Topic		Brief description of issues	Mitigation Measures
1.11.	Is there evidence that finance staff are regularly transferred to other Government departments? At what frequency are personnel transferred?	No	The FM staff will be transferred to the Filed Office when its set up.
1.12.	Is the project finance and accounting function staffed adequately?	Yes. Does staff composition appropriately correspond to proposed FM organisational structure?	Staff composition will be tweaked to respond adequately to proposed FM structure.
2.	Budgeting		
	Annual Work Plan and Budget (AWPB) Identify who will be involved in the AWPB preparation/approval process	The FM/M&E Managers would lead the preparation of the AWPB in consultation with other project staff and stakeholders.	The AWPB will be subject to NPSC first approval; and subsequent approval by IFAD before inclusion of national budget and implementation
	Are Implementing Entity project budgets prepared for all significant project activities in sufficient detail to provide a meaningful tool with which to monitor subsequent performance?	Yes	
	Are procedures in place to plan project activities, collect information from the units in charge of the different components, and prepare the budgets?	Yes	
3.	Funds flow and Disbursements Arrangements		
	Does the Implementing Entity have previous experience of using imprest fund and donor funding Statement of Expenditure (SOE) procedures? Were there any problems or issues encountered by project staff in the operation of the imprest fund or SoE procedures in the past?	Yes. No	
	Does the Implementing Entity have experience in the management of disbursements from IFAD or other donors? Have there been the major problems in the past in receipt of funds by the entity?	Yes No	

Topic		Brief description of issues	Mitigation Measures
	Does the entity have/need to develop capacity to manage foreign exchange risks?	No	
	Are the beneficiaries required to contribute to project costs? How are payments made for the counterpart funds? If counterpart funds are to be contributed in kind (in the form of labour), are proper guidelines formulated to record and value the labour contribution?	Yes IFAD guidelines on in-kind contribution shall be followed for computing non-cash contributions	IFAD Guidelines on in-kind contribution shall be considered an integral part of the PIM
	Is part of the project implemented by communities or NGOs? Does the PIU have the necessary reporting and monitoring features built into its systems to track the use of project proceeds by such agencies?	No	Any potential implementing partner will be required to furnish PIU with reports on usage of such funds in a prescribed financial reporting template developed during the signing of MOU/MOA between the PIU and the Community
	Describe (proposed) project funds flow arrangements; (attach flow chart and explanation of the flow of funds from IFAD, government and other financiers).	As soon as entry into force, IFAD will open a loan and a grant account which will be credited with the total loan/Grant agreed amounts. These funds will be transferred to the project in accordance with the financing agreement and the IFAD's disbursement procedures. The project will open two designated accounts in USD, one for the IFAD loan and another for the IFAD grant in the Central Bank of Ghana and two project accounts in local currency; one for the IFAD loan and another for the IFAD grant in the Central Bank of Ghana. The Project will also open two project accounts designated to receive	

Topic	Brief description of issues	Mitigation Measures
	counterpart funding from the government and from the beneficiaries. See attached marked "Proposed Flow Chart Prosper"	
In which bank will the Imprest Account be opened?	The Central Bank	
Are the (proposed) arrangements to transfer the proceeds of the financing (from the government / Finance Ministry) to the Implementing Entity satisfactory?	Yes, Satisfactory	
If microfinance schemes are foreseen, analyse the control system planned (staff capacity, financial reporting, targeting etc.) to determine whether they will address the inherent financial fraud risk exposure. Outline any control gaps identified.	Microfinance schemes not applicable. However there are blended finance scheme.	
If cash distribution schemes are foreseen: <ul style="list-style-type: none"> - Determine the level of security of the disbursement system to be adopted (cards, mobile phones, blockchain technology etc.) - Analyse the controls over beneficiary lists for receipt of matching grants; how will the lists be maintained and communicated for receipt of resources? What controls are in place to secure the list of intended recipients? How will the names be verified? 	Cash transfers to beneficiaries will be paid to their mobile phone accounts. Beneficiary lists will be generated by VCD/FBOs and shared with the project.	Beneficiaries list will be given to MTN (as partner) to effect transfers, and provide report to PROSPER Management. The staff of MOFA, specifically, the extension officers would have to confirm smallholder farmers presence in the district to PROSPER Management before disbursement. FM and Rural Finance Officer will then call beneficiaries to confirm receipt of cash
4.	Internal Controls	
	Policies, Procedures, and Manuals. <i>Are there policies or procedures that outline the decision processes? Are they clear? Is there a separate Financial Manual (or equivalent)?</i>	Yes Yes Project to submit updated Financial Manuals to IFAD for No Objection

Topic	Brief description of issues	Mitigation Measures
<p><i>How often are policies, procedures, and manuals reviewed/updated?</i> <i>What is the process of approval when modifications are required?</i></p>	<p>When an issue arises or new policies or new procedures are communicated by IFAD or the GoG.</p>	
<p>Segregation of duties. <i>Are the following functional responsibilities performed by different units or persons?</i></p> <ul style="list-style-type: none"> i) Preparation of a transaction; ii) Review of a transaction; iii) Authorization of a transaction; iv) Custody of assets; and v) Reconciliation of accounts 	Yes Yes Yes Yes Yes	
<p>Are the functions of ordering, receiving, accounting for, and paying for goods and services appropriately segregated?</p>	Yes	
<p>Are bank reconciliations prepared by someone other than those who make or approve payments?</p>	Yes	
<p>Are internal controls for all high risk areas (most commonly cash transfers, fuel management (purchase rights / reasonable usage), vehicle logbooks, suspense accounts, manual payments) appropriate and adequately documented?</p>	<p>Electronic Fuel cards used to purchase and analyse usage of fuel by vehicles; vehicle logbooks are in use; cash transfers are done via MTN which submits reports to PCU for reconciliation of recipients. Manual payments are hardly used; payments are well documented.</p>	<p>Electronic fuel cards will be used. Cash transfers to beneficiaries will be done with MTN for availability of reports and audit trail</p>
<p>Assess how per diem usage will be monitored.</p>	<p>Per Diem will indicated in the AWPB and calculated according to existing policy. The approved amount in the AWPB will be the limit for the year.</p>	<p>The project will seek No Objection to every travel if they achieve 100% of the allocation approved in the AWPB.</p>
<p>Assess procedures foreseen for management and eventual recovery of advances.</p>	<p>Recipients of advances (particularly to DADUs) are retired on monthly basis until</p>	<p>Technical officers who work directly with the DADUs are to help in the planning of activities to be undertaken by the DADUs</p>

Topic		Brief description of issues	Mitigation Measures
		the final activity is executed and accounted for.	to reduce the time between the release of advances and the implementation of activities. Programme Accountants are to send reminders regularly to the DADUs to retire advances.
	Internal Audit (if applicable) Is there an internal audit department in the LPA? If, not, is internal audit deemed necessary given the size and design characteristics of the project? Describe internal audit requirements.	Yes	MoFA Internal Audit will conduct at least twice audit per year
	What are the qualifications and experience of internal audit department staff?	<i>If internal audit is not deemed relevant for this project (as per 4.5), these sections can be left blank</i>	
	To whom does the internal auditor report?	Chairman of MOFA Audit Report Implementation Committee	Internal Audit Report will be shared with IFAD at the same time as the report is being submitted to the Chairman. This will be inserted in the Letter to the Borrower.
	Will the internal audit department include the project in its work program?	Yes	
	Are actions taken on the internal audit findings?	Yes	Audit Tracker will be part of documentation for Withdrawal Applications
5.	Accounting and Financial Reporting		
	Basis of accounting applied by the Implementing Entity (cash, accrual), and whether the accounting standards are in line with IFAD's requirements (e.g. IFRS/IPSAS/IPSAS cash).	Cash IPSAS	

Topic	Brief description of issues	Mitigation Measures
Adequacy and reliability of accounting system. Does the entity have an integrated accounting system that allows for the proper recording of project financial transactions, including the allocation of expenditures in accordance with the respective components, disbursement categories, and sources of funds? Will the project use the entity accounting system?	Yes Project will not use the entity accounting system	The project will use the IFMIS module of the GIMFIS
Are controls in place concerning the preparation and approval of transactions, ensuring that all transactions are correctly made and adequately explained?	Yes	
Is the chart of accounts adequate to properly account for and report on project activities and disbursement categories?	Yes	
Can cost allocations to the various funding sources be made accurately?	Yes	
Are the General Ledger and subsidiary ledgers reconciled and in balance?	Yes	
Are all accounting and supporting documents retained on a permanent basis in a defined system that allows authorized users easy access?	Yes	
What is the basis of accounting (e.g., cash, accrual)?	Cash	
What accounting standards are followed?	IPSAS	
Does the project have an adequate policies and procedures manual to guide activities and ensure staff accountability?	Yes	
Do procedures exist to ensure that only authorized persons can alter or establish a new accounting principle, policy or procedure to be used by the entity?	Yes	
Is there a written policies and procedures manual covering all routine project financial management activities? Are manuals distributed to appropriate personnel?	Yes Yes	

Topic	Brief description of issues	Mitigation Measures
Payments Are all invoices stamped PAID, dated, reviewed and approved, and clearly marked for account code assignment?	Paid invoices not stamped as PAID. Will be introduced. Account codes clearly stated on PVs.	
Cash and Bank Does the organization maintain an adequate, up-to-date cashbook, recording receipts and payments?	Yes	
Are bank and cash reconciled on a monthly basis?	Yes. Automated Bank Reconciliation is use.	
Assess the adequacy of the authorized signatory hierarchy and the appropriateness of the roles given the authorization (reporting lines, capacity, thresholds for 2nd signatures, etc.). Names and positions of authorized signatories of project bank accounts may be recorded if necessary.	? Cat A signatories are the Project Coordinator alternated by the MoFA Chief Director Cat B signatories are the Finance Manager alternated by MoFA Director of Finance. Will the alternate signatories be available in the absence of regular signatories	Bank signatories must share their vacation calendar and informed each other when they are taking a break.
Safeguards over assets Is there a Fixed Asset accounting system, with a Fixed Asset Register, fully implemented - as part of an integrated accounting system? Is the system maintained up to date?	Yes No	Will be used under GIFMIS
Are there periodic physical reconciliation of fixed assets and stocks?	Yes, annually.	
Are there appropriate physical safeguards (security practices) for high value and/or high risk assets (e.g. petty cash, vehicles and logbooks, office equipment etc.) in place?	Yes	
Other Are fraud reporting and handling procedures described in the Project Implementation Manual?	Yes	
Has the project advised employees, beneficiaries and other recipients to whom to report if they suspect fraud, waste or misuse of project resources or property?	Yes, but not all.	Beneficiaries are usually represented by their leaders (FBO leaders). During missions, the project will relay this information to the beneficiaries.

Topic	Brief description of issues	Mitigation Measures
Do policies and procedures clearly define conflict of interest and related party transactions (real and apparent) and provide safeguards to protect the organization from them?	Yes	
Do controls exist for the preparation of the project payroll and are changes to the payroll properly authorized	Yes	
Reporting and Monitoring Does the reporting system need to be adapted to report on the project components?	Yes, for the new project since the components are different from the existing project components	As part of implementation preparedness, the report generator of accounting system will be amended to take care of the components of the new project.
Does the project have established financial management reporting responsibilities that specify what reports are to be prepared, what they are to contain, and the frequency of production?	Yes	
What is the frequency of preparation of financial statements? Are the reports prepared in a timely fashion so as to useful to management for decision making?	Quarterly	
Do the financial reports compare actual expenditures with budgeted and programmed allocations?	Yes	
Are financial reports prepared directly by the automated accounting system or are they prepared by spreadsheets or some other means?	Reports prepared directly from the automated accounting system	
(In case of need of consolidated financial statements) Is the accounting system sufficiently equipped to ensure proper consolidation of entities' financial data?	Yes	
Information systems Is the financial management system computerized?	Yes	
Does the system enforce the segregation of duties through restricted access and controls over edit and approver rights by staff role?	Yes When new staff is employed. When new responsibilities are assigned.	

Topic	Brief description of issues	Mitigation Measures
How frequently will user access lists be reviewed for consistency and correctness? How will new rights and/or new users added and old users removed? Is an independent review of system access rights and users foreseen?	No	
Can the system produce the necessary project financial reports?	Yes	Project financial reports will be customized when the GIMFIS migration is completed.
Is the staff adequately trained to maintain the system?	Yes, to the current system. But there is a planned migration to the national platform, GIMFIS, of which the staff are untrained.	Staff will be sensitized and trained in the GIMFIS as part of planned migration
Are adequate systems in place to “back up” financial records	Yes	
6. External Audit		
Who is the external auditor of the entity?	The Ghana Audit Service	
Are there any delays in audit of the entity? When are the audit reports issued?	No. Before the 30 June deadline	
Is the audit of the entity conducted according to the International Standards on Auditing?	Yes	
Were there any major accountability issues brought out in the audit report of the past three years? Were there any issues noted in prior audit reports related to the operation of project imprest accounts or use of SOE procedures? Did any past audits flag potentially fraudulent activities?	No No	
Will the entity auditor audit the project accounts or will another auditor be appointed to audit the project financial statements?	Same entity auditor will audit the project accounts	The Ghana Audit Service will audit the PFS of the project
Has the project prepared acceptable terms of reference for an annual project audit?	Yes	

GOVERNMENT OF GHANA

PROMOTING RURAL OPPORTUNITIES SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE
(PROSPER)

Financial Manual

OCT 2021

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ACRONYMS

Abbreviations and acronyms

1D1F	One District One Factory
AAFORD	Affordable Agricultural Financing for Resilient Rural Development Project
ACB	
ASWG	Agricultural Sector Working Group
AU	African Union
BAC	Business Advisory Centre
BoG	Bank of Ghana
BP	Business Plan
BRC	Business Resource Centre
CAADP	Comprehensive Africa Agriculture Development Programme
CHRAJ	(Ghana) Commission on Human Rights and Justice
DA	District Assembly
DAES	Directorate of Agricultural Extension Services
DDA	District Department of Agriculture
DSF	District Stakeholder Forum
EASH	
ESRF	Emergency Support to Rural Livelihoods and Food Systems Exposed to COVID 19
ESS	Environmental and Social Safeguards
FARA	Agribusiness Learning Alliance
FI	Financing Institution
FMA	Financial Management Assessment
FNS	Food and Nutrition Security
FSRP	West Africa Food Systems Resilience Programme
GADP	Ghana Agricultural Development Plan
GAIP	Ghana Agricultural Investment Programme
GASIP	Ghana Agricultural Sector Investment Programme
GBV	Gender Based Violence
GCF	Green Climate Fund
GCX	Ghana Commodities Exchange
GEA	Ghana Enterprises Agency
GEWE	Gender Equality and Women's Empowerment
GFD	Ghana Federation of the Disabled
GGWUP	GCF Great Green Wall Umbrella Programme (GGWUP).
GHG	greenhouse gas
GIRSAL	Ghana Incentive Based Risk Sharing Agricultural Lending
GJSP	Ghana Jobs and Skills Project
GoG	Government of Ghana
GRM	Grievance Redress Mechanism
GSIVS	Gender, Social Inclusion and Vulnerability Specialist
HH	household
HHM	household methodologies
ICO	IFAD Country Office
ICP	IFAD Client Portal
IFAD	International Fund for Agricultural Development
IFR	Interim Financial Report
IGREENFIN	Inclusive Green Financing Initiative
IPRM	Integrated Project Risk Matrix
KAP	Knowledge Attitude Practice
LCU	Local Currency Unit
LEAP	Livelihood Empowerment Against Poverty
LF	Logical Framework Matrix
LULUCF	Land Use, Land-Use Change and Forestry

MDDW	Minimum Dietary Diversity for Women
MESTI	Ministry of Environment, Science, Technology and Innovation
MIYCN	maternal, infant, and young child nutrition
MLGDRD	Ministry of Local Government, Decentralisation and Rural Development
MNDPF	Medium-Term National Development Policy Framework
MOA	Memorandum of Agreement
MOAP-NW	Market Oriented Agriculture Project
MoF	Ministry of Finance
MoFA	Ministry of Food and Agriculture
MoGCSP	Ministry of Gender, Children and Social Protection
MoTI	Ministry of Trade and Industry
MOU	Memorandum of Understanding
MPI	Multidimensional Poverty Index
MSME	Micro-, Small- and Medium-Enterprise
MSP	multi-stakeholder platform
NCD	non-communicable disease
NDC	Nationally Determined Contribution
NFIDS	National Financial Inclusion and Development Strategy
NNP	National Nutrition Policy
NOTUS	No Objection Tracking and Utilities System
NRGP	Northern Rural Growth Programme
NRM	Natural Resource Management
PAP	project affected person
PERD	Planting for Export and Rural Development
PFI	Participating Financial Institutions
PFJ	Planting for Foods and Jobs
PIP	Productive Investments Project
PPA	Public Procurement Authority
PRM	Procurement Risk Matrix
PROSPER	Promoting Rural Opportunities, Sustainable Profits and Environmental Resilience
PWD	Person with Disability
RAFIP	Rural and Agricultural Finance Programme
RCB	Rural Commercial Bank
REACH	Resilience Against Climate Change
REP	Rural Enterprises Programme
RFSP	Rural Financial Services Project
RI	Rural Institution
RTIMP	Roots and Tubers Improvement & Marketing Programme
SBCC	Social Behaviour Change Communication
SCGV	Safeguards, Climate, Gender and Vulnerability
SFEA	Smallholder Farmer E-Commerce Access
UNSDP	UN Sustainable Development Partnership
VAC	Violence Against Children
WEF	World Economic Forum
WSMT	Water and Sanitation Management Team

SECTION ONE
INTRODUCTION

1 INTRODUCTION

1.1 PURPOSE AND APPLICATION OF THE MANUAL

This manual is applicable to all the employees who are directly or indirectly engaged in the financial and administrative operations of the PROSPER project. Specifically those administering the IFAD and GCF funds.

It describes PROSPER's accounting, internal control policies and operational procedures in relation to financial and administrative management.

The main objectives of this manual are:

- To clearly document systems, procedures and controls - defining who does what, where, how, in what sequence and why it is done. This enables standards of performance and efficiency to be clearly understood;
- To provide a quick reference and easy to follow guide to staff in their day to day activities, as well as a reference for management, external auditors and other stakeholders;
- To train new staff in their duties and responsibilities. It is also used to train staff replacing colleagues absent on leave or for any other reason; and
- To ensure consistency in recording and classifying financial transactions.

1.2 CONTENT AND STRUCTURE OF THE MANUAL

The FM is presented in eight chapters presented as follows:

1. Introduction
2. Organization and Staffing
3. Planning & Budgeting , Budget Control
4. Funds Flows : Incoming Fund Flows and Disbursement Management
5. Accounting policies and financial statements & reports
6. Asset management
7. Internal Control
8. External Audit
9. Project Completion and Closure.

1.3 DISTRIBUTION & MONITORING RESPONSIBILITIES

It is the Financial Manager's responsibility to maintain and distribute the manual to all staff and to provide training and assistance in the correct application of the required procedures. The Internal Auditor will ensure that all staff have obtained a copy of the manual and apply the required procedures consistently.

1.4 REVISIONS TO THE MANUAL

The Financial Manager is responsible for reviewing all proposed revisions to PROSPER's Financial Procedures Manual. The Financial Manager will then submit a recommendation for manual revision to the National Project Coordinator. The National Project Coordinator will require the validation from the IFAD Finance Officer for Ghana and decide whether or not to approve the proposed change. If the amendment is approved by the National Project Coordinator, authorized revisions to the procedure manual will be accomplished with a "Notice of changes to Procedures Manual". The notice

of changes should be sent to IFAD Country Director for no objection. After no objection by IFAD, the revised procedure will be sent by the Financial Manager to users of the Procedures Manual.

Each recipient of a “Notice of changes to Procedures Manual” is responsible for inserting the new pages into the Manual and keeping it current until a complete revised version is provided.

**SECTION TWO:
PROJECT DESCRIPTION,
ORGANIZATION AND STAFFING**

2 PROJECT DESCRIPTION, ORGANIZATION AND STAFFING

2.1 PROJECT GOAL AND DEVELOPMENT OBJECTIVE

Project Goal. The overall goal of PROSPER is to support the structural transformation of the Ghana economy by tapping into the full potential of its agricultural sector.

Development Objective: Strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority VCs in the Northern and Middle Ecological Belts taking advantage of the increased demand created by the national agro-processing strategy. PROSPER aims to provide a framework for the long-term engagement with and financing for private sector-led, pro-poor agricultural VC development tailored to the specific needs and potential of small-scale producers and operators in targeted regions of Ghana.

Project Components and Expected Outcomes

PROSPER comprises two mutually supportive components concentrated on increasing the real demand for sustainably grown produce by significant numbers of people living in poor rural communities while enhancing their capacity to meet this demand through more efficient climate-resilient agricultural practices and natural resource management to mitigate the negative impact of climate change. The intended outcomes are increased incomes, greater food and nutrition security, and improved health status.

Component 1: Development of rural institutions and socioeconomic infrastructure. The expected component outcome is: *Improved and sustainable livelihoods in target areas supported by strengthened rural institutions and improved socioeconomic infrastructures.* These actions are concentrated on investing in “public goods” within and for the benefit of the targeted 100,000 beneficiaries in the project areas.

Subcomponent 1.1 Capacity building of rural institutions, enterprises and households comprises a range of institution-building and skills development activities to enable target communities to take ownership of and accountability for their own development initiatives, to promote sustainable community-based NR management, to strengthen their ability to implement modern sustainable and climate resilient farming, and to adopt healthier diets.

Subcomponent 1.2 Development of socioeconomic infrastructure. This development activity seeks to realize some of the “public goods” investments prioritized and chosen by local communities through the Cluster Planning process. Three complementary types of climate-resilient infrastructure will be eligible: *Off-farm/watershed works and hazard mitigation measures; Feeder roads and farm tracks; and Communal social infrastructure.* These investments aim to improve the sustainability of NR-related livelihoods and to stimulate socioeconomic advancements in the participating clusters.

Component 2: Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains. The expected outcome is: *Smallholders and small businesses draw greater benefits from the increasing market outlets for agricultural produce through comprehensive financial, capacity and marketing support.⁵⁶*

Whereas the first component will invest in the human, physical and natural resources of the target communities, the second component is concentrated on investing in the “private goods” of the population to bring about a sustained uplift in the earning capacity of agricultural producer groups and related enterprises. The aim is to expand business activity both within the target communities

⁵⁶ Small businesses comprise enterprises and organised groups engaged in income generating activities other than primary production. The members are drawn from the same population.

and in lasting agreements with other actors in the selected VCs. The project is realistic in recognising the differing prospects of the targeted beneficiary groups and the extent to which access to finance is the main constraint they face. In this context, the PROSPER emphasis on climate-friendly business development must be balanced with social and welfare considerations for the most-disadvantaged households.

Subcomponent 2.1 Sustainable marketing linkages and business development. This subcomponent comprises three activities. In the first, *Value chain analysis*, PROSPER will build on the preliminary value chain analysis conducted during project design. It will examine in depth the status and characteristics of each selected national value chain—soya, rice maize, cashew, shea and poultry—and map the VC actors located close to the target communities, particularly the first stage market linkages between producers and others in the chains. The general presumption is that most smallholder farmers and their groups in remote areas have no established marketing arrangements and interact opportunistically with buyers and middlemen only as and when they harvest a surplus. The number and location of private sector operators, including larger agribusinesses working with contracted outgrowers, is not well documented. PROSPER will commission a detailed structural examination of each VC, including an estimation of the value added at each link, to provide a sound platform for project interventions

The practical and intensive developmental activity *Promotion of linkages between producers and value chain actors* is aimed at generating enduring partnerships between producers engaged in climate-resilient farming and larger-scale agribusinesses within locally appropriate forms of robust and equitable contract relationships in the private sector. PROSPER itself will not enter business relations with the parties at any stage. This second activity will concentrate on those eligible RIs and MSMEs that demonstrated interest and potential in the Component 1 capacity building interventions. Group eligibility for PROSPER support centres on meeting membership criteria regarding the minimum proportion of specified disadvantaged groups: women, female and male youth, PWDs and landless or near-landless households. These criteria allow for and, for practical reasons, encourage a minority of non-eligible members with productive land holdings of up to 10 ha.

Subcomponent 2.2 Access to rural financial services. The objective is to promote a savings culture among PROSPER's beneficiaries, facilitate realization of the cluster-level Business Plans and improve enduring access to suitable financial resources for the beneficiaries to engage in profitable agribusiness. *Expected outcomes:* farmers through RIs and related local MSMEs are integrated step-by-step into the formal financial system and have lasting access to adapted and affordable financial services to develop their agribusinesses, including green investments. Such access is a necessary though not sufficient condition for rapid sectoral development.

PROSPER financial services are structured around three instruments appropriate to the various situations prevailing in rural areas as regard capacities and professionalization: (1) *Saving and Loan Groups* (VSLA model) for sparking the saving habit within communities; (2) a *Matching Grants* fund for capitalizing emergent RIs to engage in commercial agriculture and smaller MSMEs around the selected VCs and supporting food and nutrition security promotion schemes for the most vulnerable groups; and (3) a *Blended Finance Facility* operated as a refinancing facility (RF) by PFIs to ensure sustainable access to financial services for growing FIs and MSMEs, (see details in respective sections below). These instruments form a global graduation process by which beneficiaries will be able to increase their access to financing solutions over time as they build their financial and management capacities and develop their business relationships with other VC actors.

Component 3. Project management and Policy engagement. The expected outcome of the support component: *Efficient and timely delivery of PROSPER development results and support to evidence-based sectoral policy formulation.*

Subcomponent 3.1 Project management. PROSPER will be facilitated by an implementation support structure embedded in the host GoG agency providing liaison, physical and financial project

management, reporting and accounting, proactive knowledge management and learning activities, and monitoring and evaluation functions.

Subcomponent 3.2 Policy engagement. PROSPER will support developing an enabling policy environment that will help achieve the project's goals and objectives through the provision of technical assistance, organising high-level round table discussions, establishing policy dialogue, holding conferences and advocacy as appropriate. This will be underpinned by analytical work and KM products from PROSPER, IFAD and other development partners.

2.2 PROJECT MANAGEMENT AND COORDINATION

MoFA is designated as the **Lead Project Agency**. The ministry will have the overall responsibility for the implementation of PROSPER and will ensure linkages to other relevant Ministries, Departments and Agencies, such as MoF, MESTI, MoTI, MLGDRD, Environmental Protection Agency (EPA) and the Local Government Service. PROSPER implementation will involve private sector and community level technical service providers and will leverage on-going projects implemented by public sector and NGOs.

MoFA will establish a **Project Steering Committee** (PSC) to provide overall oversight project implementation. It will be chaired by the Chief Director of MoFA and include representatives of all relevant ministries and agencies, Bank of Ghana, ARB Apex Bank and regional coordinating councils from the project area. Members shall include private sector non-state actors (such as NGOs) and youth and women who operate along the relevant agricultural VCs as practitioners or advocates. The PSC will meet at least twice a year, and as necessary. The main responsibilities of the PSC will include: (i) providing strategic and policy guidance to the Project Coordination Unit (PCU); (ii) ensuring overall conformity with government policies and strategies; (iii) reviewing project progress and performance; (iv) approving the Annual Work Plan and Budget (AWPB); (v) resolving implementation problems or conflicts; and (vi) assisting the PCU in obtaining government assistance for the project when needed. A Project Technical Committee (PTC) will be constituted comprising members drawn from the PSC. The PTC will serve as a standing committee empowered to meet whenever needed to resolve implementation bottlenecks that require immediate attention.

2.3 PROGRAM COORDINATION UNIT (PCU)

PROSPER's **Project Coordination Unit** will be responsible for implementation and will be based in the project area to ensure effective management and coordination. The PCU will operate within the supervision of the Directorate of Agricultural Extension Services DAES, which will provide direct oversight. A Project Coordinator will head the PCU's day to day operations, assisted by central technical and operations support teams as defined in the PIM. The responsibilities of the PCU will include the overall coordination of Project activities and direct implementation of specific actions, and overall responsibility for fiduciary, climate change and environmental and social safeguards, including gender and vulnerability. Key activities will include consolidation of project accounts, preparation of annual financial statements, disbursements, consolidation of Annual Work Programme and Budgets (AWPB) and procurement plans; quarterly financial and comprehensive safeguards and climate change reports; consolidation of progress reports; organization of annual audits in line with IFAD's guidelines; assistance for supervision and other missions, including mid-term review; promotion of cross-cutting themes such as gender, youth and vulnerability; and preparation and updating of the Project Implementation Manual (PIM) and other required manuals.

2.4 IMPLEMENTING PARTNERS

Key implementation partners will include selected MoFA departments, DDAs, Regional Departments of Agriculture (RDAs), ARB-APEX Bank, MoTI, GEA including BRCs and BACs, MESTI, GCX, GIRSAL and GAIP. PROSPER will enter MoUs with the above entities that will outline implementation modalities and the role of each of these partners. From a safeguards and climate change standpoint, the PCU will embed a Gender, Social Inclusion and Vulnerability Specialist (GSIVS) to work with EPA to ensure consistency and compliance of project implementation with national regulations and the SECAP guidelines.

A dedicated team will be anchored in APEX Bank to manage the BFF. The BFF team will report to the PROSPER PCU. This team will comprise a Coordinator and two field officers supported by the GSIVS funded from the IGREENFIN-I Grant.

2.5 CONDITIONS OF EMPLOYMENT

PROSPER human resource (HR) policies, rules, procedures and guidelines apply to all PROSPER staff, unless otherwise specified in their contract. The PCU and PSIU are responsible for providing PROSPER staff with HR services and for ensuring the proper implementation of PROSPER rules, policies and procedures on human resource matters.

PROSPER recognizes a robust and professional approach to recruitment and selection of staff to attract and appoint individuals with the necessary skills, knowledge and attributes to effectively support the achievement of Project objectives.

All appointments are made on the Principle of Merit and need in line with relevant government policies and related processes. The PROSPER is an equal opportunity employer where emphasis is placed on applicant's ability to do the job, not on factors that are unrelated to job performance (such as ethnicity, gender, religion, age, disability, HIV status or marital status). All vacant staff positions will be advertised, and recruitment will be conducted on a competitive basis, to ensure the best employees are hired.

Recruitment Process

Based strictly on clearly defined needs, the following shall be the process for staff recruitment:

- Declare vacant positions in consultation with component heads.
- Advertise for the vacant position.
- Accept curriculum vitae.
- Constitute the PROSPER interviewing panel (if not contracted to an external agency)
- Collate applications.
- Shortlist candidates.
- Set up interview date with the interviewing panel.
- Call to inform candidates of date.
- Send candidates for final interview.
- Ensure proper documentation of finalists.
- Furnish the HR Department with details as to names, cadre of entry, department deployed to, and salary per annum of each new intake.

MOFA will co-ordinate the recruiting process. The NPC in consultation with IFAD Country Office will give final approval for all full-time hires.

Publication of job position.

Depending on the nature of the job, the HR Department can advertise a job opening using internal PROSPER's information network, electronic and print media or through reputable employment

agencies/relevant stakeholders. When posting a vacancy, the HR Department should create a simple position description for the job covering key activities, tasks, skills required, expectations, deliverables and safety considerations. When advertising, discriminatory language/insinuations should be avoided. The requirements of the job should be the target.

Job Description

The Administration and Logistics Officer is responsible for: (i) developing detailed job description for all PROSPER staff, and (ii) ensuring that job description records are properly managed and regularly updated for all positions. A job description is indicative of the characteristics/requirements of the job in terms of duties and responsibilities, order of reporting, seniority, and functional relationship with other jobs. The objectives of a job description in PROSPER are to:

- a. Aid in orienting employees to their jobs,
- b. Identify the requirements of each position,
- c. Establish hiring criteria,
- d. Set standards for employee performance evaluations,
- e. Identify role boundaries and avoid role conflicts among staff,
- f. Provide the information needed to put a job in the proper classification in order to assign an appropriate salary range and to comply with applicable employment and personnel laws and regulations,
- g. Guide the process of interviewing candidates to fill a job opening,
- h. Guide newly hired employees to immediately understand the job duties, and
- i. Assist in the conduct of employee performance appraisals.

Job descriptions may be rewritten periodically to reflect any changes in the position's duties and responsibilities. All employees will be expected to help ensure that their job descriptions are accurate and current, reflecting the work being done. Employees should remember that a job description does not necessarily cover every task or duty that might be assigned, and that additional responsibilities may be assigned as necessary. Contact the HR Department if you have any questions or concerns about your job description.

Orientation Training

All new employees should be made to feel welcome and ready to start work safely and competently through the use of a proper, formal induction process. The induction exercise should cover among others the following areas.

- Introductions
- Workplace tour
- HR policies and procedures
- Project overview - structure and implementation arrangements
- A working safely plan
- Training policies and procedures
- Information technology (IT) system orientation
- Policy and procedural requirements

Probation Period and Confirmation of Appointment

Probation period. For all staff, the first 90 days of employment are considered a probation period. This time gives a staff member the opportunity to learn and adjust to his/her new job and work associates. It also gives a supervisor the opportunity to work with the employee and to evaluate work performance and progress, punctuality and attendance, and any other considerations that will contribute to a satisfactory employment relationship. At the end of the period, all new employees will be formally evaluated and recommended for confirmation or otherwise.

Confirmation of appointment. On successful completion of probation, the employee's appointment will be confirmed. This will qualify him/her to enjoy:

- Staff training and development
- Annual increment in salary subject to fulfilment of other requirements
- Maternity leave
- Terminal benefit.

Special Appointments

The PROSPER may appoint consultants and other temporary staff. Consultants (independent contractors) are individuals with whom the Project has signed an agreement for a specified period of time and for a specified task. Consultants are not employees and receive no benefits. Fees will be agreed upon by the appropriate Project representative and the consultant prior to assignment, and will be based on the type of work involved and approved procurement guideline. Such appointments are based on contracts. All contracts are renewable depending on:

- (a) Satisfactory job performance
- (b) Continuity of the project
- (c) Availability of sufficient funds
- (d) Approval of the NPC
- (e) In some cases, approval of IFAD.

The NPC shall identify terms and conditions of the contract. Contracts are not guarantees of continued employment.

1. Project staff are either seconded from the lead implementing agency who retain their status as public servants with benefits such as social security contributions, health insurance for their families, and end-of-service benefits.

2. As per Ministry of Finance Notice dated 10 April 2017, "consultants who are recruited as project implementation specialists to manage Donor-Funded Projects / Programmes are not Public Servants. It is therefore not Government's responsibility to pay their Social Security contributions, health insurance for their families, and end of service benefits". Consequently, projects staff that shall be recruited as consultants shall be paid gross consultancy fees to enable meet their own financial obligations, including tax obligations, social security contributions, health insurance for themselves and their families. Consultants shall be limited to the renumeration that shall be spelt out in their contracts and shall NOT be entitled to public servants' benefits.

The benefits stated in this manual are for meant for staff that shall be seconded or recruited as public servants to the project.

Salary Structure

It is PROSPER's policy to compensate its employees in a fair and equitable manner on the basis of responsibilities, qualifications, and work performance. Staff salaries and allowances are determined based on what is paid by government and other similar organizations. As an incentive, salaries and allowances are subject to periodic reviews in response to situations regarding the current job market of its operating locations as determined by periodic surveys and availability of funds. When a staff member is hired, his/her position in the salary range for the job is determined by the NPC in consultation with relevant PCU members based on the employee's qualifications and experience.

Salary Payment

Salary is payable in equal monthly instalments directly into the employee's assigned bank account. All salaries and benefits shall be subject to taxation and other deductions according to applicable laws and legislation. Employees will receive monthly an itemized statement of wages (pay slip) from the

Accounts Unit, as an extract from the Account System in use. The pay slip shall indicate as a minimum the basic salary, the distribution of the allowances, and deductions.

Salary Review

Salaries may be reviewed at the end of a contract period based on availability of fund and other considerations in the interest of moving the Project forward. Promotional increases or other salary adjustments (called administrative changes) may be considered based upon changes in the level of responsibility and the recommendation of a supervisor. Such adjustments must be fully justified by the supervisor and approved by the NPC.

The PROSPER does not guarantee regular salary adjustments. All increases will NOT be above the range of annual increments in the approved COST TABLES and dependent upon the financial position of the Project, both generally and with respect to the funds available for particular projects or activities.

Confidentiality

A staff member's salary is a confidential matter between the employee and the PROSPER, and it is not a topic for discussion with anyone other than the employee's immediate supervisor and other PROSPER personnel on a 'need-to-know' basis.

General Medical Benefits

The PROSPER believes that the employees are in the best position to be responsible for their own health. The Project includes in the payroll of the employee, X% of the basic monthly salary as a contribution to the employee's health expenses.

Personal Life Insurance

PROSPER shall provide towards the premium (in consonance with existing Government approved rates or amounts for public servants) for a personal life insurance of the employee, subject to evidence of the employee actually taking up a life insurance policy and renewing such policy annually.

Maternity Leave

Female full-time staff who have worked for PROSPER for at least 12 months are eligible for 4-months paid maternity leave, starting anytime in the last month of pregnancy. The benefit of maternity leave is provided to the primary caregiver and only to those staff members who fully intend to return to work at PROSPER following their leave. A written agreement to this effect will be drawn up and signed by the employee. Vacation, all bonuses and other benefits are not accrued or paid during maternity leave. Annual and Sick leave do not accrue during periods of maternity leave. Pregnant women are exempted from query or suspension from duty.

Personal Leave

Full-time staff of PROSPER shall be entitled to specific leave with full pay to cover vacation or sickness. Other staff are not entitled to personal leave. Leave shall be taken under conditions that are convenient to the organization. The following categories and conditions shall apply:

- (a) Annual leave is earned at the following rate starting on the date of appointment:
 - i) All full-time senior staff, other than casual laborers, earn 30 working days per annum.
 - ii) All full time senior/support staff earn 21 working days
 - iii) All full time junior staff including drivers are entitled to 14 working days.
- (b) The employee must have earned at least half of their leave, i.e., worked for the organization for six months to be eligible to take leave. If leave is required before that time, the employee may apply subject to the approval of IPC.
- (c) Leave days may be taken one at a time (for personal days), a few days at a time, or altogether.

- (d) Staff are encouraged to take their annual leave. If leave is not taken in the year it is due for no serious and approved reasons, the officer forfeits the leave for that year.
- (e) In an emergency situation, management may recall a staff member from leave. In such instances, the balance of his leave is deferred.
- (f) A staff member who fails to return to duty on due date at the expiration of his/her leave, is deemed to be absent from duty without permission. Absenteeism without permission or without just cause, as determined by the PC, will result in subtraction of future leave days, equal to the days absent, probation or dismissal.
- (g) Leave time cannot be taken by employees during the probation period. If a staff member is terminated before the probation period has been completed, he/she will not be reimbursed for any accrued but unearned vacation.
- (h) Leave is not accrued on overtime hours or during periods of medical disability leave or other unpaid leaves of absences.

Procedure. The following steps are followed in benefiting from Personal Leave:

- (a) The HR Department develops a tentative calendar for annual leave for all staff to guide staff leave management.
- (b) The employee's leave request, authorized in writing by the supervisor, with a copy to the PC, is required no less than one month in advance. This ensures that there is no conflict with future work assignments or other leave periods. In the event that there is a conflict, employee seniority will be the deciding factor.
- (c) Before departing for leave, the employee is expected to make sure that his immediate supervisor is aware of the status of projects or special assignments and where all materials can be located. The departing employee is also responsible for leaving all assignments at a reasonable point where they can be completed by other staff if necessary. He must leave his full contact address while on leave in case there is a need to contact him or her.
- (d) Leave allowance is paid according to the terms of employee's contract.

Leave of Absence

Leave of absence is unpaid unless otherwise specified, and only full-time employees are eligible to apply for leave of absence.

Policies regarding leave of absence are as follows:

- (a) Before taking a leave of absence, the employee shall notify the immediate supervisor of the status of projects or special assignments and where all materials can be located. The departing employee is also responsible for leaving all assignments at a reasonable point where they can be completed by other staff if necessary.
- (b) In order to ensure efficient office management, the employee shall inform the supervisor of his/her whereabouts at all times and this information shall be noted in the office calendar.
- (c) Personal leave shall not accrue to the employee during periods of leave of absence.
- (d) Unless otherwise specified, the employee's job will be held open during periods of leave.

Return to employment from leave of absence. An employee who has been officially granted leave shall be assured the same or a comparable position as previously held upon return from the leave and will be reasonably accommodated, unless:

- (a) The same or comparable position is no longer available due to an operational necessity associated with reorganization, financial retrenchment or similar cause, in which case the employee shall be given 30 days' notice that the same or comparable position will not be available on their return; or
- (b) The right to such reinstatement has been waived in the terms of the leave, signed by both the employee and the NPC.

Unplanned absence. When absent from work because of personal or dependent illness the immediate supervisor should be notified no later than 9:00 a.m. of the first day of the period of absence and every day during the illness.

Planned absence. When planning a doctor or dental appointment during official hours, the supervisor should be informed at least one week in advance (with the exception of appointments in the case of emergencies).

Leave without Pay

A staff member who does not have any accrued vacation may take time off for personal reasons to a maximum of two weeks in the form of a leave without pay. The request must be made in writing to the employee's immediate supervisor and approved by the PC at least one month in advance. The purpose of the leave, length of service with PROSPER, and general performance record will be taken into consideration when granting a staff member's request for a leave of absence without pay.

Personal leave of absence/sabbaticals. In cases where it is deemed in the best interest of PROSPER, a staff member may take up to a one month leave of absence without pay to participate in education, training, or other related activities. It will be at the discretion of the PC to determine if the assignment is in the interest of the Project. Personal leave of absence must be requested in writing to the employees' immediate supervisor and approved by the PC at least one month in advance.

Note: PROSPER does not accept staff of other organisations/institutions on sabbatical leave engagement.

Compassionate Leave

Full-time staff with approval of the PC and his/her immediate supervisor are eligible for compassionate leave of up to five (5) paid days to be away from work as a result of death or critical illness or injury of an immediate member of the family (spouse, child, brother, sister or parent) and one (1) paid day from work as a result of death of a relative.

Compassionate leave will normally be granted unless there are unusual official needs or staffing requirements. Employees may, with their supervisors' approval, use any available paid leave for additional time off as necessary.

Critical illness or injury is defined as an instance in which death is imminent or likely to occur as based on competent medical opinion or one in which the absence of the staff member would result in great personal hardship.

Public Holidays

PROSPER will grant paid public holidays for those days required by Ghana legislation. If an observed holiday falls within an employee's vacation period, vacation is not deducted on these days.

Holidays are NOT exchangeable for other days. Employees wishing to observe holidays other than the ones noted above are free to do so as a leave day or an unpaid leave of absence, subject to management approval.

Employees traveling and/or working on official assignment during a paid holiday may take one compensating day either during the trip or upon return.

Absence from Office

The PC, and Component Heads should always inform the office of their absence from duty in writing stating the period of absence, purpose of the trip and location. He/She should designate an appropriate officer to act for him/her. Appropriate files for information on absence should be opened for information purposes.

Death of an Employee

Realizing that the death of an employee brings hardship to the employee's family, PROSPER's policy is to provide assistance to the employee's family in receiving all appropriate benefits due to them. The Project Accountant will prepare the following: a final payroll cheque based on wages earned through the date of death, calculate the cash equivalent of earned and accrued vacation and reconcile any outstanding accounts.

The foregoing payments should be made to the next of kin. Items of indebtedness to the Project are to be deducted from any money due to the employee's next of kin. In addition, the Project will provide the family of the deceased with some funds to offset cost of obituary announcement, coffin and transporting the corpse home where necessary. If the amount of the employee's indebtedness exceeds the money due, the Project Accountant should make an arrangement for repayment of the balance.

The PC will assist the family with benefits coordination. A final letter of settlement, accompanied by a letter of condolence, will be sent to the next of kin. The letter will contain the following:

- Status of unpaid wages and other amounts and benefits due to the employee
- Withholding tax statement
- Status of debts owed to the organization

2.6 PERFORMANCE IMPROVEMENT AND DISCIPLINE

PROSPER is concerned about continuous improvement of staff performance and has put in place a number of incentives to create the necessary enabling environment for staff to put in their best. However, PROSPER requires a minimum standard of conduct and performance, which will be made clear to employees in management appraisals. If an employee does not meet this standard, the Project will take appropriate corrective action, in line with the provisions of the Civil Services rules.

Training and Staff Development

It is the PROSPER's policy to hire only individuals who are already fully qualified for the job for which they were selected. However, growth and life-long learning are essential for the improvement of staff performance. As a first step, PROSPER will seek to encourage and facilitate the learning process with on-the-job coaching by supervisors and fellow employees.

PROSPER's staff training and capacity building policy provides staff the opportunity to further improve on their knowledge, skills and performances. Regular skills gap analysis (Skills Audit) is conducted to determine staff training and development needs. The result is used to: (i) determine the types of training interventions, (ii) identify non-training and capacity building interventions, and (iii) identify organizational performance problems and remedial measures.

PROSPER provides opportunity for employees to benefit from the following types of training:

- a) Orientation training:
- b) In – house training
- c) Workshops/Seminars
 - Local training
 - International Training
- d) Study tours, local and international
- e) Part-time studies
- f) Professional associations trainings/meetings

Disciplinary Action

The PROSPER expects its employees to perform their duties in a professional manner and according to specified standards. The Project's objective in addressing poor performance is to correct the situation, prevent the reoccurrence of past problems as well as to deter other problems from arising. When a staff member's performance or behaviour fails to meet established standards, it is the responsibility of the supervisor to counsel the employee and to assist in resolving the problem. Should these efforts fail, the supervisor may, under the guidance of the NPC, initiate a program of constructive disciplinary action to be administered in a fair and consistent manner. If there is not sufficient improvement, the employee is subject to dismissal. PROSPER will give an employee the opportunity to defend himself or herself before management takes further action.

Corrective action for performance improvement may include:

1. Verbal or written warning
2. Loss of Pay
3. Suspension
4. De-secondment
5. Termination of Appointment
6. Dismissal (from service for gross misconduct)

General procedure for corrective action. The following steps will be followed:

The employee's supervisor will advise the employee of any shortfall in their performance, and give them an opportunity to respond indicating how to improve on their performance. The advice will clearly state, using specific examples, what the supervisor sees as the performance problem or the unacceptable conduct, and refer to the correct policy or procedure.

Following their response, the supervisor will decide if performance improvement action should be taken. PROSPER will provide support such as training where appropriate.

If the employee is given a verbal warning, the supervisor should make a note of it, date it and sign it. The supervisor will allow the employee to respond before making a decision. The employee may have a support person present at such meeting.

If a written warning is to follow, the supervisor is to: (i) document it and give the employee a copy, (ii) give the employee (and their support person) the opportunity to sign the warning, and (iii) keep a copy on file.

The warning must clearly define: (i) the deficiency, (ii) a clear explanation of the expected standard, (iii) by when the employee needs to achieve it, (iv) how the Project will help the employee achieve the improvement required, and (v) consequences of failing to improve.

The supervisor concerned will keep a record of all meetings, training and/or coaching given and a summary of discussions, and put a copy in the employee's personnel file. This should include date, location and time of discussion.

The supervisor will continue to support the employee and note the support given, for example, training or counselling.

If the employee's performance or conduct doesn't improve, the supervisor will give the employee a final written warning and follow steps 4–7 above. This document needs to warn the employee in clear terms that PROSPER will terminate their employment if there is not enough improvement, and a sustained improvement, in their performance.

Note: some circumstances may justify going straight to a second or final warning.

Progressive discipline. Progressive discipline means that, with respect to most disciplinary problems, four steps will normally be followed: a first offence may call for a verbal warning; a next offence may be followed by a written warning; another offense may lead to a suspension, and, still another offense may then lead to termination of employment. PROSPER may use progressive discipline at its discretion. Depending on the severity of the problem and the number of occurrences, one or more

steps are bypassed. By using progressive discipline, the Project hopes that most employee problems can be corrected at an early stage, benefitting both the employee and the Project.

Procedure. Should the supervisor choose to initiate a programme of progressive discipline, any written documentation in this regard must be reviewed by the PC before signing and the original copy must be placed in the employee's confidential file. A corrective interview should be conducted and documented on a corrective interview form. Both supervisor and employee should sign off on the written form. Signatures reinforce the fact that both parties have read and fully understand the situation and the content of the interview, as well as demonstrate a good faith effort by the organization to review and help correct an undesirable situation. Employees should be advised that signing the corrective interview form does not necessarily mean that the employee is in agreement and that the employee has the right to respond in writing to the interview. If an employee refuses to sign the form a notation should be made on the form indicating that the employee has refused signature and for what reasons. All corrective interviews will specify, if appropriate, any disciplinary action to be taken. The type of disciplinary action is determined by the appropriate staff member in conjunction with the PC on a case by-case basis as required. Employees may request copies of any document in their files that they have signed. Any decision regarding continued employment will be made by the PC in collaboration with the recommendation of the immediate supervisor. A staff member may appeal his/her dismissal to the NPC in writing within two weeks of the date of dismissal. The decision of the PC will be final.

Termination of Employment. Below are examples of some of the most common circumstances under which employment is terminated:

- Resignation - voluntary employment termination initiated by an employee.
- Discharge - involuntary employment termination initiated by the organization.
- Layoff - involuntary employment termination initiated by the organization for non-disciplinary reasons.
- Retirement - voluntary employment termination initiated by the employee meeting age, length of service, and any other criteria for retirement from the organization.

Dismissal. Unsatisfactory performance that is grounds for dismissal includes, but is not limited to, habitual absenteeism or tardiness, inadequate work performance, fighting in the office, antagonism or refusal to accept reasonable work assignment, and failure to comply with the PROSPER's code of ethical standards. Management should seek legal advice before dismissing an employee.

Procedure. The following steps should be taken regarding the dismissal of an employee:

1. The supervisor is to investigate the alleged offence thoroughly, including talking to witnesses, if any.
2. The supervisor should ask the employee for their response to the allegation (taking notes of this discussion) and allow them to have representation. The supervisor should also have a witness present. The supervisor shall give genuine consideration to the employee's response and circumstances.
3. If still appropriate, following a thorough investigation, the supervisor can recommend termination/dismissal of the employee to the PC.
4. The supervisor should keep a file of all evidence collected and action taken in these circumstances.
5. PROSPER will send the employee a letter of termination noting brief details.

Position Elimination. A position may be eliminated in PROSPER through no fault of the staff member. Reasons for position elimination might include lack of funding, work that is no longer required by the Project or work that has been absorbed by other positions.

Resignation is a voluntary act initiated by the employee to terminate employment with PROSPER. A one month written notice from the employee or the corresponding salary in lieu of notice, is required. PROSPER will give the required notice stipulated above or pay in lieu of notice if the termination of

appointment is at its instance. Prior to an employee's departure, an exit interview may be scheduled to discuss the reasons for resignation/ termination and its effect on benefits.

Obligations of the employee and employer on termination of an appointment.

Employees' obligations. An employee leaving PROSPER after their contract has come to an end must:

- Carry out an inventory of their working equipment;
- Return all PROSPER property, materials, or written information issued to them or in their possession or control;
- Return the corporate badge and any identification tools that they may still have (for example, stickers with the corporate logo on them) and the working tools;
- Reimburse the loans subscribed or advances on salary, if any.
- Make sure that the job can be continued.

Employer's Obligations. PROSPER shall take the following steps when an employee is leaving:

- Provide the employee with a work certificate/attestation;
- Inform all key stakeholders involved of the termination of the contract;
- Pay out all amounts due to the employee;
- Request the employee to return all PROSPER property immediately. Where permitted by applicable laws, PROSPER may withhold from the employee's check or final pay check the cost of any items that are not returned when required, and take all action deemed appropriate to recover or protect its property.

Problem Resolution

PROSPER is committed to providing the best possible working conditions for its employees for optimum performance. Part of this commitment is encouraging an open and frank atmosphere in which any problem, complaint, suggestion, or question receives a timely response from PROSPER's supervisors and management. PROSPER supports the right of every employee to lodge a grievance with their supervisor if they believe a decision, behaviour or action affecting their employment is unfair. An employee may raise a grievance about any performance improvement action taken against them.

It is aimed to resolve problems and grievances promptly and as close to the source as possible. When necessary, PROSPER will escalate a grievance to the next higher level of authority for more discussion and resolution, and continue escalating it to the level above until it is resolved. Supervisors will do their utmost to action grievances objectively, discreetly and promptly. Grievances that are misconceived, vexatious, and lacking substance may result in disciplinary action being taken against the employee lodging the grievance.

Procedure. The following steps shall be followed in relation to problem resolution:

1. The employee should try to resolve the grievance as close to the source as possible. Every possible effort should be made to settle a grievance before the formal grievance process starts. If the matter still can't be resolved, the process continues and becomes formal.
2. To start the formal grievance, the complainants must fully describe their grievance in writing, with dates and locations wherever possible and how they have already tried to settle the grievance.
3. The person(s) against whom the grievance/complaint is made should be given the full details of the allegation(s) against them. They should have the opportunity and a reasonable time to respond before the process continues.
4. If the grievance still cannot be resolved, the employee should refer the matter, in writing, to the most senior officer for consideration and a final decision.

Work Schedules

The normal work schedule for all employees is 8 hours a day, Monday to Friday. Supervisors will advise employees of the times their schedules will normally begin and end. Staffing needs and operational demands may necessitate variations in starting and ending times, as well as variations in the total hours that may be scheduled each day and week. PROSPER operates an attendance register that all staff must sign every morning on reporting for duty and at closing.

Flexible scheduling, or flextime, is available in some cases to allow employees to vary their starting and ending times each day within established limits. Flextime may be possible if a mutually workable schedule can be negotiated with the supervisor involved. However, such issues as staffing needs, the employee's performance, and the nature of the job will be considered before approval of flextime.

Place of Work

Although the PROSPER recognizes that the creative and conceptual work in which employees are engaged will sometimes necessitate work to be done at some outside locations, regular office presence is necessary to maintain interface among staff. The normal place of work for all office staff is their assigned desk or operations area at their various regional or state offices. All employees are expected to work at the office unless their duties require them to be on the field. Any exceptions to this policy must be approved by the immediate supervisor on a case-by-case basis.

Staff must be accountable for time spent away from the office or from the assigned area of operations. Inability to properly account for time spent away from the office will be the basis for appropriate disciplinary action to be instituted by the staff's supervisor. State level staff should be encouraged, guided and supported to manage field activities.

Punctuality

To maintain a productive work environment, PROSPER expects employees to be punctual in reporting for scheduled work. Tardiness places a burden on other employees and on the Project. In the rare instances when employees cannot avoid being late to work or are unable to work as scheduled, they should notify their supervisor as soon as possible in advance of the anticipated tardiness. Excessive tardiness may lead to disciplinary action.

Excessive Absence

Excessive absence decreases team morale and productivity and the Project will take disciplinary action to curb such absence. Excessive absence is when there are five periods of absence, regardless of reason, in any four-month time span. The four-month time span is the most recent four months, even if several of those months had been figured in a previous disciplinary action. A period of absence is defined as all consecutive days of absence from work regardless of reason. For example, an absence on Thursday, Friday and Monday, is considered one period of absence. However, an absence on Monday and then again on Thursday of the same week, is two periods of absence.

Personal official should be arranged during lunchtime or before or after work whenever possible. If an employee must be away during official hours for personal official, the supervisor's approval is required and the absence should be recorded on time sheets appropriately. In the event of an unexpected absence or lateness, the employee should notify the supervisor and/or the NPC within a reasonable period of time (preferably before 9:00 a.m.) on the morning of the absence. If the employee's supervisor or the NPC is unavailable, the employee should leave a message with the secretary.

Overtime

All employees are expected to work the hours required to get the job done. When operating requirements or other needs cannot be met during regular working hours, employees will be encouraged to undertake overtime work assignments. Appropriate incentives will be extended to concerned officers and staff for overtime work.

Emergency Closing

At times, emergencies such as fires, floods or political disturbances, can disrupt project operations, or in extreme cases, cause danger to staff and project property. Management should order emergency closure of work until such situations are under control.

Short and Long Term Disability

No Short or Long Term Disability Coverage is offered by the PROSPER. Vacation and sick days do not accrue during periods of disability.

Use of Official Phone, Computer, E-Mail and Internet

Telephone. Personal use of the telephone for long-distance and toll calls is not permitted. Employees should practice discretion when making local personal calls and may be required to reimburse PROSPER for any charges resulting from their personal use of the telephone.

Computer and E-Mail. Computers, computer files, the e-mail system, and software furnished to employees are PROSPER property intended for official use. Employees should not use a password, access a file, or retrieve any stored communication without authorization. To ensure compliance with this policy, computer and e-mail usage may be monitored. The e-mail may not be used to solicit others for commercial ventures, religious or political causes, outside organizations, or other non-official matters.

To maintain a workplace free of harassment and sensitive to the diversity of its employees, PROSPER prohibits the use of computers and the e-mail system in ways that are disruptive, offensive to others, or harmful to morale. Examples include, the display or transmission of sexually explicit images, messages, and cartoons; ethnic slurs, racial comments, off-color

Internet. Internet access to global electronic information resources on the World Wide Web is provided by PROSPER to assist employees in obtaining work-related data and technology. The following guidelines have been established to help ensure responsible and productive Internet usage:

(i) While Internet usage is intended for job-related activities, incidental and occasional brief personal use is permitted within reasonable limits.

(ii) All Internet data that is composed, transmitted, or received via PROSPER computer communications systems is considered to be part of the official records of PROSPER and, as such, is subject to disclosure to law enforcement or other third parties. Consequently, employees should always ensure that the official information contained in Internet e-mail messages and other transmissions is accurate, appropriate and lawful.

(iii) The equipment, services, and technology provided to access the Internet remain at all times the property of PROSPER. As such, PROSPER reserves the right to monitor Internet traffic, and retrieve and read any data composed, sent, or received through its online connections and stored in its computer systems.

(iv) Data that is composed, transmitted, accessed, or received via the Internet must not contain content that could be considered discriminatory, offensive, obscene, threatening, harassing, intimidating, or disruptive to any employee or other person. Examples of unacceptable content may include, but are not limited to, sexual comments or images, racial slurs, gender-specific comments, or any other comments or images that could reasonably offend someone on the basis of race, age, sex, religious or political beliefs, national origin, disability, sexual orientation, or any other characteristic protected by law.

(v) The unauthorized use, installation, copying, or distribution of copyrighted, trademarked, or patented material on the Internet is expressly prohibited. As a rule, if an employee did not create the material, does not own the rights to it, or has not gotten authorization for its use, it should not be put on the Internet. Employees are also responsible for ensuring that the person sending any material over the Internet has the appropriate distribution rights.

(vi) Internet users should take the necessary anti-virus precautions before downloading or copying any file from the Internet. All downloaded files are to be checked for viruses; all compressed files are to be checked before and after decompression.

(vii) Abuse of the Internet access provided by PROSPER in violation of law or PROSPER policies will result in disciplinary action. Employees may also be held personally liable for any violations of this policy.

(viii) The following behaviors are examples of previously stated or additional actions and activities that are prohibited and can result in disciplinary action:

- Sending or posting discriminatory, harassing, or threatening messages or images
- Using the organization's time and resources for personal gain
- Stealing, using, or disclosing someone else's code or password without authorization
- Copying, pirating, or downloading software and electronic files without permission
- Sending or posting confidential material, trade secrets, or proprietary information outside of the organization
- Violating copyright law
- Failing to observe licensing agreements
- Engaging in unauthorized transactions that may incur a cost to the organization or initiate unwanted Internet services and transmissions
- Sending or posting messages or material that could damage the organization's image or reputation
- Participating in the viewing or exchange of pornography or obscene materials
- Sending or posting messages that defame or slander other individuals
- Attempting to break into the computer system of another organization or person
- Refusing to cooperate with a security investigation
- Sending or posting chain letters, solicitations, or advertisements not related to official purposes or activities
- Using the Internet for political causes or activities, religious activities, or any sort of gambling
- Jeopardizing the security of the organization's electronic communications systems
- Sending or posting messages that disparage another organization's products or services
- Passing off personal views as representing those of the organization
- Sending anonymous e-mail messages
- Engaging in any other illegal activities

Use of Equipment

When using property, employees are expected to exercise care, perform required maintenance, and follow all operating instructions, safety standards, and guidelines. An employee should notify the supervisor if any equipment, machine, or tool appears to be damaged, defective, or in need of repair. Prompt reporting of damages, defects, and the need for repairs could prevent deterioration of equipment and possible injury to employees or others. The supervisor can answer any questions about an employee's responsibility for maintenance and care of equipment. The improper, careless, negligent, destructive, or unsafe use or operation of equipment can lead to disciplinary action.

Smoking, Use of Alcohol and Drugs

Smoking. In keeping with PROSPER's intent to provide a safe and healthy work environment, smoking is prohibited throughout the workplace. This policy applies equally to all employees,

Use of alcohol and drugs. PROSPER recognises that alcohol or other drug abuse can impair short-term or long-term work performance and is an occupational health and safety risk. Accordingly, PROSPER has a zero tolerance policy in regards to the use of alcohol and illicit drugs on their premises or attending other official related premises (e.g. clients) while under the influence of alcohol or illicit drugs. Contravening either of these points may lead to performance improvement action or dismissal.

Visitors in the Workplace

To provide for the safety and security of employees and the facilities at PROSPER, only authorized visitors are allowed in the workplace. Restricting unauthorized visitors helps maintain safety standards, protects against theft, ensures security of equipment, protects confidential information, safeguards employee welfare, and avoids potential distractions and disturbances.

All visitors should go through the body and car scanners, if available, at the entrance gate of PROSPER Offices and should enter the offices via the reception area only. Authorized visitors will receive directions or be escorted to their destination by the receptionist. Employees are responsible for the conduct and safety of their visitors. If an unauthorized individual is observed on PROSPER premises, the security guard should be notified for immediate necessary action.

Security

Employees responsibility. Entry to the PROSPER premises during and/or outside of normal official hours must be through the security guards at the entrance gate. It is the responsibility of every employee to submit himself or herself for routine security check when entering or leaving the office premises.

Employees must ensure that all confidential/sensitive documents are locked away at night. Personal belongings and valuables should also be locked away and secured. Personal property is not covered by Company insurance. Employees must ensure that all inner lights and connections to electronic gadgets are put off/disconnected at close of work. Only security lights should be left on overnight.

Security Disposal/Shredders. Paperwork with any sensitive or confidential PROSPER information needs to be disposed of by either being shredded or placed into the locked security disposal bin. Such documents include but not limited to:

- Procurement related documents
- Financial related documents
- PROSPER official correspondence
- Personnel information
- Classified documents
- Any other sensitive materials/documents

Security Inspections. PROSPER wishes to maintain a work environment that is free of illegal drugs, alcohol, firearms, explosives, or other improper materials. To this end, PROSPER prohibits the possession, transfer, sale, or use of such materials on its premises. The cooperation of all employees in administering this policy is required. Desks, lockers, and other storage devices provided for the convenience of employees remain the sole property of PROSPER. Accordingly, they, as well as any articles found within them, can be inspected by any agent or representative of PROSPER at any time, either with or without prior notice.

Intellectual Property. All intellectual property developed by employees during their employment with PROSPER, including discoveries or inventions made in the performance of their duties, will remain the property of PROSPER. Employees who are given access to confidential information, data, official property, keys to premises or any other official related property/information in the performance of their duties must protect such property and use it only in the interests of PROSPER. Employees must not:

- disclose or use any part of any confidential information outside of the performance of their duties and in the interests of PROSPER; or
- authorize or be involved in the improper use or disclosure of confidential information during or after their employment without the Employer's written consent, other than as required by law.
- ‘Confidential information’ includes any information in any form relating to PROSPER and related bodies, clients or activities, which is not in the public domain. Employees must act in good faith towards PROSPER and must prevent (or if impractical, report) the unauthorized disclosure of any confidential information. Failure to comply with this policy may result in performance improvement proceedings, and PROSPER may also pursue monetary damages or other remedies.

Workplace Monitoring. Workplace monitoring may be conducted by PROSPER to ensure quality control, employee safety and security. Employees, who regularly communicate with contractors, consultants, farmers, etc, may have their telephone conversations monitored or recorded. Such telephone monitoring is used to identify and correct performance problems through targeted training. Computers usage and files may be monitored or accessed.

Because PROSPER is sensitive to the legitimate privacy rights of employees, every effort will be made to guarantee that workplace monitoring is done in an ethical and respectful manner. Employees can also request access to information gathered through workplace monitoring that

Workplace Violence Prevention. PROSPER is committed to preventing workplace violence and to maintaining a safe work environment. Given the increasing violence in society in general, the following guidelines have been adopted to deal with intimidation, harassment, or other threats of (or actual) violence that may occur during official hours or on its premises:

- All employees, both senior and support staff, should be treated with courtesy and respect at all times. Employees are expected to refrain from fighting, or other conduct that may be dangerous to others, including gossiping, peddling rumors and pressure groupings.
- Conduct that threatens, intimidates, or coerces another employee, a customer, or a member of the public at any time, including off-duty periods, will not be tolerated. This prohibition includes all acts of harassment, including harassment that is based on an individual's sex, race, age, position or any characteristic protected by federal, state, or local law.
- All threats of (or actual) violence, both direct and indirect, should be reported as soon as possible to the immediate supervisor or any other member of management. This includes threats by employees, as well as threats by contractors, consultants, or other members of the public. When reporting a threat of violence, you should be as specific and detailed as possible.
- All suspicious individuals or activities should be immediately reported to the appropriate authority.

- Employees should not place themselves in peril by trying to observe or intercede in a commotion or disturbance near the office premises.

PROSPER will promptly and thoroughly investigate all reports of threats of (or actual) violence and of suspicious individuals or activities. The identity of the individual making a report will be protected as much as is practical. In order to maintain workplace safety and the integrity of its investigation, PROSPER may suspend employees, either with or without pay, pending investigation.

Anyone determined to be responsible for threats of (or actual) violence or other conduct that is in violation of these guidelines will be subject to prompt disciplinary action up to and including termination of employment.

Employees are encouraged to bring their disputes or differences with other employees to the attention of their supervisors or the Administration and Logistics Officer before the situation escalates into potential violence. PROSPER is eager to assist in the resolution of employee disputes, and will not discipline employees for raising such concerns.

Miscellaneous Employee Workplace Conduct and Disciplinary Action

Employee Conduct and Work Rules. It is not possible to list all the forms of behavior that are considered unacceptable in the workplace. The following are examples of infractions of rules of conduct that may result in disciplinary action, up to and including termination of employment:

- Theft or inappropriate removal or possession of PROSPER property
- Falsification of timekeeping records
- Working under the influence of alcohol or illegal drugs
- Possession, distribution, sale, transfer, or use of alcohol or illegal drugs in the workplace, while on duty, or while operating employer-owned vehicles or equipment
- Fighting or threatening violence in the workplace
- Boisterous or disruptive activity in the workplace
- Negligence or improper conduct leading to damage of employer-owned property
- Insubordination or other disrespectful conduct
- Violation of safety or health rules
- Sexual or other unlawful or unwelcome harassment
- Possession of dangerous or unauthorized materials, such as explosives or firearms, in the workplace
- Excessive absenteeism or any absence without notice
- Unauthorized use of telephones, mail system, or other employer-owned equipment
- Unauthorized disclosure of official "secrets" or confidential information
- Violation of personnel policies
- Unsatisfactory on the job performance or conduct
- Operating pressure groups.

Sexual and Other Unlawful Harassment. PROSPER will not tolerate actions, words, jokes, or comments based on an individual's sex, race, color, national origin, age, religion, disability, or any other legally protected characteristic. Sexual harassment is defined as unwanted sexual advances, or visual, verbal, or physical conduct of a sexual nature. This definition includes many forms of offensive behavior and

includes gender-based harassment of a person of the same sex as the harasser. The following is a partial list of sexual harassment examples:

- Unwanted sexual advances.
- Offering employment benefits in exchange for sexual favors.
- Making or threatening reprisals after a negative response to sexual advances.
- Visual conduct that includes leering, making sexual gestures, or displaying of sexually suggestive objects or pictures, cartoons or posters.
- Verbal conduct that includes making or using derogatory comments, epithets, slurs, or jokes.
- Verbal sexual advances or propositions.
- Verbal abuse of a sexual nature, graphic verbal commentaries about an individual's body, sexually degrading words, or suggestive or obscene letters or invitations.
- Physical conduct that includes touching, assaulting, or impeding or blocking movements.
- Unwelcome sexual advances constitute sexual harassment when:
 - Submission to such conduct is made either explicitly or implicitly a term or condition of employment;
 - Submission or rejection of the conduct is used as a basis for making employment decisions; or,
 - The conduct has the purpose or effect of interfering with work performance or creating an intimidating, hostile, or offensive work environment.

The following guidelines will be used in the treatment of cases of sexual harassment:

- The employee reports immediately to the supervisor if she/he experiences or witnesses sexual or other unlawful harassment in the workplace. If the supervisor is unavailable or is believed to be inappropriate to contact, the employee should immediately contact the NPC/SPC or any other member of Management. The employee should raise concerns and make reports without fear of reprisal or retaliation.
- All allegations of sexual harassment will be quickly and discreetly investigated. To the extent possible, the confidentiality of the employee and that of any witnesses and the alleged harasser will be protected against unnecessary disclosure.
- When the investigation is completed, the employee will be informed of the outcome of the investigation.
- Anyone engaging in sexual or other unlawful harassment will be subject to disciplinary action, up to and including termination of employment.

The IFAD policy to preventing and responding to sexual harassment, sexual exploitation and abuse is available on IFAD website at <https://www.ifad.org/en/-/document/ifad-policy-to-preventing-and-responding-to-sexual-harassment-sexual-exploitation-and-abuse>.

Personal Appearance. Dress, grooming, and personal cleanliness standards contribute to the morale of all employees and affect the corporate image PROSPER presents to supervising agencies, stakeholders and visitors. Accordingly, during official hours or when representing PROSPER, staff are expected to present a clean, neat, and tasteful appearance. Staff are to dress and groom themselves according to the requirements of their positions and accepted social standards.

Without unduly restricting individual tastes, the following personal appearance attires and items are considered not professionally appropriate during official hours:

- Jeans, bermudas, t-shirts, and shorts
- Unnaturally colored hair and extreme hairstyles
- Offensive body odor and poor personal hygiene
- Facial jewelry, such as eyebrow rings, nose rings, lip rings, and tongue studs

- Multiple ear piercings (more than one ring in each ear)
- Visible excessive tattoos and similar body art

Workplace Etiquette. PROSPER strives to maintain a positive work environment where employees treat each other with respect and courtesy. PROSPER encourages all employees to keep an open mind and graciously accept constructive feedback or a request to change behavior that may be affecting another employee's ability to concentrate and be productive. The following workplace etiquette guidelines are not necessarily intended to be hard and fast work rules with disciplinary consequences. They are suggestions for appropriate workplace behavior to help everyone be more conscientious and considerate of co-workers and the work environment. The NPC or SPC should be contacted for further clarifications or suggestion regarding these workplace etiquette guidelines.

- Avoid public accusations or criticisms of other employees. Address such issues privately with those involved or your supervisor.
- Try to minimize unscheduled interruptions of other employees while they are working.
- Communicate by e-mail or phone whenever possible, instead of walking unexpectedly into someone's office or workspace.
- Be conscious of how your voice travels, and try to lower the volume of your voice when talking on the phone or to others in open areas.
- Keep socializing to a minimum, and try to conduct conversations in areas where the noise will not be distracting to others.
- Minimize talking between workspaces or over cubicle walls. Instead, conduct conversations with others in their workspace.
- Try not to block walkways while carrying on conversations.
- Refrain from using inappropriate language (swearing) that others may overhear.
- Monitor the volume when listening to music, voice mail, or a speakerphone that others can hear.
- Clean up after yourself and do not leave behind waste or discarded papers in your office.

Anti-Corruption Policy

The management of the project funds shall be sufficiently rigorous to safeguard against Fraud and Corruption. Fraud and corruption include, but are not limited to:

- corrupt practice - offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party
- fraudulent practice - any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation
- collusive practice - an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party
- coercive practice - impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party

IFAD applies a zero-tolerance policy towards fraudulent, corrupt, collusive or coercive actions in projects financed through its loans and grants. 'Zero tolerance' means that IFAD will pursue all allegations falling under the scope of this policy and that appropriate sanctions will be applied to parties or entities involved where the allegations are substantiated. IFAD takes all possible actions to protect individuals who submit allegations of fraudulent or corrupt practices in its activities from reprisal. The primary responsibility for enforcing the Anticorruption Policy lies with the Borrower/Recipient, and the first defence for controls shall be exercised by Project staff, Implementing Partners and Counterparts. Pursuant to this, the Borrower/Recipient shall have the

responsibility to incorporate pertinent provisions of the Anticorruption Policy in its contracts with project staff, cooperating/implementing partners, and suppliers/consultants. The IFAD anticorruption policy is available on IFAD website at www.ifad.org/governance/anticorruption/index.htm). The IFAD website also provides instructions on how to report any alleged wrongdoing to the Office of Audit and Oversight (<http://www.ifad.org/governance/anticorruption/how.htm>).

Under the IFAD General Conditions for Agricultural Development Financing, by notice to the Borrower/Recipient, the Fund may require that all bidding documents and contracts for procurement of goods, works and services financed by the Financing include provisions requiring bidders, suppliers, contractors, sub-contractors and consultants to: (i) allow full inspection by the Fund of all bid documentation and related records; (ii) maintain all documents and records related to the bid or contract for three years after completion of the bid or contract; and (iii) cooperate with agents or representatives of the Fund carrying out an audit or investigation.

It is the Project Coordinator's and the Project Financial Manager's responsibility to make sure that all NPCU staff, including the financial department, are aware of IFAD's and the National's anticorruption policies and whistle blowing procedures.

2.7 OFFICIAL TRAVEL EXPENSES

PROSPER will reimburse employees for approved official travel expenses incurred while on assignments away from the normal work location. All official travels must be approved in advance by the NPC or SPC, as appropriate. Employees whose travel plans have been approved should consult the relevant department to make all travel arrangements.

Expenses that generally will be reimbursed include the following:

- Airfare fare, train fare or boat fare for travel in coach or economy class or the lowest available fare.
- Car rental fees, only for compact or mid-sized cars.
- Fares for shuttle or airport bus service, where available; costs of public transportation for other ground travel.
- Taxi fares, only when there is no less expensive alternative.
- Mileage costs for use of personal cars, only when less expensive transportation or official vehicles are not available.
- Cost of standard accommodation in low to mid-priced hotels, motels, or similar lodgings.
- Telephone calls fax, and similar services required for official purposes.

Employees are encouraged to use their cellular telephone or calling cards when traveling, as hotel charges are excessive.

Employees who are involved in an accident while traveling on official duties must promptly report the incident to their immediate supervisor. Vehicles owned, leased, or rented by PROSPER may not be used for personal use without prior approval.

Cash advances to cover reasonable anticipated expenses may be made to employees, after travel has been approved. Employees should submit a written request through their supervisor to the NPC or SPC when travel advances are needed.

When travel is completed, employees should submit travel expense reports within 10 days. Reports should be accompanied by receipts for all individual expenses.

Employees should contact their supervisor and finance officers for guidance and assistance on procedures related to travel arrangements, travel advances, expense reports, reimbursement for specific expenses, or any other official travel issues.

Abuse of the official travel expenses policy, including falsifying expense reports to reflect costs not incurred by the employee, can be grounds for disciplinary action, up to and including termination of employment.

PROSPER strongly upholds and enforces the “No Retirement, No New Advance Policy” as non-retirement of advances affects the phase of preparation of withdrawal applications and fund replenishment to support Project activities.

Vehicles’ Operation and Maintenance

Official vehicles are major assets of PROSPER. Drivers are responsible for the operation and maintenance (O&M) of the vehicles allotted to them. They are required to check their vehicles daily (water, oil, etc.) and sign in the log register daily. Drivers will be trained on the completion of the log register as well as safe defensive driving. They would wash the vehicles daily and keep them clean. All problems arising from the use of the vehicles should be reported to the Administration and Logistics Officer. Fueling should be done at designated gas stations and signed for or receipt obtained.

Drivers are responsible for the safety of their passengers. They should ensure that they and the passengers put on their seat belts (or life jackets in the case of marine craft), that they practice defensive driving, and drive within acceptable speed limits.

In the event of an accident, the driver and the employee(s) should report immediately to the supervisor or other senior official.

Careless driving and tardiness to work could be ground for disciplinary actions up to, and including dismissal.

Insurance

Project vehicles and equipment are major assets and should be properly secured and managed. Insurance of PROSPER vehicles and capital equipment is mandatory. As much as possible, such assets should be insured with government insurance companies.

2.8 CODE OF CONDUCT

Policy and Principles for the Code of Conduct

PROSPER believes in responsible social and ethical behaviour by all employees. Furthermore, PROSPER employees have an obligation to the Project, stakeholders and to themselves to observe high standards of integrity and fair dealing. Unlawful and unethical practices undermine the much-needed trust and confidence in the Project.

The Code of Conduct Policy applies to all employees and provides the framework of principles for conducting official business, and dealing with other employees, stakeholders, consultants, project beneficiaries and contractors. The Code of Conduct does not replace national legislation and if any part of it is in conflict, then the legislation takes precedence. All employees should:

- Act and maintain a high standard of integrity and professionalism
- Be responsible and scrupulous in the proper use of Programme information, funds, equipment and facilities
- Be considerate and respectful of the environment and others
- Exercise fairness, equality, courtesy, consideration and sensitivity in dealing with other employees, contractors, consultants and farmers.
- Avoid apparent conflict of interests.
- Promote the interests of PROSPER at all times.
- Perform duties with skill, professionalism, honesty, care and diligence
- Abide by policies, procedures and lawful directions that relate to the employment with PROSPER and/or stakeholders.

- Avoid the perception that any official transaction may be influenced by offering or accepting gifts
- Under no circumstances offer or accept money.

Any employee, who in good faith, raises a complaint or discloses an alleged breach of the Code, whilst following correct reporting procedures, will not be disadvantaged or prejudiced. All reports will be dealt with in a timely and confidential manner.

PROSPER expects co-operation from all employees in conducting themselves in a professional, ethical and socially acceptable manner of the highest standards. Should an employee have doubts about any aspect of the Code of Conduct, they must seek clarification from their supervisor. Any employee in breach of this policy may be subjected to disciplinary action, up to, and including termination.

Policy and Procedures for Dealing with Conflict of Interest

Policy. Conflict of interest arises whenever the personal, professional or official interests of an employee are potentially at odds with the best interests of PROSPER. Employees need to be aware of the potential for a conflict of interest to arise, and should avoid being put in a situation where there may be a conflict between the interests of PROSPER and their own personal or professional interests, or those of relatives or friends. Where such a conflict occurs (or is perceived to occur), the interests of PROSPER will be balanced against the interests of the employee and, unless exceptional circumstances exist, resolved in favour of PROSPER.

Procedures. Employees must:

- declare to management any potential, actual or perceived conflicts of interest that exist as soon as soon as they are employed by PROSPER in any capacity.
- avoid being placed in a situation where there is potential, actual or perceived conflict of interest if at all possible.
- not set up or engage in private official or undertake other employment in direct or indirect competition with PROSPER, using knowledge and/or materials gained during the course of employment with PROSPER. Engaging in other official interests during work hours will result in strong performance improvement/disciplinary action.

If an employee declares such an interest, PROSPER will review the potential areas of conflict with the employee and mutually agree on practical arrangements to resolve the situation. Failure to declare a potential, actual or perceived conflict of interest or to take remedial action agreed with PROSPER, in a timely manner, may result in performance improvement proceedings including dismissal.

Employee Declaration

I have read and understand the contents of the PROSPER Administrative Manual and I agree to the terms and conditions as stated in the Manual.

Employee Name: _____

Employee Signature: _____

Date: _____

**SECTION 3:
PLANNING, BUDGETING AND BUDGET CONTROL**

3 PLANNING, BUDGETING PROCESS AND BUDGET CONTROL

3.1 Planning Principles

The PCU has major components and a range of implementing activities under each component and by various implementing agencies and participating states that should reinforce each other and jointly lead to achieving the objectives of the project. Clear AWPB is essential in order to integrate all activities and to coordinate the efforts of the different implementing states and entities.

Three Levels of Planning

Planning is not just preparation of an AWPB. Throughout the life of the project, planning should take place at three levels: (a) strategic, (b) annual work planning, (c) short-term planning

- a. ***Strategic Planning.*** A good strategic or logical model is a critical element for a project to succeed. Initially this strategy is defined in the project design document but the PCU will increasingly use their own analysis of what has happened, the external assessments, the participatory planning and actual implementation experience to compliment the project design. To facilitate this process, a strategic review should take place at least once a year, before planning and budgeting for the next year. Review of the Logical Framework is also important.
- b. ***Annual Planning.*** IFAD-funded projects are implemented based on an approved AWPB, and annual planning therefore is the most important planning activity. Annual planning is expected to do four things:
 - i. Take local needs and priorities on board
 - ii. Review and where needed adjust the project strategy
 - iii. Set realistic targets for the year in line with implementation capacity
 - iv. Produce an AWPB based on inputs from the states that can direct implementation by different implementers, service providers and facilitate monitoring.
- c. ***Short-Term Planning.*** An AWPB only defines project activities in general terms but cannot contain operational details of these planned activities. For example, an AWPB can indicate the construction of an office but not when, how, and how many bags of cement will be procured for the construction of this office. Each implementer therefore should use the AWPB as a starting point, together with the procurement plan, but needs to set its individual work.

3.2 Development of the AWPB

The Annual Work Plan and Budget (AWPB) and Procurement Plan will be prepared each year using the bottom-up approach. A joint (GoG, IFAD and MoFA) AWPB will be developed by the PCU and FSIUs. These budgets will be approved by the steering committees and granted NO by the co-financiers. This exercise will commence in July each year by when, the PCU would have prepared their plans based on the market potential and expressed demands of the FOs through the Value Chain Action Plans (VCAPs) and the clusters. The cluster level plans will be prepared with assistance from the PSIU and full participation of the beneficiaries and required inputs and information from service providers. The consolidated plan (state level) will be placed before the respective SVCSC by 15 September each year. After approval from the SVCSC, these Plans ratified at state level are later forwarded by the PSIU to the PCU. The PCU places the draft Plan before the VCSC for information and approval.

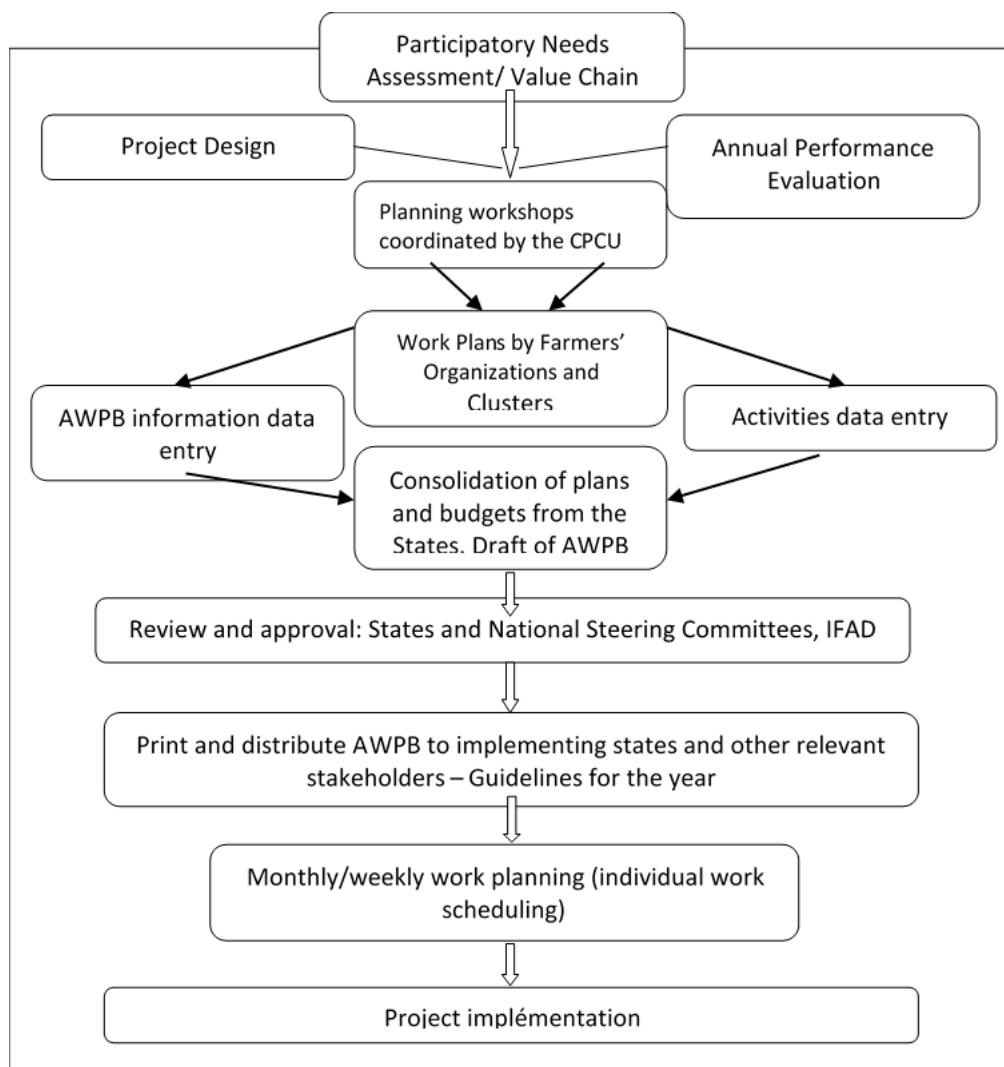
The PCU shall prepare a consolidated final AWPB for each Programme year to be submitted to the Fund for no-objection no later than sixty (60) days before the beginning of the relevant Programme Year – 1 November. The AWPBs would include inter alia a Procurement Plan, a detailed description of planned Programme activities during the coming Programme year, and the sources and uses of the proceeds of the IFAD Financing. The AWPBs shall also provide the basis for identifying the amount of counterpart funds to be provided each year upfront by the Federal, State and Local Governments.

AWPB for each financial year will be the responsibility of PCU.

3.3 Stages in AWPB Preparation, Review and Planning Calendar

The AWPB of the first year of the project is usually based on the project design document and is prepared by a small team of experienced staff. From year 2 onwards, the decentralized and participatory approach should take over. Three important sources of information should be used by the PCU and participating states

- a. The project design document and the Log Frame
- b. The findings of needs assessment and participatory planning exercises in the states and local government levels
- c. The findings of annual strategic review and performance evaluation (review workshops, supervision missions, special reports from consultants etc.)



(Chart 1: Stages in AWPB Preparation, Review and Planning)

3.4 Review and Planning Calendar

Once the states planning process is over and the AWPBs are consolidated, the PCU submits the draft AWPB to the National Project Steering Committee for approval not later than 20th October. The final objective is to send the final AWPB, consolidated and possibly amended, to IFAD not later than 30th September. If IFAD does not comment on the draft AWPB within 30 days of receipt, the AWPB is deemed to be approved. The PCU shall adopt the AWPB substantially in the form approved by IFAD and the PCU shall provide copies thereof to IFAD, prior to the commencement of the relevant project year. The AWPB thus becomes the sole authority for expenditure during the programme year.

Review and Planning Activity	Timing/Deadline
Continuous review and self-appraisal	Continuous
CPCU – Head of components supervision	Daily
CPCU – Finances, MIS, Procurement	Monthly
MIS Feedback	Quarterly
Local and State Governments reporting	Quarterly, Annually
IFAD supervision missions	Biannually
FOs' planning process at beneficiary level	1 to 15 th July
Participatory evaluation/planning workshops	16 th to 31 st July
All DADUs AWPB ready for PCU	1 st August
CPCU consolidation of AWPB	31 st August
Review and approval by the NPSC	20 th September
Final draft of AWPB sent to IFAD/MoF/MoFA	1 st Octoberber

(Chart 2: Review and planning calendar. This timing is to suit MoF and MoFA budgeting processes)

3.5 AWPB Preparation Schedule

When preparing the AWPB the following aspects should be taken into consideration:

- Consistency with other financial reports: It is practical to prepare the budget and financing plan in the same format as the periodic (financial) progress reports and the project financial statements of the project.
- Contingency provisions (physical and price) and allocation of funds from the unallocated expenditure category.
- Post implementation activities e.g. arrangements for after life of project.
- Availability for funds and arrangements for all audits.

In accordance with the FA, a draft AWPB has to be submitted to IFAD no later than 90 days before the beginning of the relevant fiscal year of the project. If required the PCU/MoFA could propose adjustments in the AWPB during the relevant project year, which would become effective after IFAD's approval.

The AWPB must be accompanied by a procurement plan prepared by the Procurement Officer in accordance with the procurement manual of the project. In short, the procurement plan outlines what will be procured, at what cost, under what procurement method and when. The first Procurement plan should cover the first 18 months of the project lifecycle while the subsequent procurement plans should cover 12 months of the project lifecycle. Due to the fact the majority of the funds go through procurement it is vital that the Financial Manager and the procurement officer communicate regularly to ensure sufficient availability of funds. While efficiently managing the intersection between financial management and procurement does not alone ensure the achievement of the development goals, neglecting it virtually guarantees the project will fail.

3.6 Review of the AWPB

A sub-committee on budget should be inaugurated by the National Programme Coordinator. Members shall include all component heads and the Financial Manager / M&E Officer as heads of the committee. At least once every quarter, the budget sub-committee shall meet to review the budget implementation status during the quarter comparing budget with actual figures. In case of differences between the planned and actual costs presented in the AWPB, the sub-committee should identify the reasons for those differences, highlight them and advise on ways to handle such differences and guide against future occurrences.

Every quarter, the Financial Manager (FM) in conjunction with Programme Accountants (PAs) shall review the costs incurred during this time period. In case of differences between the planned and actual costs presented in the Annual Budget, the FM should identify the reasons for those differences and detail them in the periodic Financial Reports presented to IFAD. In case of internal problems identified during the costs review, the FM shall take the necessary steps to eliminate them. Otherwise, the budget for the next quarters should be readjusted to reflect the difference between actual and planned figures. These should also be done in conjunction with the M&E Officer.

3.7 AWPB and related documents approval process

After preparing the draft AWPB, the M&E Officer, the procurement officer and the Financial Manager (in coordination with all staff members: Head of Components) will send it to the Project Coordinator and Steering Committee for review and clearance/approval before sending it to IFAD for no objection.

In accordance with the Financing Agreement, a draft AWPB has to be submitted to IFAD no later than 90 days before the beginning of the relevant fiscal year of the project. If required the MoFAPCU could propose adjustments in the AWPB during the relevant project year, which would become effective after the steering committee's approval and IFAD's no objection.

The checks listed below are designed to improve the quality of the AWPB during the final preparation stage.

- ✓ Is the AWPB complete and clearly presented? Does it disclose sufficient information? Does it contain the necessary financing and budget tables?
- ✓ Are the expenditures structured by component, expenditure category and financier?
- ✓ Is the AWPB in line with the project description and rational (schedule 1) as per the financing agreement and the project log-frame? Are all the activities relevant to the project?
- ✓ Are the cost categories of the AWPB in line with the Schedule 2 of the IFAD financing agreements and are expenditures within the agreed allocations?
- ✓ Does the implementation schedule seem realistic and does it show appropriate targets and milestones?
- ✓ Do the total (and subtotal) costs add up? Are the inputs (unit cost) and outputs (physical targets) adequately quantified? Is there coherence between the inputs and outputs? And

- does these represent value for money (i.e. what is the unit costs for per output, e.g. cost per trained farmer)?
- ✓ Are the unit costs realistic and do they reflect market prices?
- ✓ Is the AWPB accompanied by a procurement plan? Is the AWPB consistent with the procurement Plan? For multi-year contracts or activities, does the AWPB take into account the year's achievable portion only?

For an expenditure to be eligible for IFAD financing, it has to be included in the AWPB, GIMFIS, approved by the relevant authorities, i.e., the steering committee IFAD and Parliament.

3.8 BUDGETARY CONTROL

Computerized budget monitoring system

Usually, the AWPB is developed and modified using excel. However, once the AWPB has been developed and approved, it should be inserted in the budget module of the PCU's accounting system (GIMFIS) to ensure that expenditures not part of the AWPB are blocked reducing the risk of incurring ineligible expenditures.

The computerized accounting system incorporates a feature to allow for comparison of actual expenditure against budget at any time. The Financial Manager shall generate monthly budgetary performance reports comparing actual against budgeted expenditure by financier, category, component and sub-component. The reasons for all variances must be investigated.

A variance is calculated as the difference between the approved and the actual expenditure. Favorable variances occur when actual expenditure on a budget or activity line is less than the approved amount. Adverse variances occur when actual expenditure on a budget or activity line exceeds the approved amount. The Financial Manager should investigate and report on significant variances in actual costs from approved budgeted amounts.

An accepted level of variance will be agreed but any excessive variance (positive or negative) should be investigated. Identifying the cause can allow the PROSPER to take timely and appropriate action.

Variance analysis and reports

In preparing the variance report, The Financial Manager and all Officers should consider the following issues:

- What is the size of the variance?
- Why has it happened?
- Is this the first time or has it happened before?
- Does it appear to be indicating a trend, or merely a one-time expense?
- Can actions be taken to reduce or eliminate the variance (is it a controllable variance)?

The budget vs. actuals reports along with variance reports must be discussed monthly with all PCU staff. The same meetings must be enlarged to implementing partners on a quarterly basis.

Assessment of AWPB Financial execution rates:

The FM should always indicate in the project's quarterly, bi-annual and annual reports the following two rates:

- AWPB financial achievement rate
- AWPB disbursement rate

Financial achievements against AWPB are comprised of the costs of the year's achieved works and activities, received goods, supplies and services. These should be recorded under Payable at year – end, whether they are billed and paid or not yet paid. (cut-off rule).

Disbursements against AWPB are comprised of all payments made by the project during the year: Payment for achieved works and activities, received goods, supplies and services AND ADVANCES.

The Budget Vs. Actuals statements are produced automatically by the Project Accountant from the GIFMIS financial software and give both rates:

- Disbursement rate from the Disbursement Module
- Financial achievement rate from the Budget Monitoring Module.

The Financial Manager should review these statements and send them to the PD with brief comments on figures.

The financial achievement rate should be closed to the physical execution rate given by M&E as it represents the costs of all physical achievements.

The financial software gives also the following figures and rates:

- Disbursement rate including Commitments
- Achievement rate including Commitments

Commitments represent: signed commitments (contracts, MoUs, purchase orders) that are not yet executed /performed. It may be part of the commitment or the entire commitment.

Coherence between physical and financial execution of the AWPB

An analysis of the coherence between physical and financial execution of the AWPB should be performed by the projects and included in their quarterly / semi-annual and annual reports. The following tasks must be performed in that respect:

- Assess the coherence between the physical and the financial execution rates for each activity (main activities) and the possible facts that may have led to the incoherence if any;
- Make corrections / updated in the accounting entries or at M&E level to correct the incoherence
- Comment of the financial issues relating to each activity (main activities).
- Make their appreciation on the AWPB global execution at the time of the report.

The M&E Officer and FM should ensure coherence of budget lines with the expected results of the activity concerned. This will ease the correct interpretation of execution rates against the expected result, for each activity.

Example: Purchase of seeds to be distributed to farmers.

1. If the AWPB has 2 budget lines:

- one budget line for the purchase of the seeds
- one budget line for the distribution costs of the seeds

The project may rate 100% execution on the first line, which could be interpreted as a good result. But if it rates 0% on the second, the performance is bad as the goods are stored somewhere and may deteriorate: the end result of delivery to the final beneficiaries is not achieved.

2. If the AWPB has one budget line: Purchase and distribution of the seeds, one can better assess the performance because the rate of 100% (physical and financial if there are no over costs) will be reached only when the distribution is done.

The detailed tasks and costs should be presented in the Budget Notes.

3.9 Budget Monitoring

Assessment of AWPB Financial execution rates:

The FM should always indicate in PROSPER quarterly, bi-annual and annual reports the following two rates:

1. AWBP financial achievement rate
2. AWBP disbursement rate

Financial achievements against AWPB are comprised of the costs of the year's **achieved** works and activities, **received** goods, supplies and services. These should be recorded under Payable at year-end, whether they are billed and paid or not yet paid. (**cut-off rule**).

Disbursements against AWPB are comprised of all payments made by the project during the year: Payment for **achieved** works and activities, **received** goods, supplies and services **AND ADVANCES**.

The *Budget Vs. Actuals* statements are **produced automatically by the Accountant from the financial software and give both rates:**

- Disbursement rate
- Financial achievement rate

The FM should review these statements and send them to the PC with brief comments on figures.

The financial achievement rate should be much closer to the physical execution rate given by M&E as it represents the costs of all physical achievements.

The financial software gives also the following:

- Disbursement rate including Commitments
- Achievement rate including Commitments

Commitments represent: signed commitments (contracts, MoUs, purchase orders) that are not yet executed /performed. It may be part of the commitment or the entire commitment.

Coherence between physical and financial execution of the AWPB

The analysis should be made by the projects and included in their quarterly / semi-annual and annual reports.

They have to:

- Analyze the coherence between the physical and the financial execution rates for each activity (main activities) and the possible facts that may have led to the incoherence if any;
- Make corrections / updated in the accounting entries or at M&E level to correct the incoherence
- Comment of the financial issues relating to each activity (main activities).
- Make their appreciation on the AWPB global execution at the time of the report.

SECTION 4: FUNDS FLOW:
Incoming Funds Flow and Disbursement Management

4 FUNDS FLOW: INCOMING FUNDS FLOW AND DISBURSEMENT MANAGEMENT

4.1 Disbursement Arrangements

Disbursement arrangements for the Project are grounded in the Project Financing Agreement, the Project Design Report, the Letter to the Borrower and IFAD guidelines on supervision and implementation support of projects and programmes funded from IFAD loans and grants.

IFAD funds will be disbursed into an account denominated in United States dollars with the Central Bank of Ghana, and will be operated by the PCU using country system. An operational bank account in local currency will also be used.

The proceeds from the designated account will be used exclusively to finance eligible project expenditures, as stipulated in schedule 2 of the financing agreement. Funds will be periodically transferred from the designated account to the operational account for expenditures eligible for financing by IFAD. Additional designated and operational accounts will be opened for GCF financing. Funds flow arrangements shall be organized in line with Public Financial Management procedures adopted by GoG. Report-based disbursement method will apply for the project, with disbursement based on the interim financial reports of the project which will be specified in the Letter to the Borrower. Other methods of disbursement will include advances, direct payments, and reimbursements.

Prior to disbursement, relevant Project Accounts should have been opened by the Lead Project Agency through the MoF and the CAGD. These accounts are:

Designated Accounts. The Borrower will be required to open and maintain one bank account (the Designated Account- DA) denominated in USD with a bank acceptable by the Fund, designated to receive IFAD loans proceeds. GCF loan and grant designated accounts will be opened as soon as the specific agreement concerning GCF funds will enter into force. All Designated Accounts will be administered based on the revolving fund mechanism.

Programme Accounts. One Program Account denominated in Ghana **cedis** shall be opened and maintained in a bank, acceptable to the Fund, to receive funds from the IFAD *Designated Account* for eligible expenditures and will be managed by the designated staff within the project implementation unit. Two program accounts will also be opened to receive funds from the GCF Loan and grant designated accounts as specified in the IGREENFIN Appraisal Report. An additional Programme Operational Account in Ghanaian cedi shall be opened to provide *counterpart funds* from the GoG for Project implementation. The default payment accounts shall be the programme accounts in line with Bank of Ghana directives that the Ghana Cedi is the only legal tender in Ghana (Foreign Exchange Act, Act 723, 2006).

The regular signatories to the bank accounts will be the Project Coordinator and the Financial Manager as Category A and Category B signatories respectively, unless clearly specified otherwise in the IFAD or GCF Financing agreements. However, the Chief Director (MoFA) and Director of Finance (MoFA) will be the alternate Category A and B signatories respectively. The same arrangements will be applicable to funds allocated by co-financiers. All signatories must have access to the GFMIS platform to enhance payments through the use of the electronic funds transfer feature of GFMIS.

Payments made against advances to implementing partners will be secured against bank guarantees and training will be provided to partners' financial staff on IFAD procedures. All processes will be documented and outlined in MOUs.

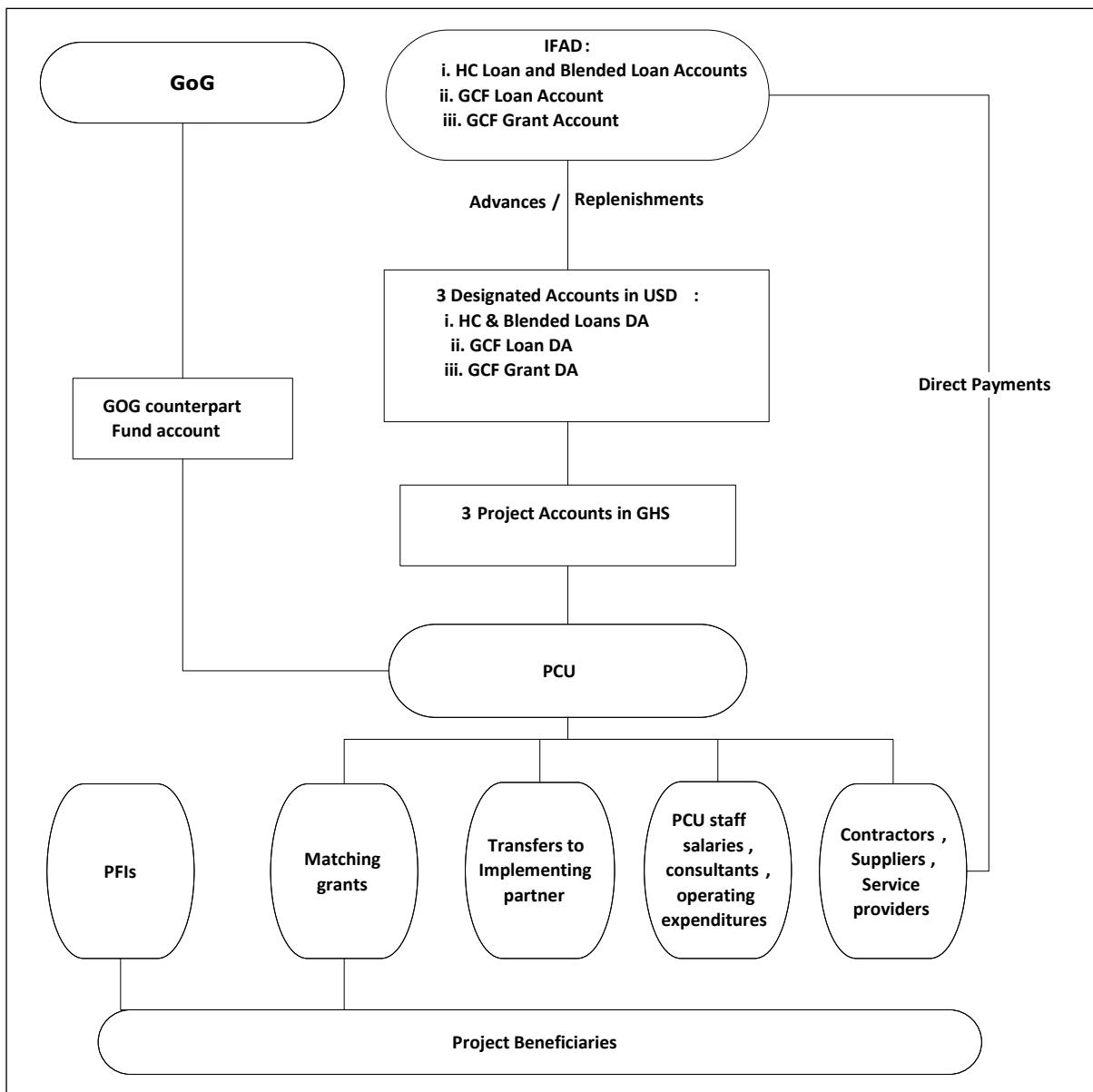
Before withdrawal can commence (after the loan is declared effective) IFAD must receive from the MoF (the designated official representative of the Borrower as stated in the Financing Agreement) a letter designating the person or persons authorized to sign WAs, together with their authenticated specimen signatures.

4.2 Withdrawal of Funds

The Project Financing Agreement refers to the withdrawal of funds to meet project expenditure. Report-based disbursement method will apply for the project, with disbursement based on the interim financial reports of the project as specified in the Letter to the Borrower. Other methods of disbursement will include advances, direct payments, and reimbursements. Withdrawal of Loan or Grant Funds must be carried out in accordance with the disbursement procedures of IFAD as the case may be. The MoF and PCU must always refer to the Letter to Borrower from IFAD or the IFAD Disbursement Handbook, and ensure that project staffs are trained in these procedures. The PCU is responsible for submitting WAs to IFAD via the IFAD Client Portal.

GoG and IFAD will explore the use of harmonized disbursement forms to make them easy to be automatically generated from the project's accounting system.

The PROSPER Funds Flow Diagram is presented below:



4.3 Disbursement Procedures

There are three standard procedures that may be used for disbursing loan funds.

- **Procedure I: Designated Account**

This should be used for the documentation of the initial deposit and replenishment to the Designated Account of the Project.

- **Procedure II: Direct Payment**

This procedure should be used for eligible Project expenditures to be paid directly by IFAD to suppliers, contractors, consultants, or other third parties as authorized by the Borrower.

- **Procedure III: Reimbursement**

This procedure should be used when eligible Project expenditures reimbursable under the loan or grant have been pre-financed by the Borrower.

4.4 Use of Designated Account

Application for deposit of the Initial Withdrawal:

The project PCU will receive initial deposit amounts from IFAD and GCF in the designated accounts equivalent to the first six (6) months of operation as approved in their first AWPB. All withdrawal applications shall be processed through the IFAD Client Portal.

The request for the Initial Deposit into the Designated Account shall be made using Form 100. Documentation required in support of the WA for Initial Deposit are:

- A copy of the agreement between the Borrower and BANK OF GHANA holding the Designated and Programme Accounts, confirming the establishment of the designated bank accounts, providing the account numbers and the agreed procedures for the operation of the accounts;
- The Approved AWPB and Procurement Plans; and
- A list of the persons (names and functions) authorized to operate the Designated and Programme Accounts

After loan effectiveness is declared, the following details will be provided to the MoF for submission to IFAD.

- | |
|---|
| (a) Specimen signatures for all the nominated signatories to bank accounts and withdrawal documents. |
| (b) Details of project bank accounts for all of the Project and USD accounts including:
Name and address of bank
Title of account and account number
Names and ranks, and signatures of authorized signatories |

Form 100 shall be signed by the authorized signatories, i.e. PC and FM. Copies of the duly signed Form 100 together with the relevant attachments shall be prepared and uploaded onto the IFAD Client Portal.

Replenishment of the Designated Account:

Further advances to the Designated Accounts will be made for the next reporting period provided that at least 70% of the immediately preceding advance and 100% of all prior advances have been justified. All withdrawal applications shall be processed through the IFAD Client Portal.

WAs for the replenishment of the Designated Account which shall be denominated in US dollar shall be prepared using Form 100. Summary Sheet Form 101 is used when additional space is required, that is, for more than one contractor, or if expenditures relate to multiple suppliers on a reimbursement basis. Summary Sheet Form 102 is used when expenditures are claimed under Statement of Expenditure (SOEs). If the expenditures are not claimed under a Statement of Expenditure (SOE), the supporting documents (bills, receipts, evidence of payments and evidence of shipment) are submitted.

In order to recover the actual US dollars withdrawn from the Designated Account, the local currency expenditures that were funded from the designated bank accounts should be converted at the prevailing exchange rate at the time of the transfer of US dollars to the Project Account in Ghana Cedis and not at the prevailing exchange rates at the time of payment or time of the withdrawal application.

At the time of transferring funds from the Designated Account, the schedule of payment which shall show the calculations of eligible project expenditures by categories and at the agreed funding percentages shall constitute the Statement of Expenditure for that WA. No payment shall be authorized from the Designated Account except for eligible expenditures based on approved work plan and budget. Expenditures which have not been properly documented and advances which have not properly retired shall not qualify for replenishment under the Project. Note also that part payment will only be reimbursed when bank guarantee is attached.

Recovery of Initial Deposit to Designated Account:

Any balance of the Designated Account Initial Withdrawals that remains unjustified at the Closing Date of the Loan must be promptly refunded to IFAD in the currency used by IFAD for the purpose of withdrawal from the Loan Account.

Providing supporting documentation for Disbursement: In the preparation of WAs for the replenishment of Designated Accounts, the following documents shall be required.

- Withdrawal Application Forms.
- Application Summary Sheets.
- Interim Financial Statements
- Register of Contracts.
- Designated Account Reconciliation Statement.

Withdrawal Application Forms:

Withdrawal Application Form 100: This is the official application for the withdrawal of funds from IFAD. It has 14 sections which shall be duly completed by the FM. The Letter to the Borrower has the instructions on how to complete Form 100. The following notes are however to be applied in completing Form 100.

- Applications should be submitted in duplicate and together with all supporting documentation sent to IFAD, through the ICP.
- Separate applications must be prepared for each currency of payment and for each payee.
- All numbered lines of paragraph 1 through 14 must be completed
- When completed, this application should be checked to ensure that the references, amounts, and other details are correct before passing to the Authorized Representative for signature. Mistakes and omissions lead to delay in payment.
- If a Summary Sheet is used, items 4 through 6 should be left blank.
- The WAs shall be prepared in English and shall be numbered consecutively irrespective of the withdrawal procedure used.

Application Summary Sheets

Form 101: Application Summary Sheet Form 101 is used for replenishment of the Designated Account, direct payment and reimbursement of expenditures that are not eligible under the SOE. Effort should be made to ensure that all relevant sections of the Form are completely and accurately filled.

Form 102: This is the form prescribed for expenditures eligible under the SOE i.e. where supporting documentations are not required to be attached to the WA. Care should be taken to ensure that the relevant sections for replenishment into the Designated Account or reimbursement of expenditure pre-financed by the Borrower are appropriately marked. Bank Statement duly cross reference to SOE should be attached.

Supporting documentation

For expenditures eligible under SOE:

- The completed and signed SOE Form 102 appropriately marked for replenishment or for reimbursement of eligible project expenditure
- Every form should be signed by the authorized representatives
- The Interim Financial Reports, at a minimum comprising:
 - (i) sources and uses of funds by expense category,
 - (ii) sources and uses of funds by component and subcomponent
 - (iii) a variance analysis, comparing actual expenditures against budget, with explanations for significant variances for both the quarter and cumulative period
 - (iv) The DA activity statement (and related bank statements)
 - (v) The summary SOEs extracted from the DA by expense category, for contracts subject to IFAD prior review
 - (vi) Semi-Annual Cashflow Statement by Financier (forecast expenditures for the following two reporting periods)

For direct payment to a contractor, supplier or consultant:

- The completed and duly signed Form 101
- Invoice (or Demand Letter, Statement), certified for payment
- Contract (for the first progress payment or one-time payment)
- Purchase order
- Bank guarantee, for advance payment
- Delivery receipts for goods
- Certification for works by certified professional completed on civil works
- Consultant's report, if required, for final payment to be made

Register of Contracts: It is required of the Project to keep a register of all contracts entered into whether prior or post review threshold contracts. The register will disclose necessary detailed information about the contract for works, supplies and consultancy executed by the Project for the period covered by the WA. A schedule of contract register is attached in Annex 2.

Designated Account Reconciliation Statement – Form 104: Each WA submitted for replenishment to the Designated Account must be supported with a Designated Account Reconciliation Statement (Form 104), together with the bank statements issued by BANK OF GHANA. The Designated Account Reconciliation Statement enables the Project to ascertain the liquidity and facilitates in overall resource management.

The completed and signed Designated Account Reconciliation Statement together with the bank statements of BANK OF GHANA and the bank statements of the Project Accounts (if applicable) are mandatory supporting documentation WAs for replenishment to the Designated Accounts.

To complete the Designated Account Reconciliation Statement, each application for replenishment to the Designated Account should be supported by a statement issued by BANK OF GHANA for the Designated Account at the relevant month-ending (Reporting Period), showing all transactions under the account during the reporting Period, including:

- Opening balance
- Each transaction during the Reporting Period, by currency and amount paid
- Date of payment
- Rate of exchange used
- Deposit(s) by IFAD into the Designated Bank Accounts during the Reporting Period; and
- Closing balance at the end of the Reporting period

The statement of account by BANK OF GHANA for the Designated Account must be provided in USD, with each transaction shown in the currency and amount of withdrawal made.

4.5 Period of Withdrawal Application

The period of WA starts with the date of transfer of funds from the Designated Account to Programme Account to meet eligible project expenditures to the date that that transfer or any other within the application period has been fully exhausted in the Programme Account. An earlier date could be taken where the FM feels that enough amounts for replenishment could be prepared from the withdrawals that have been made in the Programme Account.

The cut-off date for item 4 should be consistent with item 5 in Form 104, i.e. the same date of closing balance should be used and this date must so reflect on the bank statement. Designated and clear instructions should be given to the bank in requesting for bank statement so that the closing date of bank statements should be consistent with items 4 and 5 in Form 104 and also the end of reporting period of Forms 101 and 102 as the case may be.

4.6 Direct Payment

This procedure is used for asking IFAD to make a direct payment to a third party (usually to a supplier, contractor or consultant on the basis of the Borrower's instructions) for amounts due. The appropriate forms to use for this Application for Withdrawal are:

- Form 100- Application for Withdrawal
- Summary Sheet – Form 101 with the section for direct payment on top right corner of the form appropriately marked, and if required, to summarize several invoices.
- The Withdrawal Application Form and Summary Sheet to be used under this procedure is the same as the reimbursement procedure. The only difference is in the payment instruction. Under the direct payment procedure, IFAD pays directly to the supplier, contractor or consultant.
- Attachments to Form 101 are as described above section 6.4.4b.

It should be noted that direct payment to a contractor, supplier or a consultant should be for an amount exceeding USD100, 000. If lower, payment should be made from the Designated Account.

4.7 Reimbursement

All eligible expenditures pre-financed by the borrower are claimed for reimbursement under this procedure using Application for Withdrawal – Form 100 and Summary Sheet Forms – 101 or 102 as required.

- If Summary Sheet Form 101 is used, the supporting documents to be attached are the same as discussed under replenishment of Designated Account above
- Separate summary sheets should be used for each disbursement category
- If expenditures are claimed under the SOE, supporting documents do not need to be submitted with the Application for Withdrawal
- A summary sheet Form 102 should be prepared, signed and attached to the WA
- Normally, reimbursement applications should be submitted ***within 30 days*** from the date that payment was made and, in any case, ***no later than three months*** of such date
- Reimbursement should be made in the currency of the Borrower and payment should be domiciled into the Government Counterpart Funds Account where the payment for the expenditures being claimed was made
- Request for reimbursable will not be eligible where the Designated Account is well funded during the period of making claim.

4.8 Evidence of Authority to Sign Withdrawal Applications

The IFAD requires the borrower's representative, as designated in the financing agreement, to furnish satisfactory evidence of the authority and authenticated specimen signatures of the individuals who will sign WAs on behalf of the borrower. This evidence must reach the IFAD before the first WA is presented by the borrower and should be the original (photocopies, facsimiles or other means of transmission are not acceptable).

Each WA should be signed by such duly authorized individuals, and the IFAD must be notified of any change in the signatories authorized to withdraw IFADs from the loan account.

The IFAD must also be notified of the designated signatories for operating any designated and/or programme or other accounts, including changes thereto, whether or not these authorized signatories are included in the financing agreement. Such changes, as effected during the life of the project, must be communicated promptly to the IFAD. The borrower, guided by the sample in annex 1 of the disbursement handbook, should provide the names and specimen signatures of the newly appointed signatories and include the date when such change is to take effect. The original of such changed documentary evidence is to be provided to the IFAD.

The PCU will compile and consolidate, on a timely basis, eligible project expenditures for activities. From these expenditures the PCU will prepare withdrawal applications (WAs) for eligible project expenditures under each financing source and submit these to IFAD. All WAs will be signed by the authorized signatories under the IFAD Client Portal (ICP). The Withdrawal of Funds will follow IFAD disbursement procedures and the transfers will reflect the requirements of the Project implementation.

4.9 Submission of WAs using IFAD client portal

The IFAD client portal (ICP) allows the project to submit Withdrawal applications electronically to IFAD while the hardcopies are maintained by the project for audit purposes.

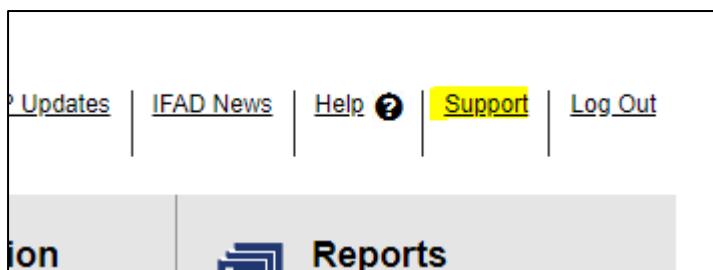
ICP also allows the project and ministry staff to access real time financial reports on the project performance or debt servicing reports of ongoing and closed projects.

If you face any technical problems, or you want to raise issues or queries you can contact the 'ICP dedicated help-desk by filling up a basic form in the ICP portal itself. This can be done in two places:

- On the ICP login page, below the area where you enter your username and password, there is a link 'Request Support':

- Alternatively, if you have already logged into the ICP, you can find another 'support' button on the top right-hand side of the page (picture below). Clicking either of these will take you to a basic form where you can enter your enquiry.

It is important to note to use the ICP support function for any ICP related issues or queries as it is the quickest and most direct way to have issues reviewed and escalated by the IFAD support team. On the other hand, if you should require guidance on how to fill in a Withdrawal application or run a report, you can find detailed quick cards by clicking on the "Help" button just next to the support button (picture below).



4.10 Terms and Conditions for Access to IFAD Client Portal

These are the terms and conditions of use that apply to the IFAD Client Portal (ICP).

Only authorized users are allowed to access the system. Unauthorized access is not permitted and IFAD reserves the right to fully pursue any and all remedies available to it related to any unauthorized access, use or connection.

Access to the web-site requires the user to be authenticated using a Two Factor Authentication (2FA) mechanism. The first factor is a username and password combination.

IFAD will determine which type of second factor is most appropriate Based on the evolution of the associated technology. Currently, the default second factor adopted by IFAD is to issue Borrower/ users with a soft token accessed through a smart phone.

A. Identification of Users.

1. The Borrower/ must identify users authorized to use the ICP and is responsible for the actions performed in the ICP by these users.
2. The Borrower/ must immediately notify IFAD if a User is no longer authorized to act as a User.
3. Each User will be required to provide various mandatory data for creation of a user profile before access to the ICP is granted.
4. Once user registration is completed the User will be issued with the second authentication factor. This registration step requires the User to establish a PIN code which is associated with the second factor.

5. The Borrower/ must ensure that all Users authorized by them to access the ICP have read, understood and agreed to be bound by these Terms and Conditions of Use before accessing the ICP.
6. IFAD will maintain in its records a user account (Account) for each User to manage access to ICP.

B. Use of 2FA

I. Security

It is the responsibility of the ICP User to:

- I.1. not reveal his/her PIN code to anyone or store or record the PIN in written or other form.
- I.1. not allow anyone else to utilize his/her credentials to access information in the ICP or initiate or submit online requests in the ICP.
- I.2. always logout from the application when not using the system.
- I.3. immediately notify IFAD through the ICP Support form available on the ICP log-in page, if the User believes a third party has learned any part of his/her credentials.
- I.4. immediately notify IFAD through the ICP Support form available on the log-in page of any lost, stolen or compromised 2FA devices, and take other reasonable steps to ensure such 2FA devices are disabled immediately.

II. Reservation of Right to Disable Access

- II.1. IFAD reserves the right to revoke the authorization of a User to access the ICP at any time.

III. Care of 2FA

- III.1. IFAD will deliver soft token activation codes or hard tokens to each User in such manner as it chooses.
- III.2. Hard tokens remain the property of IFAD.
- III.3. Hard tokens contain delicate and sophisticated instrumentation and therefore must be handled with due care, and must not be immersed in liquids, exposed to extreme temperatures, crushed or bent. Also, hard tokens should be kept more than five (5) cm from devices that generate electromagnetic radiation (EMR), such as mobile phones, phone-enabled PDAs, smart phones and other similar devices. Hard tokens must be carried and stored separate from any EMR device. At close range (less than 5cm), these devices can output high levels of EMR that can interfere with the proper operation of electronic equipment, including the hard token itself.

IV. Replacement of hard tokens

- IV.1. Lost, damaged, compromised (in terms of B.I.4, above) or destroyed hard tokens will be replaced at the expense of the Borrower.

4.11 Supporting Documentation

(i) For all cases described in (ii) through (vi) below:

- ✓ The signed contract or purchase order - showing the specified amount that is due to be paid;
- ✓ The bank guarantee for advance payment, as specified in the contract documents;
- ✓ The bank guarantee for performance, as specified in the contract documents;
- ✓ Copies of communications sent by the IFAD country programme manager to the lead project agency providing the

'no objection' (whether post or prior) to the contract award; and

✓ Evidence of payment.

(ii) For payment of goods, in addition to (I):

✓ Supplier's invoice, duly certified for payment by the project director - specifying the goods, their quantities, and prices;

✓ Bills of lading or similar documents; and

✓ As appropriate, the certificate of delivery (to include condition of goods on delivery).

(iii) For payment of consultants' services and other services, in addition to (I):

✓ The supplier's or consultant's claim, duly certified for payment by the project director and showing sufficient detail. If such services relate to the importation of goods (for example, freight and insurance payments), adequate reference should be given to enable the Fund to relate each of these items to specific goods whose cost has been or is to be financed by the financing closing date; and

✓ As appropriate, a certificate of delivery of satisfactory services. If the consultant provided training it should be specified how many workshops/people trained together with a list of participants. If the Consultant developed a manual or a study this study should be attached or indicated in the certificate, etc.

(iv) For progress and retention payments of civil works, in addition to (1):

✓ The claim of the contractor, including a financial progress report, stating the work performed and the amount due;

✓ A certificate - signed by the project consultants or owner's representative, if any, or by the borrower's chief engineering officer or resident supervising engineer assigned to the project, to the effect that the work performed is satisfactory and the payment claimed is due in accordance with the terms of the contract; and

✓ A copy of the contract payment monitoring form.

(v) For payment of credit lines/grants etc. in addition to(i):

✓ Duly certified financial reports;

✓ Copies of the sub-agreements with the PFIs;

✓ Approved minutes of the technical committee (if applicable); and/or

✓ Payment requests from the PFI and evidence of payment.

(vi) For payment of Trips, fuel, stationary and other expenses in addition to (i):

✓ Supplier invoices;

✓ Evidence of payment;

✓ Back to office report;

✓ Travel authorization; and/or

✓ Expense reports by the traveller (including invoices).

APPENDIX 1. INTERIM FINANCIAL REPORT

INTERIM FINANCIAL REPORT

FORM 100 - APPLICATION FOR WITHDRAWAL

1	IFAD Loan/Grant/Financing No.:	IFAD XXXXXXXXXX	2	Application No.:	x
To: International Fund for Agricultural Development Via Paolo di Dono, 44 00142 Rome, Italy					
3	Please indicate the disbursement procedure used				
4	Please Pay:	xxx		xxx	Amount to be Paid in Figures
Currency Name					

We hereby apply for withdrawal from the Loan/Grant Account opened under the IFAD Financing Agreement and hereby certify as follows:

A. The undersigned has not previously withdrawn from the Loan/Grant Account to meet these expenditures and has not and does not intend to obtain funds for this purpose out of the proceeds of any other Loan/Grant/Financing.

B. The goods and services covered by this application have been or are being purchased and/or procured in accordance with the terms of the General Conditions Agricultural Development Financing approved on 29 April 2009.

C. This Application for Withdrawal covers a reporting period:

xx/xx/xx
From (dd/mm/yy) xx/xx/xx
From (dd/mm/yy)

The undersigned hereby certify that the expenditures for which replenishment is claimed in Form 102 A and 102 B are correct, for the Project as provided in the IFAD Financing Agreement. We certify that the expenditures incurred are within the Statement of Expenditure (SOE) thresholds and represent resources used in compliance with the principles of legality, regularity and sound financial management.

We certify that the audit requirement outlined in article VIII and section 9.01 of the General Conditions will be complied with, and that the requirements for maintaining records and documentation for expenditures disbursed using the Statement of Expenditure (Form 102/A) modality and outlined in section 4.04(c) and (d) of the General Conditions, will be complied with. This includes, inter alia, that an annual audit will be carried out and that the documentation (including purchase orders, invoices, evidence of payment and delivery and any other relevant documentation evidencing the expenditures) will be retained for 10 years after the Closing Date of the IFAD Financing, and that such records and documentation will be made available to IFAD representatives for review on request

Details of Expenditure

(Use summary sheet(s) if additional space is required or if expenditures relate to more than one supplier, category or subcategory

Payment Instructions

5	Name and Address of Contractor or Supplier (If different from Payee)	xxx	8	Payee's Bank	
6	Procurement Details		9	Payee's Name and Address	
a)	Contract or Purchase Order No. and Date:	xxx	xxx		
b)	Description of Goods, Work or Services:	xxx	xxx		
c)	Currency and Total Amount of Contract	xxx	xxx		
d)	Invoice No. and Net Amount of Invoices covered by this Application	xxx	xxx		
7	Withdrawal Details		10	Correspondent Bank (not required when using the Direct Payment procedure)	
a)	Category or Subcategory No.:	xxx	xxx		
b)	Percentage of Expenditures to be Financed by IFAD:	xxx	xxx		
12	xxx	Name of Borrower/Recipient	13	xx/xx/xx	
14	xxx	Name(s) and Title(s) of Authorized Representative(s)	15	xxx	
			Date (dd/mm/yy)		
			Signature(s) of Authorized Representative(s)		

APPENDIX 2: Designated Account Activity Statement
FORM 1-A

LOAN XXXXXXXXXXXX
Designated Account Activity Statement

Bank and Account No. USD USD

Part 1

1. Cumulative advances to end of current reporting period
-

2. Cumulative expenditures to end of last reporting period
-

3. Outstanding advances to be accounted for (1 minus 2)
-

Part II

4. Opening DA Balance at beginning of reporting period (as of _____)
-

5. Add/Subtract Cumulative adjustments (if any) * _____

6. Advances from IFAD during reporting period _____

7. Add 5 and 6 _____

8. Outstanding advances to be accounted for (4 +7) must be same as item 3

9. Closing DA balance at end of reporting period (as of _____) _____

10. Add/Subtract cumulative adjustments (if any) ** _____

11. Expenditures for current reporting period _____

12. Add 10 and 11 _____

13. Add 9 and 12 _____

14. Difference (if any) 8 minus 13 *** _____

Part III

15. Total forecasted amount to be paid by IFAD _____

16. Less: Closing DA balance (as per item 9) _____

17. Cumulative adjustment (if any) _____

18. Add 16 and 17 _____

19. Cash requirements from IFAD for the next six months (15 minus 18) _____

20. Amount requested for advance to DA (rounding)

*Explanation for item 5 (if not zero)	FMR & AW Ref	Amount (+/-)	Remarks

*Explanation for item 10 (if not zero)	FMR & AW Ref	Amount (+/-)	Remarks

*Explanation for item 14 (if not zero)	FMR & AW Ref	Amount (+/-)	Remarks

*Explanation for item 17 (if not zero)	FMR & AW Ref	Amount (+/-)	Remarks

APPENDIX 3: Summary Statement of Expenditures (Sum-SOE) for expenditure not subject to Prior Review

FORM 1-C

LOAN XXXXXXXXXXXX

Summary Statement of Expenditures (Sum-SOE) for expenditure not subject to Prior Review

Quarter

Ln/Cr/TF No.:

Street No.:

1	2	3	4	5	6	7	8	9	10
SR	Disbursement Category Cat. No. Description	Threshold for SOEs (USD Eqv)	Number of SP2D Covered	Country of Supplier / Consultant / Training	Total Paid to Contractors / Expenditures (GoG + IFAD)	IFAD Financing %	Amount of IFAD portion paid	Average Exchange Rate	Amount charged to DA (USD eqv)
	(1) Category 1* (2) Category 2 (3) Category 3 (4) Category 4								
	GRAND TOTAL								

- Please have a separate line item if GCF financing percentage is different

ATTACHMENT 6: Summary Sheets for Payments of Contract Subject to Prior Review

LOAN XXXXXXXXXXXX

Summary Sheets for Payments of Contract Subject to Prior Review

Quarter:

Ln/Cr/TF No.:_____

- Street No.:_____

1	2	3a	3b	4	5	6	7	8	9	10	11	12	13
SR	Disbursement Category	Office Issuing SP2D	Cross Ref SP2D	Date of Payment (SP2D)	Contract No. and Date	Supplier / Contractor Name	Contract Value (Incl Add)	Total Amount Paid to Contractor	IFAD Financing %	Amount of IFAD portion paid	Exchange Rate Applied	Amount Charged to DA (USD eqv)	IFAD Contract Ref
1	(1) Category 1*												
2													
3													
	<i>Subtotal</i>												
1	(2) Category 2												
2													
3													
	<i>Subtotal</i>												
1	(3) Category 3												
2													
3													
	<i>Subtotal</i>												
1	(4) Category 4												
2													
3													
	<i>Subtotal</i>												
	Grant Total												

APPENDIX 4: Project Cash Forecast

Form 1-D

LOAN XXXXXXXXXXXX
 Project Cash Forecast
 For the Quarter Ending MM/DD/YYYY

SR	Disbursement category	GoG + IFAD Cash Requirement for Quarter Ending mm/dd/yyyy	GoG + IFAD Cash Requirement for Quarter Ending mm/dd/yyyy	Total Cash Requirement for next Two Quarters (six months)	Total Cash Requirement for next Two Quarters (six months)	IFAD Cash Requirement for next Two Quarters (six months)	IFAD Cash Requirement for next Two Quarters (six months)
		GHS	GHS	GHS	GHS	GHS	USD
1							
2							
3							
4							
	Total						

APPENDIX 5: Project Uses of Funds by Category

Form IFR-1

LOAN XXXXXXXXXXXX

Project Uses of Funds by Category for the Quarter Ending MM/DD/YYYY

Currency: _____

	Actual			Planned			Variance		
	1	2	3	4	5	6	7	8	9
Sources of Funds									
Total Sources of Funds									
Uses of Funds (by Category)									
(1) Category 1									
(2) Category 2									
(3) Category 3									
(4) Category 4									
Total Uses of Funds									

NOTE:

A. Sources of fund:

1. Actual includes IFAD portions, GCF, and GoG counterpart funds
2. Planned: to be completed with the approved budget; especially for the current quarter this must be completed with the previous quarter's cash forecast.

B. Uses of Funds:

3. Actual project expenditure by categories for the IFAD portions, GCF portions, and GoG counterpart funds
4. Planned: "Year-to-date" to be completed with the approved budget; "Cumulative-to-date" to be completed with amount in PA
5. "Current Quarter" covers the expenditures claimed to be eligible reported in the quarter
6. "Year-to-Date" covers accumulative expenditures during the year

7. "Cumulative-to-date" covers expenditures since the beginning of the project with the current quarter.

SN	Uses of Funds (by Category)	Actual / Planned					
		1	2	3	4	5	6
	Total	GoG Counter-part	Other Donors	Outstanding	Charged to IFAD DA	Charged to IFAD DA	
1							
2							
3							
4							
	Total Uses of Funds						

Average Exchange Rate: _____

*Please use a separate line if GCF financing percentage is different.

4.12 Schedule 2 of Financing Agreement: global budget per category

Schedule 2 of the Financing Agreement gives the budget for each category for the entire project lifespan.

When sending a WA, the WA must assess the available balance under each category. A maximum of 30% surplus against budget may be reached at the condition of remaining balances under one or multiple categories, provided that the total loan amounts are not exceeded.

Unallocated funds

An allocated amount is shown in schedule 2. Usually at midterm review (or in case of significant changes before midterm, PROSPER will request a reallocation in order to be able to use the funds in defined categories. The reallocation will result in the signature of an amended Financing Agreement with new budget lies per category.

4.13 Eligible expenditures

The financing Agreement specifies when the Expenditures are deemed Eligible. The following conditions have to be met:

- i) The expenditure shall meet the reasonable cost of goods, works and services required for the Project and covered by the relevant AWPB and procured in conformity with the Fund's Procurement Guidelines.
- ii) The expenditure shall be incurred during the Project Implementation Period, except that expenditures to meet the costs of winding up the Project may be incurred after the Project Completion Date and before the Financing Closing Date.
- iii) The expenditure shall be incurred by a Project Party.
- iv) If the Agreement allocates the amount of the Financing to categories of Eligible Expenditures and specifies the percentages of such Eligible Expenditures to be financed by the Financing, the expenditure must relate to a category whose allocation has not been depleted, and shall be eligible only up to the percentage applicable to such category.
- v) The expenditure shall be otherwise eligible in accordance with the terms of the Financing Agreement.

Hence the following checklist is provided for the assessment of expense eligibility:

Expenditures are eligible if:

- the cost of the goods/works/services is "reasonable" and if the goods /works/ services are required for the project
- it is required for the project
- the cost is covered by the approved AWPB
- goods/works/services are procured in conformity to IFAD's guidelines
- it is incurred by a Project Party
- it relates to a category of the Financing Agreement which has not been depleted and shall be eligible only up to the percentage applicable to such category
- it is incurred during the project implementation period (up to completion date)
- it is for costs of winding up the project (after completion/before closing)
- it is NOT related to a coercive/collusive/corrupt/fraudulent practice.
- it is compliant with the terms of the FA (incl. tax, special covenants).

4.14 Exemption from taxes

IFAD funding under the financing agreement is exempt of taxes. The Government will provide counterpart financing in the term of tax exemption spread over the duration of the project.

4.15 SAPZ DISBURSEMENT MANAGEMENT

The Project will mainly finance, small works (rural roads, irrigation infrastructure etc.), consultants' services (design, supervision and studies), goods (office supplies, computers, cars), microfinance in the form of grants and credit as well as PCU operating costs (salaries, travel expenditures etc.). Last section outlined how the PCU will receive funds from IFAD to cover the incurred expenditures related. This section will outline the different steps involved in the outflow of funds from the PCU to the Contractors, Suppliers, Consultants etc. The procurement process of these items, including the hiring process for consultants is detailed in the project procurement manual.

4.16 General instructions

All payments are prepared by the accountant and authorized by the Project coordinator after the review and clearance of the Financial Manager.

- a. Expenditure of Project funds shall be incurred or committed only if:
 - i. The expenditure item is part of the approved Work plan and Budget
 - ii. Funds are available under the relevant IFAD category and the expenditure is within approved Work plan and Budget
 - iii. The proposed expenditure is an eligible expenditure under the Financing Agreement
 - iv. The proposed expenditure is supported by adequate supporting documentation as defined in the IFAD disbursement hand book and letter to the borrower.
 - v. The expenditure to be incurred is in line with approved Project policies and procedures, and
 - vi. The CPM's No Objection (NO) has been obtained for expenditure above the prior review threshold or where applicable, as determined by IFAD.
 - vii. The expenditure is in line with the disbursement schedule of the sub-agreement (if applicable).
- b. The following shall however be observed by the Financial Manager before clearing the payment:
 - i. The expenditure is included in the approved work-plan and budget. Any item not in the budget that becomes necessary for project implementation shall only be undertaken with approval of the IFAD CPM and subsequent modification of the AWPB.
 - ii. All expenditures must fulfil the eligibility requirements in the financing agreement, loan disbursement handbook and letter to the borrower.
 - iii. Payments shall receive the clearance of appropriate PCU officer (e.g. a component/sectional head or technical officer) before they are authorized by the Programme Coordinator.

- iv. There must be evidence that the activity to which the payment is related has completed before the programme completion date with the exception of winding up expenditures that may be incurred after the completion date but before the closing date.
- v. The expenditure must be supported by necessary supporting documentation as per IFAD Letter to the borrower and disbursement handbook.
- vi. If the expenditure item is part of a contract, the invoice must be in line with the disbursement schedule of the relevant contract.

4.17 Invoice Related Payments

- a. The programme shall enter into contracts for the procurement of three major items
 - i. Goods
 - ii. Works
 - iii. Consultancy services (for training, audit, etc.); and

General Guidelines for Invoice Related Payments:

- a. All invoices shall be addressed to the Programme Coordinator
- b. When an invoice is received with the supporting documents at the NPCU, the accountant shall conduct an initial review and ensure that the documentation is in order and complete after which the documents are forwarded to the component/technical head for review.
- c. The Component/Technical Head shall review the documentation. If the payment is in order, the affected Component/Technical Head within the NPCU shall make recommendation to the PC for payment.
- d. After the technical review, the project FM shall ensure that the payment meets all the eligibility criteria and that the supporting documentation is complete before clearing the payments.
- e. After the FM's clearance the payment will be forwarded to the project coordinator who shall validate the checks and then authorize the invoice for payment.
- f. The approved Invoice with related documents shall be sent to the FM Unit for processing and issuance of appropriate instruction for mandate/cheque preparation.
- g. The Programme Accountant will carry out an internal check and ensure that the documentation is authentic and complete before approving the Invoice/Bill for settlement.
- h. If the documents are found to be in order, a Payment Voucher (PV) will be raised by the Project accountant.
- i. The PV and the supporting documents required by IFAD and outlined in the LTB/disbursement handbook, including the CPM No Objection, will be sent to the FM who

will ensure that the correct account codes as well as the appropriate Project fund have been indicated on the PV.

- j. Where the FM is satisfied with the internal checks, the PV will be approved for mandate and the appropriate instruction for writing a mandate will be issued to the Project accountant
- k. Otherwise it will be returned to the Project Accountant with the appropriate query, who shall endeavour to correct the error noticed or forward the invoice and the (queried) documents back to where it originated, depending on the nature of the observation(s).
- l. Confirmation letters will be written to the banks for all mandates, drawn on Project accounts before payment can be affected.
- m. Approved PV together with the mandate, bank confirmation letter and the supporting documents will be forwarded to the FM who will review and if satisfied will sign his portion of the PV, the confirmation letter and the mandate and immediately send them to the PC.
- n. The PC will equally review immediately and if satisfied shall sign his portion of the PV, the confirmation letter and the cheque and return them to the Project Accountant for documentation and release.
- o. The turnaround time for settlement of invoices shall not exceed 3 working days. Before releasing the cheque to the payee, the accountant will ensure that the beneficiary signs the PV and Cheque Issued/Mandate Register.
- p. Official receipts shall be obtained for all payment. Proforma invoices are not acceptable.

4.18 Travel related payments

The project will be involved in activities that will make it necessary for project staff and others involved in project implementation to travel outside project office locations. The project will advance project staff and individuals in project implementation for necessary and reasonable transportation and travel related expenses incurred in connection with project business travel.

4.19 Accountable Imprest/Office Travel

Generally, all cash advances to Programme staff to carry out an official assignment shall be treated as an accountable imprest and hence will not be considered as final expenditure until the cash taken has been accounted for. Cheques shall be drawn on the basis of the approved estimates and made payable to the officer involved or to the most senior officer in the case of group trek after approval by the NPC or his representative. Accountable imprest shall be retired within three (3) working days after the discharge of the official assignment and/or return to office. The retirement of accountable imprest shall include completing the accountable imprest retirement form (Refer to appendices). The officer must attach all relevant receipts, invoices, etc. in connection with the assignment.

In the case of advances to officers on trek, the officer must complete the following forms:

- a. **Travel Authorization.** The PROSPER Travel Authorization forms the basis of approval of the travel by the NPC. The form when completed will disclose the details of the activities to be carried out during the trek and the related budget and time to be spent on the trek.
- b. **Travel Matrix.** This gives guidance on the amount to be budgeted for DSA and fuel for the

trek. (See below for details).

TRAVEL COSTS MATRIX

In-country missions

a) Fuel

Vehicles of 2 years or less: 5 gallons / 100 Km maximum

Vehicles of more than 2 years: 6 gallons / 100 Km maximum

NB: These fuel provision ceilings should be adjusted based on actual experience.

b) Daily subsistence allowance

Out-of-country missions

Transport

Cost is estimated based on three (3) pro forma invoices from a travel agency.

Daily subsistence allowance

IFAD (UN) DSA rates published at the beginning of each month shall be used for the computation of DSA. Total DSA shall be computed based on number of nights spent. Traveller(s) shall submit receipts from hotels, bus/train/air tickets and boarding pass on return form the trip as part of expense report.

Travel Expense Claim Forms. This form shall be used to retire the accountable imprest taken for any official trek. The actual expenditure will be indicated and compared with budgeted amount and any difference resulting from this may either be refunded to the NPC or the staff. (Refer to appendices)

Back To Office Report. This sets out the objectives of the trek, persons met, activities carried out, findings, actions taken and recommendations by the officer. The officer shall submit this form within three (3) working days of their return from the trek (See appendix for sample)

4.20 Daily Subsistence Allowance (DSA)

The following procedure is used for DSA:

- a. This shall cover cost of hotel accommodation, meals and other personal expenses related to nights spent away from the traveller's home/duty station.
- b. GASIP shall pay DSA at rates for which IFAD has given a "No Objection"
- c. **Reduced DSA rates**—when accommodation and/or meals are provided free of charge to the traveller, the following DSA rates shall be applied:

Situation	% Reduction	Reduced DSA rate (%of full DSA rate)
Free accommodation	50%	50%
Free meals:		
Breakfast	6%	94%
Lunch <u>or</u> dinner	12%	88%
Breakfast <u>and</u> lunch or dinner	18%	82%
Lunch <u>and</u> dinner	24%	76%
All meals free of charge	30%	70%
Free accommodation and meals:		

Accommodation and breakfast	56%	44%
Accommodation and breakfast or dinner	62%	38%
Accommodation and breakfast + lunch	68%	32%
Accommodation and breakfast + dinner	68%	32%
Accommodation, lunch and dinner	74%	26%
Accommodation and all meals	80%	20%

Directors of implementing partners, NPSC members, NPC, and National directors of MOFA and MOF shall have the option to have free accommodation and 50% of DSA.

4.21 Resource Persons' Allowance

Resource persons for the Programmes' activities, e.g. workshops, training, etc, who undertake the responsibility of facilitation, delivery of paper, rapporteuring, and similar responsibilities, shall be entitled to Resource Person Allowance (RPA) of US\$100 per/day, in addition to DSA and Transport Expense (Fuel). The RPA shall serve as an incentive to attract professionals who would show commitment to the successful delivery of the Programme. However, PROSPER staff is excluded from the payment of RPA. The RPA shall NOT be funded from loan funds.

4.22 NPSC Sitting Allowance

Members of the NPSC (Board of Directors) constitute the highest decision-making body of the programme. It is highly necessary that a full house attends such meetings. To encourage them to attend, they shall be entitled to sitting allowance of US\$120 each in addition to DSA and Travel Expense / Fuel. The NPSC sitting allowance shall NOT be funded from loan funds, except prior approval is sought from IFAD. Approval shall be granted for persons from the private sector only. The Programme shall seek approval for the budget of NPSC meetings prior to the meetings.

To mitigate the risk of:

- i. unretired travel advances and provision of inadequate or inappropriate/fraudulent documentation to justify the travel advances and
- ii. unjustifiable claims for travel not undertaken,

the project will undertake steps listed below which are aimed at arresting any such eventuality.

The steps are as follows:

- The project with the approval of the MoF shall establish a standard allowance rate to be used in respect of local travel.
- In respect of overseas/foreign travel, the applicable allowances shall be the UNDP rate published at the beginning of each month which normally involves lump sum payment for hotel and DSA.
- **Reduced DSA rates.** When accommodation and/or meals are provided free of charge to the traveller during local or foreign travel, the commensurate amount shall be deducted from the DSA/allowance rates.
- Where actual travel days fall short of the local or foreign travel days for which the advances were paid, the official will be required to reimburse the difference.
- Air tickets will continue to be reimbursed or paid on actual basis and used air tickets and boarding passes will need to be submitted as evidence of travel.

In order to justify the travel advances the following supporting documentation must be attached to the travel expense claim (as applicable):

- i. Hotel accommodation (in case of rates higher than DSA)
- ii. back-to-office report (signed and dated)
- iii. Air ticket receipt and boarding passes
- iv. Fuel receipts
- v. Excess luggage
- vi. Passport / Visa fees / Airport taxes
- vii. Medical certificate fee (Consultants only) and/or vaccination cost
- viii. Other expenses (e.g. room or equipment rental, secretarial services, purchase of office suppliers, Telephone, Fax or Internet charges etc.)

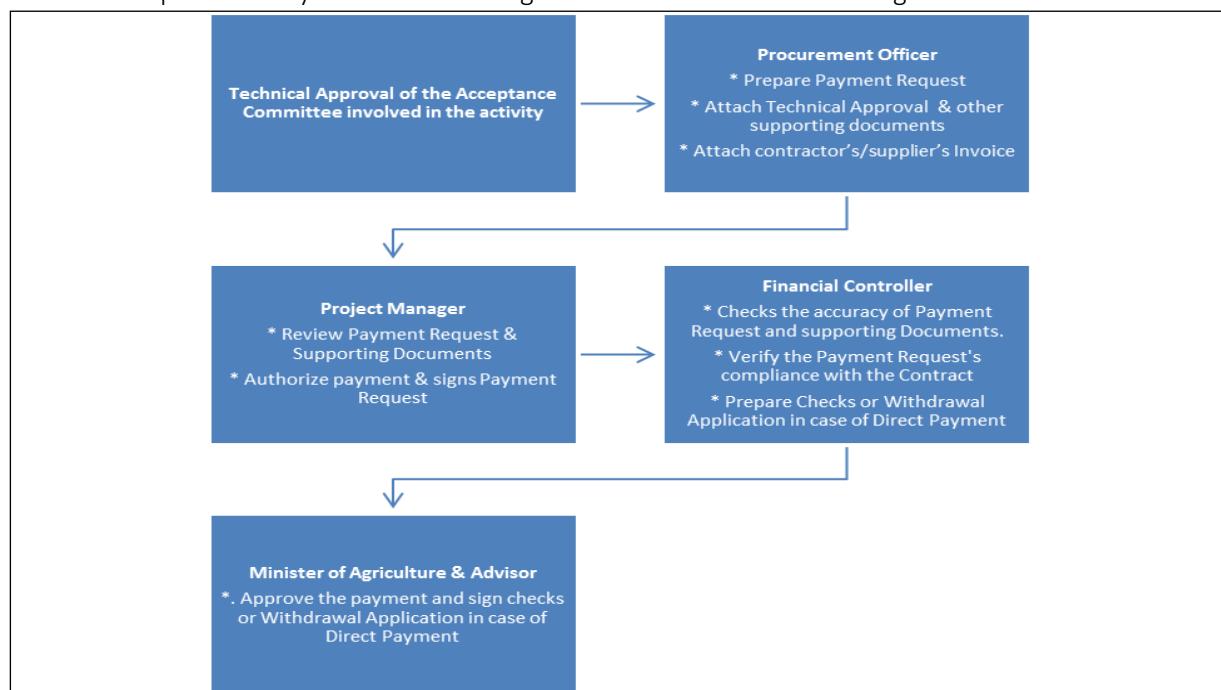
Only after the expense report and the full supporting documentation (as applicable) has been submitted can the expenditures be recorded in the accounting software and claimed from IFAD. Until a proper justification has been completed, the travel related expenditure has to be considered as an advance to the staff member.

Any unjustified travel advances will need to be reimbursed to the project by the traveller within one month after the travel date or the amount will be deducted from the payroll.

4.23 Processing of payments for Civil Works and Goods

Project will incur expenditures related to works under components 1.2 (Development of Socio-economic infrastructure) in the form of off-farm / watershed works, feeder roads and farm tracks, and communal social infrastructure etc. and goods under components 1.ab. (Capacity building of rural institutions, enterprises and households) and 3 (Project Management and Coordination) in the form of computers, cars etc.

The Expenditure Cycle for works and goods is detailed in the following chart:



(Chart: Processing of payments for Works and Goods)

Before releasing the payment to the contractor or supplier, the Financial Manager will make sure the following processes are followed:

- a. The quantity of goods is checked back to the purchase order and to contract and bid

award letter (if applicable). The goods are certified by the internal auditor and the stores officer and in the case of engineering goods like motor vehicles, an appropriate director in the ministry of transport after confirming that quality of goods is compliant with the contract conditions. The Financial Manager will ensure that the Procurement Officer provides all the necessary documents including the invoice and the acceptance/compliant report before proceeding with the payment.

- b. The conditions of the goods are reviewed for any damage or impairments. Damaged goods are to be identified and returned to the supplier for replacement. If any goods are rejected or returned to the supplier because they are not as ordered or are of sub-standard quality, the Financial Manager should be notified. Financial Manager must keep a central record of all goods returned to suppliers and maintain a separate record of all goods and equipment delivered by suppliers by contracts funded by the IFAD financing.
- c. All works are to be monitored by an architect or engineer. It is good practise to assign the architect/engineer responsible for the design to monitor and assess the works of the contractor. The architect or engineer is responsible for sending compliant reports/certificate of completion to the Procurement Officer in the PCU which includes the percentage of completion of the construction and if the construction materials are compliant with the contract conditions and specifications. A request for payment is prepared by the Procurement Officer to be sent to the Financial Manager. The Financial Manager will ensure that the payment request includes all the necessary documents including the invoice and the compliant reports/certificate of completion before proceeding with the payment to the contractor for the completed phase.

4.24 Processing of payments for Consultants' Services

Under the Project there are two types of consultants' services; a) Consultants with a lump sum contract, and b) Consultants with a time-based contract. For type (a) consultants, payments will be made against the delivery of outputs as detailed in their contracts. For type (b) consultants, payments will be made against the submission of a time sheet and a summary of activities performed. The Expenditure Cycle for type (a) consultants is detailed in the following chart:

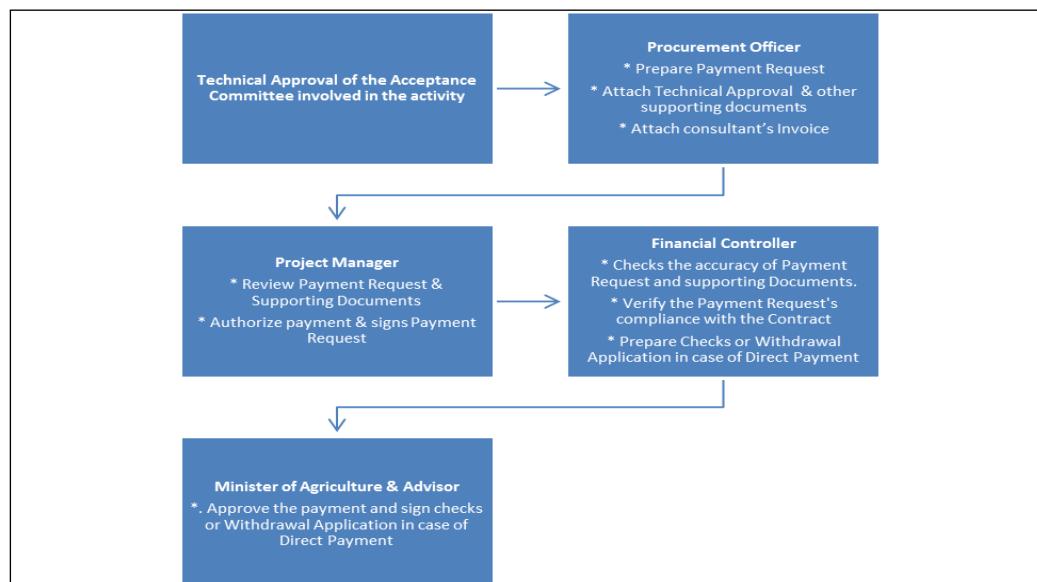


Chart: Processing of Payments for consultants - type A

The Expenditure Cycle for type (b) consultants is detailed in the following chart:

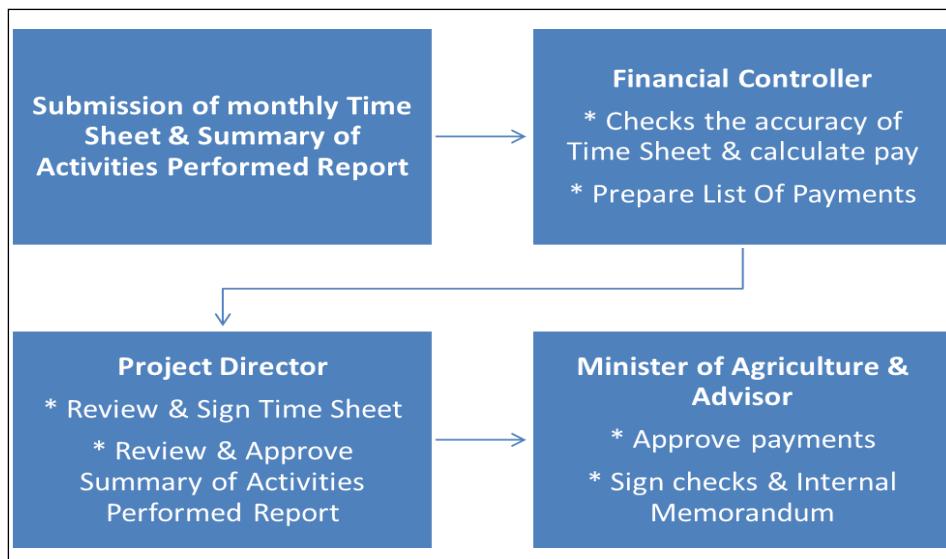


Chart: Processing of Payments for consultants - type B

Before releasing the payment to the consultant (firms), the Financial Manager will undertake the following steps:

- A. The consulting services reports are monitored by the technical committees, assigned by the NPC for the purpose of evaluating the deliverables submitted by the consultant (firms). Therefore, the Financial Manager will ensure that no payment to the consultant is prepared unless an approved committee report or letter of approval received from the committee assures that the deliverable submitted by the consultant is compliant with the contract conditions, these documents should be passed through the Procurement Officer.
- B. The consulting services reports are monitored by the specialist responsible for the activity for the purpose of evaluating the deliverables submitted by the consultant (Individual Consultant). Therefore, the Financial Manager will ensure that no payment to the consultant is prepared unless an approved report received from the specialist assures that this report is compliant with the contract terms and conditions, these documents should be passed through the procurement officer.

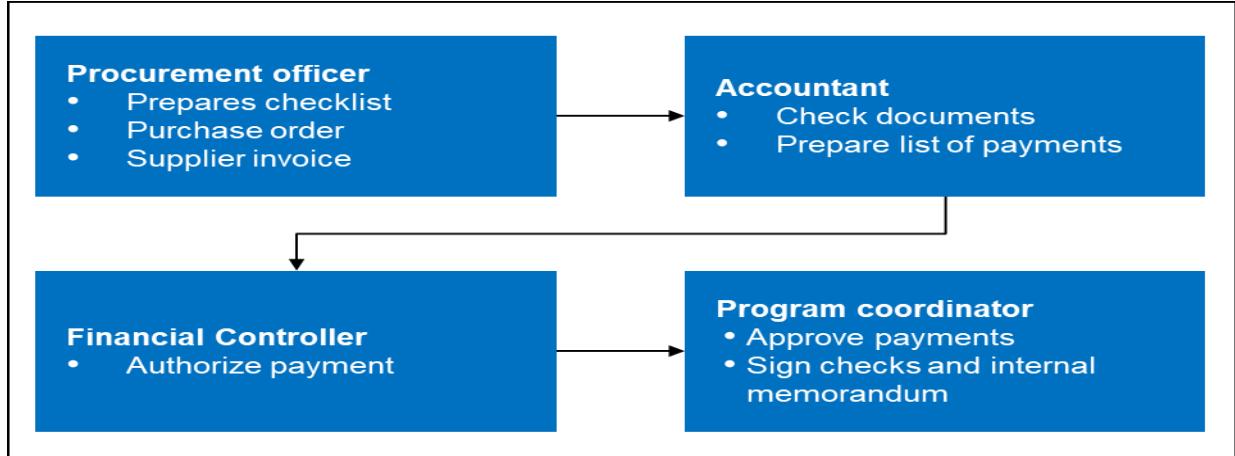
All Supporting Documents and Internal Forms must be retained at the PCU Office and must be maintained and archived in accordance with the maintenance of records section of this manual.

4.25 Processing of Payments for Office Supplies and Other Operating Costs

The payment for office supplies and operating cost will be against the preparation by the procurement officer of a serially numbered checklist evidencing the receipt of office supplies, and the presentation of the Purchase order and supplier invoice. The Financial Manager will compare the information on the checklist to the purchase order and supplier invoice, then sign the checklist. The payment for services is against the presentation by the supplier performing the service of a service invoice.

At the end of each month, the Financial Manager will prepare a serially numbered "List of Payments" that detail all the incurred costs for office supplies and operating costs during the month and present it to the project director for review and authorization. After the project director's authorization of the payments, the Financial Manager will prepare the checks and send them to the project director who will prepare an "Internal Memorandum" detailing the check numbers, amounts, suppliers and explanation of payments. The "Internal Memorandum" and the checks will be presented to the Minister of Finance and his Advisor to approve the payments and sign the checks. The following chart

summarizes the Processing of Payments for Office Supplies and Other Operating Costs



4.26 Financing of Matching Grants

The financing of matching grants will follow the steps outlined below:

- i. Eligible beneficiaries/grantees are identified and selected according to the selection criteria outlined in the matching grants manual.
- ii. The qualified applicant applies to the financial institution of his/her choice using the letter from PROSPER and a minimum 10% equity contribution to complement the loan application.
- iii. If the financial institution approves the loan, the qualified applicant will open a current account at the financial institution and deposit his/her 10% equity contribution;
- iv. The financial institution will conditionally disburse at least 50% of the loan amount to the qualified applicant's current account (this cannot be withdrawn prior to the following three steps);
- v. The financial institution (RCB/PFI) will contact the PROSPER Rural Finance Officer and forwards documentary evidence of the approved loan, and the balance held in the qualified applicant's current account and requesting PROSPER to provide the matching grant up to max 40% of the total financing. The banking details must be duly disclosed in the request. The documentation package should contain the following documents:
 - a. Matching grant request form from the RCB/PFI
 - b. Copy of the sample matching grant application form by the client
 - c. Copy of the matching grant fund offer letter provided by PROSPER
- vi. The Rural Finance Officer reviews the request, and if found in order provides a technical clearance after which the documentation package is forwarded to the Financial Manager who reviews the accuracy and completeness of the documentation, and confirms the availability of funds etc. and if found in order forwards it to the Project coordinator for approval;
- vii. The Project Coordinator instructs the Financial Manager to transfer the authorized MG to the qualified applicant's current account; and
- viii. The financial institution disburses the loan by purchasing the appropriate asset and causing the asset to be made available to the qualified applicant.

4.27 PAYROLL EXPENDITURE

Overview

To achieve successful implementation of project activities it may be required to engage personnel for the duration of the programme, or be required to pay allowances or supplements for additional project work undertaken by existing government employees. It may also be necessary to pay performance allowances to government employees engaged in project activities, based on performance standards and targets. As there are payroll expenditures for the Project, the PCU must establish a proper payroll expenditure sub-system to effectively manage and control such payments.

The system should provide for regular calculation and payment of the payroll expenses to project personnel, as well as providing complete and accurate records in support of the payments and their disbursements, and posting to the accounting ledgers of the project.

The PCU Responsibilities

The PCU shall be responsible for ensuring that:

- The engagement of employees should be merit based, be properly approved in accordance with the Project Design Report, terms and conditions, or other relevant instructions or approvals, and that
- There must be proper contract documentation supporting the engagement of project staff.
- Salaries and allowances are based on the term of the employment contract with the employee in the Project
- Salaries, and/or allowances, are paid from the appropriate funding source.
- Proper records of attendance, leave, overtime, and performance (for performance related allowances), are maintained.
- Payroll information and authorities are submitted in a timely manner.
- Payroll payments are checked and certified for payment, by the FM/SPA before payment mandate is prepared.
- Distribution of pay-slips/payment advices to the project staff, are controlled. The employee must be required to sign for the receipt of the salaries/allowances, where cash payments are made.
- The cost of payroll expenditure compared to project budgets and annual budgets, is monitored in a timely manner.

Key Internal Controls

The key internal controls that must be included are:

General controls

- Adequate segregation of duties:
 - Approval of payroll authorities and payment transactions.
 - Input/recording of payroll transactions to the payroll sub-system.
 - Checking of completeness and accuracy of payroll transactions processed.
- Adequate management information is produced and used to manage the payroll expenditures and entitlements of project personnel.

Payroll processing controls

- Approval of all payrolls is done by only by the PC.
- Payroll transactions are prepared and processed only on the basis of approved amount stipulated in the contract of engagement.
- Payroll transactions are processed completely, accurately, and only once.

- Prompt and timely processing and payment of payroll entitlements on a regular cycle of payment i.e. monthly.
- Payroll transactions are posted accurately and in the proper accounting period.
- Payroll payments are made to the correct person, or their authorized agent.
- Prompt investigation of unclaimed pays or complaints.
- Regular and timely review of payroll expenditures by PC.

Computerized system controls

- Systematic/periodic data used in the payroll sub-system is regularly reviewed and any changes are approved by an authorized officer.
- Access to payroll processing functions and data is restricted to authorized personnel.

Payroll Procedures

- **Each pay period:**
 - Calculate the pay of each eligible person from the details in the Payroll Register (for standard pays and allowances)
 - With computerized accounting systems, enter the relevant pay data and run the payroll and the system will calculate the pays.
- **Timesheet/daily time record:**
 - A timesheet must be used as a reliable basis for the payroll computation, and must include a record of dates, times, absences, and leave forms, all of which are necessary information for payroll computation.
- **Employment contract:**
 - This serves as a basis for determining the eligible members of the project. This contract is the basis for payments of services that have been rendered for the project.
- **Payroll calculation:**
 - Calculation of payroll entitlements must be prepared by a person not connected with the preparation of the payroll cheques or mandate schedule, or with the distribution of the pay entitlements.
 - The calculation must be based on the provisions stipulated in the employment contract, or other approved instructions or guidelines.
- **Payroll register (Annex 14)**
 - This shows details of the staff payroll computation.
 - It must be prepared on monthly basis by the person as mentioned above for confidentiality purposes. The Register should show the following:
 - o Gross pay.
 - o Allowances.
 - o Tax deductions.
 - o Advances (if any).
 - o Other deductions.
 - o Net pay.
- **Pay slips:**
 - Pay slips are the acknowledgment of the pay received from the project.
 - Pay slips must be given to each employee showing each pay period, salary rates, taxes, other deductions and net pay.
- **Payment procedures:**
 - After the Payroll Register has been approved by the PC, payment shall follow.
 - The e-payment process or cheques may be used for payment of salaries and advances to Project staff

4.28 Petty Cash Account

In addition to the bank accounts outlined in the section above, the PCUs will operate a petty cash account maintained under the imprest system. Amount authorized for the PCU shall be the Ghana Cedi equivalent of USD500 or near equivalent. Hence for the first year, the amount shall be maintained at GHS3000. The Petty cash will be operated by the project accountant.

Payments through petty cash will only be allowed for amounts up to GHS300 in a single transaction but no individual payment above GHS150. The float shall be kept in a safe locker or box which is kept in the PCU safe. Disbursements from the fund shall be through the Petty Cash Voucher (PCV) which shall be approved by the NPC and signed by the payee to acknowledge the amount received. The official receipts or its equivalent shall be attached to the PCV.

Use of Petty Cash

The petty cash shall be used for the following purposes

- a. Minor repairs,
- b. Small and sundry office supplies,
- c. Newspapers,
- d. Taxi fares,
- e. Sundry office expenses
- f. Small communications and internet expenses

Types of expenditure that the Petty Cash Advance must not be used for

- a. Expenditures above threshold (GHS300)
- b. Personal expenses

Key Internal Controls

The key internal controls that must be included are:

- a. Standard approved form must be used for petty cash use and management.
- b. Petty cash advances must be regularly reconciled with the Petty Cash Account and balanced regularly (at least monthly).
- c. There must be segregation of duties between approval of petty cash payments, and the custodianship of petty cash advances.
- d. Petty cash will only be reimbursed for expenses where receipts have been obtained, or other acceptable documentation is provided.
- e. Irregular spot cash counts of the Petty Cash Float using a standard cash count sheet must be carried out by the internal auditor and evidenced.
- f. The cash and documentation must be maintained separately.
- g. Petty Cash Advances must be liquidated within a specified period of time. This period of time should be set by the Financial Manager, in the instructions on the use of petty cash.
- h. There must always be a set of written instructions developed for the operation of the petty cash system.

Replenishment of the Petty Cash Fund

- a. The cash float shall be replenished before the end of each month or as soon as 75% of the fund has been disbursed.
- b. The request for the replenishment of the PCF shall be supported by the following:
 - i. Petty Cash Book containing details of the disbursement of the previous float
 - ii. Petty Cash Vouchers supported by receipts and other relevant supporting documents depending on the nature of the expenditure.
 - iii. Figure of the amount unspent at the time of request
 - iv. Amount of the request

Using Petty Cash

- a. The Petty cash disbursements may be in the form of an advance or a reimbursement (when the staff member has personally advanced the funds). Such member must receive the approval of the PC before making such payment. In all cases, the requesting staff fills out a petty cash request form. The payee name, the description of the goods or services, the estimated (or actual) cost and the transaction coding are indicated on the form, which is forwarded to the Project Coordinator for approval and subsequently to Finance Officer through the Financial Manager/State Programme Accountant for payment and recording in the accounts.
- b. ***For advances***, the Finance Officer delivers petty cash advances on the basis of the approved request. After the purchase is made, the requestor must return the invoice/receipt along with the change, if any, to the PFO for recording into the Accounting system.
- c. ***For reimbursements*** (i.e. when the goods or services have already been delivered), the invoice or receipt is attached to the petty cash request form before presenting to the PC for approval and the FO then reimburses the requesting staff member or directly pays the supplier. The form is signed by the individual who receives the money.
- d. The petty cash transactions will be recorded in the accounting software petty cash journal as they happen as described in the accounting manual. At the end of each week, the Project Accountant will reconcile the petty cash journal with the physical cash count. In addition, a surprise cash count will be conducted by the Internal Auditor once a month. It will also be followed by a reconciliation of the petty cash balance per the cash journal with the actual cash held in the petty cash box.
- e. When approved, the payment from the Petty Cash float may be made by the PFO, who must obtain the signature of the recipient on the PCV as evidence of them receiving the cash.
- f. The PFO records the expenditure in the Petty Cash Book, and files the Payment Voucher.
- g. Posting is made to the PCB from the Petty Cash Voucher as follows:

Dr Expense (Recorded in the relevant column in the multi-column PCB)

Cr Petty Cash

Example

Paid office supplies by cash GHS100. The entry is posted to the ledger accounts as follows:

Dr Office supplies 100

Cr Petty Cash 100

- h. At regular intervals (daily or weekly), the Petty Cash Float must be reconciled, and the expenditure posted to the General Ledger:

4.29 Bank reconciliation

The FM is responsible for managing the Designated Accounts and the project accounts including receiving, on a monthly basis, the Designated Account Statement of Account from the bank(s) and reconciling it against PCU records. The designated account reconciliation must be performed immediately upon receipt of a bank statement of the Designated Accounts.

Disbursements from the DA should be recorded in the PCU account records as of the date they are made, that is when the cheques are issued.

Bank account reconciliations are performed because:

- Reconciliation decreases the possibility of misappropriation of funds and fraudulent financial reporting.
- This control procedure ensures eliminating the possibility of non-disclosure of thefts by the staff working with the bank accounts through modification of the primary bank statement for the purpose of concealing suspicious transactions or discrepancies in the account balances.

Before submission of bank statements to IFAD, they must be verified by the FM with a view to ensure validity of transaction with the project funds.

The FM must perform monthly reconciliations between the designated account(s) balance recorded on bank statements and cash book balance, recorded on the system. Performance of the monthly reconciliation should follow the following steps:

- i. Designate Account balance recorded on bank statement on reconciliation date is taken as starting figure;
- ii. Add reimbursements/replenishments/other deposits that have been processed and are due to designated account, but not yet recorded on bank statements;
- iii. Subtract undelivered cheques. Any long-outstanding cheques should be identified and investigated
- iv. Following these adjustments, the bank statement and local finance system cash totals should agree. Any remaining difference should be reported and investigated;
- v. The completed bank reconciliation statement should be signed and dated by the FM; and
- vi. The reconciliation should be reviewed and countersigned by independent finance team member who understands the reconciliation process, i.e. the Internal Auditor

Other Project Banks

Monthly reconciliations shall also be performed for all other bank accounts in operation at the PCU whether or not there were transaction(s) in the accounts in any month.

4.30 ADVANCES TO IMPLEMENTING PARTNERS

Implementing partners are responsible for the implementation of some of the activities of the project. These activities are detailed in approved AWPB. Based on the approved AWPB, the project signs a Memorandum of Understanding (MOU) with the relevant implementing partner; The implementing partner will make a request for payment based on the terms of the MoU. Project Coordinator reviews the request with help of Financial Manager; The Project Coordinator approves the payment; and Financial Manager will release an advance to the implementing partners by writing a cheque in the name of the implementing partner.

All implementing partners must maintain an account cashbook. The objectives of the Cashbook are: To provide precise information on how much money has been spent; What it has been spent on; and how much is left.

RECEIPTS

The responsible official of the implementing partner must keep receipts against all expenses in proper order. Issuance of a receipt is the responsibility of the person who is receiving money from the project. However, there are instances when an official receipt is not available. In such a case, the responsible official should prepare an unofficial receipt and obtain the person's signature or thumb impression. Official receipts are provided by the person or vendor from their own receipt book after being paid for their services

Unofficial receipts are acceptable only in the case when a person or vendor does not have his/her own receipt book. This is usually the case with laborers and small vendors. The unofficial receipts should be on a blank piece of paper providing the information on the identity of the person/vendor receiving the money, the purpose of payment, location where the payment was made, date of payment, the amount of payment and the signature or thumb impression of the recipient.

IMPLEMENTING PARTNERS FINANCIAL REPORTS

Preparing expenditure reports is the responsibility of implementing partners. The implementing partner must ensure that the expenditure reports are prepared on a timely basis.

An expenditure report format is suggested below. All receipts in original must be attached to the expenditure reports and sent to the accounts department.

SECTION 5: ACCOUNTING POLICIES AND FINANCIAL STATEMENTS

5 ACCOUNTING POLICIES AND FINANCIAL STATEMENTS

5.1 Accounting system

- a. The primary objective of PROSPER financial accounting system is to record in a systematic and controlled manner, the financial transactions and events of the project, and to report financial information for monitoring and controlling project funds and project implementation.
- b. The financial accounting system is made up of the General Ledger and sub-systems, accounts and records for processing, recording and reporting assets and liabilities, revenue, and expenditure of the project.
- c. The success of the project to a great extent depends on its financial discipline and its accountability for the funds provided. Therefore, accounting plays crucial role in directing and guiding the project to its goals and objectives. A sound accounting system reflects the variations from planned goals and alarms the organization of any major changes or adverse situations so that corrective action is taken.

The majority of project activities result in the receipt, commitment or expenditure of funds. The accounting system records, processes and organizes this data in order to produce useful financial information in form of AWPB, Financial Reports, Withdrawal Applications, Financial Statements etc. needed by the Project Financiers (IFAD, Government, Beneficiaries) as well as the PCU management. The accounting system should reflect the project's needs and be designed to provide the financial information required by all interested parties (PCU, MoFA, MoF and IFAD). It should also fulfil all the legal and regulatory requirements of the Government. The accounting system is a critical part of the project's financial management system and its design.

The Project will record all its transactions in the GIMIS Accounting software. The GIMIS Secretariat shall support the project to customize accounting software to meet the reporting needs of the project as necessary. In this regard, the structure of the Chart of Accounts should conform closely to the project cost tables (as presented in the project design report and section 1 of this manual) to enable comparison of actual project costs during implementation with those estimated during the project preparation.

5.2 FM Staff Responsibility for the Accounting System

The Financial Manager is responsible for the following key areas related to the accounting system of the project:

- Designing the accounting system of the project
- Selection and maintenance of an accounting software.
- Development of an accounting manual

Specifically, the FM staff shall:

- a. Act with honesty and integrity, avoiding actual or apparent conflicts of interest in personal and professional relationships.
- b. Provide IFAD and Government with information that is accurate, complete, objective, relevant, timely, and understandable

- c. Comply with rules and regulations of federal, state, local governments, and IFAD.
- d. Act in good faith; responsibly; and with due care, competence, and diligence, without misrepresenting material facts or allowing one's independent judgment to be subordinated.
- e. Respect the confidentiality of information acquired in the course of one's work except when authorized or otherwise legally obligated to disclose. Confidential information acquired in the course of one's work will not be used for personal advantage.
- f. Share knowledge and maintain skills important and relevant to projects' needs.

5.3 The Accounting Policies

The Project Accounting Systems shall be based on a rational combination of Accounting Policies and Practices best suited to report the financial affairs of the project. The policies and practices are generally in conformity with generally accepted accounting principles namely:

- a. ***Going Concern*** - Project operations will be sustained into the foreseeable future and that there will be no significant liquidation of its assets due to a reduction in the scale of operations or credit closure/ cancellation.
- b. ***Consistency*** - Accounting policies set forth below will be applied consistently from one accounting period to another, and within accounting period, except when there is a special reason to depart from such policies. However, such reason(s) will be fully disclosed in the Project's Financial Statements.
- c. ***Prudence*** - Adequate restraint will be exercised in the determination of income to be included in the Income and Expenditure Account and that all known costs and liabilities are charged in relevant period accounts with due regard to the accounting basis.

5.4 Basis of Accounting

The cash basis shall be adopted in the preparation of Project's Financial Statements.

Cash accounting method is mostly acceptable as the basic accounting methodology for the project: the income/expenditure is identified upon receipt/disbursement of cash, no matter when the goods or services have been received. In accordance with IFAD requirements in respect of its projects, the project will use the International Public Sector Accounting Standards (IPSAS) – Cash Basis.

When using the cash accounting basis, the project accounting should be consistent with the following principles:

- The income/expenditure is identified upon receipt/disbursement of cash, no matter when the goods or services have been received.
- Liabilities are not considered until payment; therefore, liability accounts are not used normally. However, advances to individuals or implementing partners cannot be considered as expenditures before these have been properly justified. It is also best practice to disclose liabilities /receivables separately in the notes of the financial reports.

Adjustment of expenditures over the accounting period may be required for the purposes of auditing and reporting. If so, expenses that are actually incurred yet unpaid are adjusted and taken into account in the current accounting period. This also applies to the expenditures that have been incurred during in the past, yet paid during the current period

5.5 Fixed Assets and Depreciation

- i. Fixed Assets are those intended for use over a period exceeding one accounting year and whose value per unit is not below USD500 (GHS3,000).
- ii. Items with respective unit costs below USD500 (GHS 3.000) are classified as “Special Project Assets” and included in a Special Project Assets Register.
- iii. In applying the capitalization policy, all related (landed) costs and installation costs are included in the acquisition cost of the fixed asset item.
- iv. Capital expenditure on contract works will be included on the basis of valuation certificates including retention.
- v. No Depreciation is charged on the project’s fixed assets as there are no revenues to be matched against such charges and because the cash basis of accounting is in effect.

5.6 Foreign Currency

Income and Expenditure items in foreign currencies are converted to Ghana Cedis at the rates ruling at the transaction dates. Assets and Liabilities expressed in foreign currencies are converted to Naira at the rates ruling at the balance sheet date and gains or losses on such conversions are credited or charged to Reserve in the period which they arise.

5.7 Tracking and Recording of In-kind Contributions and tax exemption

In order to comprehensively monitor the financial performance and the contributions made by all stakeholders of the project, it is important that the PCU is able to estimate the value and record the following:

- the in-kind contributions made by the different financiers, usually beneficiaries and the government; and,
- the tax exemptions provided by the government.

Moreover, to ensure reliable measurement, accurate records of in-kind contributions must be retained (e.g., calculation of tax exemptions, total hours of labour contributed by communities, value of goods contributed by communities, government tax exemptions etc.) and duly filed just like other financial records. How to calculate the value of the in-kind contribution and the necessary supporting documentation to be retained for different cases is outlined in the table below:

Type of in-kind Contribution and unit of measurement	How to calculate it	Supporting documentation to be retained
Labour = total hours of labour contributed by communities.	Value =total hours worked X applicable wage rate (in most cases the applicable minimum wage rate for uneducated labour in the country)	Time sheet by the community group outlining the persons, and the hours they contributed during a specified time period. The time sheet should be duly signed by the community representative and Project technical/M&E staff
Goods = value of goods/land contributed by communities.	Value = number of goods/lands contributed X their estimated value.	Sheet by the community group outlining the number and type of goods or area of land, contributed during a specified time period. The sheet should be duly signed by the community representative and Project technical/M&E staff

Government pro-rata shares of staff salaries.	Value = government monthly salary X % of time worked for the project. Value= monthly salary x the % covered by the government	
Government pro-rata shares of utilities.	Value= monthly/annual value of utilities X the % covered by the government	

The calculation of tax and duties exemptions should be done using the prevailing tax or duties rates as outlined in the table below. The tax/duties exemptions should be supported by adequate documentation.

Category	Tax/duties rate	Example how to calculate the VAT exemption on an item that cost USD 1 000 net of tax.
Goods	Value added Tax rate YY%, Import duties XX%	$0.75 * 1000 = 75$
Works	Value Added Tax rate YY%, Import duties XX%	$0.75 * 1000 = 75$
Services	Value Added Tax rate YY%, Import duties XX%	$0.75 * 1000 = 75$

The tax-exemptions should be duly recorded in the accounting software if possible. If the accounting software is not able to accommodate this, then separate excel spreadsheets should be maintained in such a format that they can be easily harmonized with the other financial reports as necessary.

When recording the in-kind contributions, it is important that the in-kind contributions are classified according to the same principles as regular project expenditures; that is, every contribution must be linked to an activity/component, by category and by financing source (government and/or beneficiaries) to ensure that consolidated financial reports can be produced without any extra effort. All data (including excel spreadsheets) with regards to in-kind contribution should be backed up regularly.

In-kind contributions should be disclosed in the notes of the financial statements in the agreed format. The notes of the financial statements should also briefly explain the methodology of how it was calculated. On the other hand, when in-kind contributions cannot be reliably measured, for example the use of office space, then these should also be discussed in the notes to the Project financial statements.

The finance team will be guided by the IFAD In-kind Domestic Financing Technical Note to identify, acknowledge and quantify GoG in-kind contributions that shall include the provision of office space, the provision of audit services, the staff time of MOFA Directorates that shall implement PROSPER activities in the fields. Beneficiary in-kind contribution shall also be identified, acknowledged and quantified with guidance from the IFAD Technical Note. The referenced IFAD document is available at: <https://webapps.ifad.org/members/eb/125/docs/EB-2018-125-R-7-Rev-1-Add-6.pdf>

5.8 Income from project activities

During the project life, PROSPER may receive funds from different activities including but not limited to:

- i) sale of bids (Construction, vehicles and equipment etc)
- ii) Sale of an asset (old vehicles etc)
- iii) receipt of funds from farmers as part of the recovery of purchased and delivered inputs and equipment/machinery from farmers (crops, equipment etc).
- iv) Other reflows from project activities

All income from the activities listed above must be deposited in the counterpart account. All income will need to be supported by adequate financial documentation and registered in the accounting software by the Project Accountant under "other income" and disclosed in the financial reports. The notes of the financial statements will include a breakdown of all the income received from sale of bids, recovery of funds from beneficiaries, etc. and an account reconciliation. All income will be audited as part of the annual audit exercise, like with the rest of the project funds.

5.9 Year-end accounting activities.

By the end of January, the Financial Manager will ensure that the following checks and activities are performed to ensure the accuracy of the project financial statements:

- Ensure all project expenditures, including IFAD, GCF, GoG, beneficiary and other co-financiers expenditures have been properly captured and included. In-kind contributions may be tracked outside the accounting software.
- Conduct a reconciliation of Withdrawal applications submitted to IFAD and the amounts paid by IFAD. This can be done with the help of the Historic transaction reports which can be accessed through the IFAD Client Portal or by asking IFAD to submit it.
- Conduct a verification of financial reports from districts and Implementing Partners and analysis of outstanding advances. Are there any outstanding advances? Follow-up as necessary.
- Conduct a verification of completeness of transactions recorded in the accounts.
- Conduct a Bank reconciliations for all accounts including designated accounts, programme accounts, and petty cash reconciliations. Remember to list and analyse the reconciliation items (if any).
- Analysis of account balances in the General Ledger and verification of Trial Balance. Remember, for any time period the total debit entries should equal the total credit entries in the Trial Balance. A Trial Balance can be performed at intermediate stages to ensure errors are spotted as early as possible.
- Conduct corrections and adjustment of entries (omissions, coding errors, double-counting, etc.)
- Conduct an analysis of the execution of the approved/re financial execution (budget-to-actual by activity). Remember to briefly explain any significant variations in the notes of the financial report.
- Reconciliation of IFAD statements with project accounts
- Conduct an inventory of assets, supplies and materials. All missing assets should be reported to the police and properly investigated and reported separately in the inventory report and in the notes of the financial statements.

5.10 Key accounting control objectives and respective controls

- a. The following key control objectives and their respective controls are essential to the system of accounting operated at the field office where the project will be implemented.
 - i. **Accuracy:** the information in the accounts and the supporting subsidiary records shall be accurate, representing the actual substance of past events, without undue errors or omission. This shall include correct and consistent classification of transactions and the recognition of revenues and expenditures in the correct time period. This objective shall be addressed by:
 - budgetary control procedures
 - a proper approval, certification and authorisation process for payments
 - review and authorisation of payroll schedules by a delegated authority
 - reconciliation of cheque/transfer advice to claim prior to signing by authorised signatory
 - a regular, complete and up-to-date bank reconciliation
 - procedures and control for recording inter-entity transactions
 - maintenance of fixed assets registers
 - control over maintenance of permanent accounting records
 - procedures and control for making adjustments to accounting records
 - reconciliation of the general ledger to sub-ledgers, registers and source documents
 - detailed Chart of Accounts for classifying transactions
 - a regular post-audit process, both internal and external
 - ii. **Completeness:** The information in the accounts and the supporting subsidiary records shall be a complete representation of all past transactions that have occurred during the reporting period. This objective shall be addressed by:
 - budgetary control procedures
 - recognition of significant commitments, using a commitment register
 - regular checks for transactions not brought to account, using an outstanding claims register
 - issue and review of sequentially numbered receipts for all revenue
 - regular, complete and up-to-date bank reconciliation
 - physical assets shall be recorded in a register disclosed in a memorandum account
 - regular and systematic, review and clearance of suspense accounts
 - reconciliation of general ledger to sub-ledgers, registers and source documents
 - a regular post-audit process, both internal and external
 - a systematic and verifiable consolidation of accounts from subsidiary ledgers, registers and source transactions.
 - iii. **Existence/Validity:** All transactions accounted for must be genuine transactions. This objective shall be addressed by:
 - a proper approval, certification and authorisation process for payments
 - claims shall be stamped as paid on authorisation for payment
 - audit trail from the payment to the source documents supporting the claim
 - review and authorisation of payroll schedules by a delegated authority
 - reconciliation of cheque/transfer advice to claim prior to signing by the delegated authority

- no duplicate receipts provided
 - regular, complete and up-to-date bank reconciliation
 - maintenance of physical asset register, including procedure for disposal and existence checks of assets
 - a regular post-audit process, both internal and external.
- iv. **Economy:** The accounting system shall include controls to ensure the prudent allocation of project resources. This objective shall be addressed by:
- expenditure approval, certification and authorisation procedures
 - a competitive procurement process
 - central procurement facilities
 - asset management policies and procedures.
- v. **Effectiveness:** The accounting system shall include controls to ensure the effective performance of project responsibilities. This objective shall be addressed by:
- clearly defined responsibilities, scheme of delegation and reporting lines
 - comprehensive procedure notes
 - human resources program including recruitment, training and appraisal.
- vi. **Efficiency:** In practice there will often be a trade-off between economy and effectiveness. The accounting system should seek to operate as efficiently as possible by optimising the relationship between these two variables. This objective shall be addressed by:
- post-audit (certification) of payments.
 - issue of payment through direct bank transfer
 - use of imprest system for small payments
 - hierarchical organisational structure in which there is a clear scheme of authority delegation to perform the tasks
 - production of monthly semi-annual and annual financial reports
 - limited duplication of roles
 - consolidation of accounts.
- vii. **Minimise risk of fraud and corruption:** The accounting system shall include controls to minimise the risk of fraud and corruption. This objective shall be addressed by:
- segregation of duties, so that certain accounting functions should be performed by different officers, including: - accounts and audit - recording of receipts and collection of money approval/authorisation and issue of payment, recording of expenditures and issue of payment
 - budgetary control procedures
 - post-audit of claims for payment
 - maintenance of an authorised signatories list by the bank
 - requirement of a double signatory for issue of payment
 - issue of payment through direct bank transfer and cheques
 - maintenance of a physical assets registers
 - control over maintenance of permanent accounting records
 - procedures and control for making adjustments to accounting records
 - reconciliation of the general ledger to sub-ledgers, registers and source documents
 - clearly defined responsibilities, scheme of delegation and reporting lines

- a regular post-audit process, both internal and external

5.11 Key reporting control objectives and respective controls

- i. **Sufficient:** the accounting system must produce sufficient information for the adequate control of the project's finances. This objective shall be addressed by:
 - preparation of monthly, semi-annual and annual accounts
 - availability of an audit trail through sub-ledgers, registers and source documents to substantiate the financial reports
 - preparation of additional operational information by PCU/PSIUs as required
 - on-going review of information requirement by users.
- ii. **Relevance:** The accounting system must produce financial information which is relevant and understandable to the users of the information. The financial reporting from the accounting system must be based on the accountabilities required of users, and their decision-making requirements. This objective shall be addressed by on-going review of information requirement by users.
- iii. **Reliable:** The accounting system shall produce reliable financial information. This objective shall be addressed by the controls over completeness, accuracy and validity.
- iv. **Consistency:** The accounting system must enable consistent information to be produced in financial reports, in order to be useful for decision making. This objective shall be met by:
 - a consistent reporting period and unit of currency
 - consistent accounting basis and policies
 - consistent reporting formats and disclosures
 - Accounting policies consistently applied by all project parties.

5.12 Method of Accounting:

- a. The PCU and each PSIU would adopt Double Entry System of book keeping on Cash basis.
- b. All payments will be charged off to relevant project activity account head at the time of making the payments, except advance payment.
- c. Advance payments will be charged off to the relevant project activity account head on retirement
- d. Assets created out of project will be accounted at cost.
- e. No depreciation will be provided on Fixed Assets acquired under the project.
- f. Materials purchased for project activities will be charged off to the relevant project expenditure head (Category/Component) at the time of purchase itself.
- g. Release of funds to States will be accounted for as advance in the books of accounts of the PCU and treated as expenditure only upon submission of expenditure information.
- h. Release of funds to staff/ suppliers will be accounted for as advance in the books of accounts and treated as expenditure only upon submission of expenditure information.

5.13 Project Accounting & Standard Books of accounts to be maintained:

- a. Cash Book:
- b. Petty Cash Book:
- c. Journal Book and Journal Voucher:
- d. General Ledger:
- e. Stock Register:

- f. Fixed Asset Register:
- g. Advances Register:
- h. Register of Contracts:

5.14 Accounting Entries for the Project:

- a. Expenditure under the project
- b. Advances for goods
- c. Advances for services
- d. Advances for works
- e. Advances to staff
- f. Adjustment of advances for goods / services / staff
- g. Regular payment of work / adjustment of advances
- h. Regarding interest income
- i. Regarding Stale cheques

5.15 Accounting Entries Only for PCU:

- a. Receipt of Loan from IFAD/Initial Advance/Replenishment/Repayment
 - Debit: Designated Account
 - Credit: IFAD Loan Account
- b. Release of funds to DADUs (The PCU will open a ledger account for each DADU tagged advance to DADUs)
 - Debit: [Advances to Respective DADU] A/C,
 - Credit: DA for transfer to DADU and debit DD Account and later credit the DD when the transfer to DADU is made
 - Explanation: These entries are to be passed whenever PCU releases funds to the DADUs.
- c. On receipt of SOE from the DADUs:
 - Debit: the respective expenditure heads and
 - Credit: advances to the DADUs account

5.16 Accounting Entries Only for PSIU:

- a. Regarding receipt of funds from PCU
 - Debit: DD Account by each DADU
 - Credit: Advances received from PCU
- b. Regarding state expenditures and funds transfers to service providers
 - Debit: Respective expenditure heads
 - Credit: DD Account
- c. When SOEs are prepared and sent to the PCU
 - Debit: Advances from PCU
 - Credit: IFAD Loan Account

5.17 Chart of Accounts

The Chart of Accounts is a listing of General Ledger accounts.

The Chart of Accounts for PROSPER will provide the structure for recording and controlling budget and accounting data, and for summarising the data for monitoring and reporting. The coding for accounts should ensure proper recognition of revenue and expenditure, as well as assets and liabilities of the project.

In constructing the Chart of Accounts, the following basic principles will be observed:

- a. Accounts will be arranged and designated to give maximum information without the need for supplementary analysis.
- b. The account code structure will be designed to support accuracy in the coding of financial

- transactions.
- c. Account titles will reflect, as far as possible, both the purpose and nature of the revenue or expenditure.
 - d. Account codes should be structured to enable identification and reporting of financial information for financial management of project activities (components and categories), and to facilitate monitoring of the quality and reliability of the financial information.

The Chart of Accounts for the project will be structured to enable the following characteristics of transactions to be identified and reported:

- i. Nature of transaction – Asset, Liability, Revenue or Expense (including sub – category)
- ii. Source of Funds – IFAD, GCF, GoG, others
- iii. Disbursement Category
- iv. Project Component and Sub-Component
- v. Expenditure location – National, Regional, District, Communities/Farmer Organization.

The Chart of Accounts structure will be documented, and guidelines on the use of the account codes will be provided to all relevant staff of the project.

The Chart of Accounts will be reviewed regularly, to ensure that it adequately supports the financial management and internal control requirements of the project. A review of the Chart of Accounts will be undertaken prior to the start of each financial year, based on the annual work plans and annual budgets of the project.

Modifications to the Chart of Accounts must be controlled, with the Financial Manager being responsible for the project's finances and approving any required modifications.

Budgeting and budgetary control: The project budget will be recorded in the budget module of the accounting software, i.e. GIFMIS.

The accounting software would be maintained by the service provider in collaboration with the GIFMIS Secretariat. The Financial Manager/GIFMIS Secretariat is responsible for the following key areas related to the accounting system of the project:

- Designing the accounting system of the project
- Maintenance of the accounting software.
- Development of an accounting manual

5.18 Designing the project accounting system.

When designing the accounting system of the project the Financial Manager must undertake the following steps:

Step one: Identify the different kind of reports the system is expected to generate, based on the different stakeholders' requirements. - What information and in what format that needs to be produced by the PCU? As a minimum requirement the Accounting system will need to produce the following reports:

- Statement of cash receipts and payments (by category and by financier),
- Statement of cash receipts and payments (by component),
- Statement of comparative budget and actual amount by component,

- Statement of Special Account movements,
- Statement of Special Account Reconciliations,
- SOE - Withdrawal Application Statement.

Step two: List the transactions and activities, which the system must account for. As a minimum requirement the accounting system must include:

- a) Purchase orders, receipts, cheque books and other similar documents evidencing receipt, commitment or expenditure of funds.
- b) A journal for primary entry of all transactions, including adjustments, destined to be posted to the ledger.
- c) A petty cash book (PCB) for small cash expenditures below a certain low threshold. The credit side of the PCB should be analyzed into columns, one for each project component, The totals to be posted to ledger accounts monthly.
- d) A bank cash book (one for each source of financing). The credit side should also be analyzed into columns, one for each project component (like PCB). Total of these columns should be posted to their respective ledger accounts monthly.

A ledger containing separate ledger accounts for each project component. The debit side of each ledger account should be analyzed into the expenditure categories defined in the IFAD Financing Agreement (Civil Works, Equipment, Goods and vehicles, Technical Assistance and Studies, Training and Workshops, PCU Management cost). The ledger accounts should be closed and trial balance prepared at the end of each month.

- e) Fixed asset registers to record location, price and date of acquisition (or completion) of all buildings, vehicles, computers, printers, major equipment and furniture. There register should have a separate section for each type of fixed asset.

Step Three: Design the specific accounting books, including a chart of accounts and records to be maintained, the transactions to be recorded therein and the precise accounting entries on the occasion of each transaction.

Step Four: Incorporate the systemic accounting issues as agreed with IFAD and the government including the used accounting standards and valuation criteria. - In accordance with the project design document, all project accounts will be kept on a double entry system and the used accounting standards will be IPSAS Cash.

Step Five: Resolve accounting issues (if any) rising from the fact that the project is being implemented and expenditures are being incurred in different locations. The DADUs and PFIs are to provide monthly reports to FM of the PCU electronically by using the internet connection.

Step Six: Determine a tentative list of users and user rights for each staff member in line with their terms of reference in order to maintain a proper level of security.

Step Seven: In the light of steps 1-5 decide, the Financial Manager needs to work with the GIMFIS Secretariat and CAGD to customize the software to satisfy the needs of the Programme. The Financial Manager needs to have an answer to steps from 1 to 5 before approaching the GIMFIS Secretariat and CAGD. It is important to be aware that most software do not automatically provide the required reports but have to be customized. As a result, it is important to inform the Secretariat about the requirements and reports and formats. The GIMFIS Secretariat shall conduct a sensitization and training in the package (including how to modify the reports).

Step Eight: Incorporate all decisions of the previous seven steps in an accounting manual. This manual will need to be reviewed and updated once every 2 years.

5.19 The Selection of an Accounting Software

The accounting software of the Programme is an important tool for collecting, analysing, storing, and disseminating information that is vital for decision making. In addition, it enhances transparency and accountability of the project activities, provides timely reports, helps detecting errors and shortfalls during project implementation and indicates necessary corrections.

When choosing the accounting software, the Financial Manager should ensure that the software is able to meet the following criteria:

- Reflect project needs and be designed to provide the minimum financial information required by all interested parties (PCU/PSIUs, MoFA, IFAD, GCF, GoG) including the provision of accurate, timely, complete, reliable and consistent information and reports as well as fulfil the legal and regulatory requirements of MoF.
- The accounting software should be configured as a modular solution and the different modules should be suitably integrated. The software should contain the following modules: i) general ledger module, ii) accounting module incl. petty cash, iii) budget module, iv) fixed asset module, v) withdrawal application module vi) contract management and procurement management module. - The integration of budgeting module accounting module/system is important to enable comparison of the actual performance with budgets/targets (quarterly, annual, and cumulative for the Project).
- Use the double-entry system of transactions.
- Allow for multi-period and multi-user processing and reports;
- Able to output financial reports in a variety of formats including hard copy printouts, as an excel spread sheet and as an HTML file;
- Provide adequate documentation and complete audit trail to facilitate audit.
- Have security settings and different access levels for different users
- Be user friendly. Technical support, training and installation & configuration should be offered by the supplier and be easily accessible during project implementation.
- For procurement needs, the accounting software should capture and report on the following: Prior review thresholds; Procurement methods; Procurement reference; Activity description; Component (as per the description schedule of the Loan); Category (as per disbursement schedule); Estimated amount; Procurement method used; Prior/Post review; Date of issuance of advertisement; Fund No objection on bidding documents (Goods/works) or RFP (consultants); Date of bid (Goods/works) or RFP (consultants) submission; Bid opening date (goods/works) or Financial Proposal opening date(consultants); Fund No objection to evaluation report; Fund NO to contract draft; Date of submission to the Fund of the Copy of signed contract; Contract related data (date of signature, date of completion, contract amount, contract amendments and payments terms).

In the installation phase of the accounting system, Financial Manager will need to determine the following:

- access level and different user rights e.g. (i) active use for inputting/editing of data for different modules; (ii) read-only use; or (iii) no-access.

- Information storage and back-up
- Design of the chart of accounts and the detailed list ledger accounts required to account for transactions under the project.
- Design the detailed formats of various accounting books, records, and statements (e.g., cash and bank books, journals, various ledgers, trial balance, voucher formats, etc.).

5.20 Legal basis:

Accounting methodology for the PROSPER has been elaborated in accordance with the IFAD requirements for non-revenue earning projects and the existing legislation of the Government of Ghana. As both IFAD and GoG requirements are the same – IPSAS Cash, the accounting system is characterized by many features indispensable to meet these requirements.

Accounting methodology is a system of special principles, methods, rules and practical procedures that have been elaborated in accordance with the IFAD accounting, reporting and auditing procedures.

Main objective of the Project's accounting policy is the development of an information system capable of generating timely financial information that would be useful for the evaluation of the project performance and efficiency of using the loan and co-finance.

5.21 Used accounting standards:

Cash accounting method is mostly acceptable as the basic accounting methodology for the project: the income/expenditure is identified upon receipt/disbursement of cash, no matter when the goods or services have been received. However, unlike the method of accruals, the cash flow accounting method does not give an insight of the income, expenditures, assets and liabilities of an entity. In accordance with the IFAD requirements in respect of its project, PROSPER will use the International Public Sector Accounting Standards (IPAS) – Cash Basis.

When using the cash accounting basis, the project accounting should be consistent with the following principles:

- Expenditures are only considered upon payment; and
- Liabilities are not considered until payment; therefore, liability accounts are not used normally.

Adjustment of expenditures over the accounting period may be required for the purposes of auditing and reporting. If so, expenses that are actually incurred yet unpaid are adjusted and taken into account in the current accounting period. This also applies to the expenditures that have been incurred during in the past, yet paid during the current period

5.22 Chart of Accounts

The Chart of Accounts is used to: (i) capture the financial data under the appropriate headings and (ii) classify and group financial data for the various financial reports. The structure of the Chart of Accounts caters data to be captured by: (i) the Project components, sub-components activities (ii) expenditure items under each component and sub-component, (iii) The IFAD expenditures categories for the Project, and (iv) sources of funding.

Expenditure categories may also be recorded by using "cost centre" functionality which is commonly available in accounting software's.

The structure of the Chart of Accounts should conform closely to the project cost tables (as presented

in the project design report) to enable comparison of actual project costs during implementation with those estimated during the project preparation.

5.23 Budgeting and budgetary control

The project budget will be recorded in the budget module of the accounting software. Budgeting is discussed more in detail in section 2 of this manual.

5.24 Multi-component accounting

The integrated project accounting and financial management system will be centralized in the PCU. This system will be a combination of all of the components. The PCU will be responsible for the overall consolidated (across the entire project) reporting and accounting, as well as the operation of the Special Account. For the purpose of consolidation, the PCU disbursement accounts will have several levels of sub-accounts, so that the multi-component nature of the project is reflected.

5.25 Recording and processing of transactions

Whenever a transaction takes place under the Project, it should be recorded and processed using the accounting software that meets the project's specific accounting requirements. Processing of payments is discussed in detail in section 8 of this manual.

The recording of transactions under the Project follows the Cash basis of accounting which allows for the recognition of cash inflows in the period they are received and the reporting of expenses in the period those expenditures are paid.

Individual records of transactions are treated as source documents. For the project accounting purposes, the following source documents are considered:

- Purchase orders/ Contracts
- Purchase invoices
- Service invoices
- Consultants/engineers' reports

All transactions should be registered in the accounting software in accordance with the date of occurrence and under the form of journals. The journal should contain sufficient and detailed information about the date of the transaction, its type, amount and reference to the source document. All the transactions should be entered on the accounting software using the principle of double entry, which means that each transaction should be recorded twice, once on the debit side of the transaction and once on the credit side of the transaction. The accounting software will automatically process those transactions and post them to the ledger accounts, which are accounts where all transactions of similar type are recorded. This processing of transactions also allows for the production of timely reports.

The project accountant should reconcile the project accounts on a monthly basis. In case certain adjustments of entries in the accounting process have to be made, the accountant should produce a memorandum in which the reasons and the way in which the adjustment has been made is explained. The memorandum will be authorized by the National Programme Coordinator after being cleared by the Financial Manager.

5.26 Petty cash management.

The accountant will manage and periodically reconcile the petty cash account. The petty cash account is discussed more in detail in the section 5.9 of this manual.

5.27 Bank account reconciliations

The accountant will need to perform monthly bank account reconciliations between the different accounts. The reconciliation is discussed more in detail in section 5.10 of this manual.

5.28 Withdrawal of funds

The Financial Manager will be responsible for preparing withdrawal applications to be submitted to IFAD for eligible expenditures at both the PCU, DADUs and Implementing Partners. The necessary procedures are explained in section 7 of this manual and in the IFAD disbursement Handbook.

5.29 Financial reporting

The accountant is not only in charge for recording the financial transactions on a daily basis but also for summing up the expenditures made under each component and sub-component and for each activity under those and posting the data on accounting/financial reports on a periodic basis during the reporting periods specified in the Letter to the Borrower and in the Financing Agreement. The accountant will also need to keep track and report on the availability of project funds in the different accounts (Designated accounts, project accounts and petty cash) as well as the commitments made by the PCU. The produced reports will be approved by the Project Coordinator after being cleared by the FM. The different financial reports are discussed more in detail in section 9 of this manual.

5.30 Multi-currency accounting

The Project will record dual-currency financial transactions, primarily, with two currencies –Ghana Cedis and US dollars. Subsidiary SDR denominated records will be maintained only for reconciliation and monitoring of exchange movements between the SDR and USD. The SDR shall be used by IFAD if the loan is contracted in SDR. The GCF Loan and Grant are likely to be denominated in US Dollars. Rule of thumb – Monitor exchange movements based on the currency used for the loan or grant in the Financing Agreement.

The computerized accounting system should have multi-currency features for operating in a multi-currency environment. The Central Bank of Nigeria conversion rate as of the date of transaction should be used in recording all accounting transactions.

All payments to the local contractors, suppliers and consultants, including those from the IFAD loan and other financing sources, are to be made in the national currency (Ghana Cedis) only as per Bank of Ghana regulation. All international payments from any financing source are to be made in the US dollars.

5.31 Reporting requirements

Financial and accounting reports to be submitted to the IFAD shall have information denominated in USD.

Financial and accounting reports to be submitted to the governmental institutions shall be denominated in USD or Ghana Cedis, or both currencies as per requirements.

5.32 Fixed Asset Register

The FM/Accountants need to maintain fixed asset registers recording all fixed assets in the fixed asset module of the accounting software. Fixed asset management is discussed more in detail in section 8 of this manual.

5.33 Period for which records are to be kept

The accountant needs to file the original records in an organized way to be maintained by the PCU for a minimum 10 years after the project completion. Record management is discussed more in detail in section 4 of this manual.

5.34 Access Levels

The access to the accounting system should be governed by the privileged metrics defining the levels of access by different users: (i) active use for inputting/editing of data; (ii) read-only use; or (iii) no-access. This would allow a separated and controlled access to the Accounting module (i.e. Journal recording, posting to the General Ledger). Each accounting transaction records the user's ID, preventing unauthorized access to the system and an adequate level of protection against the input of false data or the destruction of the records. At the same time, the data-sharing nature of the system involves a strict coordination and active data exchange among its various users (primarily the PCU). In this respect the system should ensure the reliability in information storage and fast data processing.

5.35 Revision of accounting manual

The accounting manual is to be reviewed and updated once every two years.

5.36 Project financial reports & statements

Periodic financial progress reports are a formal requirement of the GoG and IFAD Financing Agreements. It is the responsibility of the Project Coordinator to ensure that the reports and financial statements are submitted on time to donors and other stakeholders. The Financial Manager is responsible for the preparation of accurate financial reports under the prescribed formats and on a timely basis as follows:

1. Monthly financial reports for PCU management use (These reports will be verified during IFAD supervision missions.)
2. Periodic (quarterly) interim financial reports, to be sent to IFAD within 45 days after the reporting period. The FM will be positively appraised if correct financial reports are sent after 15 days at the end of each quarter. The delay of 45 days is a far limit that should not be reached.
3. Annual financial statements, to be provided to IFAD preferably within two (2) months but not later than four (4) months after the end of the project fiscal year.
4. Annual financial statements audited by an independent auditor acceptable to the Fund and in accordance with internationally accepted auditing standards and terms of reference cleared by IFAD, to be provided to IFAD within four (4) months but not later than six (6) months after the project fiscal year. The FM should target sending the report in April or May, for a good performance.

5.37 Content of the Interim Financial Reports (IFR)

The importance of the periodic progress reports lies in the fact that they provide GoG, PCU and Donors with sufficient information to determine whether the funds disbursed to the project are being used as intended, the project implementation is on track and the budget will be fully implemented.

The financial information should be linked to the information on physical progress and procurement to give assurance that the financial and physical progress are consistent.

Quarterly financial progress reports include the following:

The IFRs include the following statements to be produced directly from the computerized accounting system:

- i) Sources and uses of funds by category and by financier during the reporting period and cumulative for the project life. This report details the project expenditures by each expenditure category or sub category
- ii) Project Actual vs. planned expenditures by component and financier during the reporting period and cumulative for the project life
- iii) SOE-WA table showing Withdrawal applications sent to IFAD and other donors,
- iv) Special Account reconciliation statements for each financier,
- v) Fixed asset register.

In addition to the statements deriving from the computerized accounting system, the IFR should comprise the following:

- vi) procurement reports and
- vii) status of audit recommendations (if any).

5.38 Records Management

Financial records must be created and preserved for every financial transaction performed under the project. Financial records are defined as any financial information including written, computer data, internal forms, e-mails, or any other form of storage information originated from the PCU such as internal forms, journal vouchers financial reports (Monthly & quarterly) copies of checks and withdrawal applications etc. or received by the PCU such as supplier invoices and receipts, bank statements, IFAD documents etc. within the framework of the project's official activities. The objective of this procedure is to preserve the financial records and files for further official use by the MoFA, for financial audit and for review by the Fund during the supervision missions. The projects financial records are the property of the MoFA and cannot be removed or destroyed.

It is important to note that in accordance with the IFAD general conditions, the recipient/borrower has to maintain the original records for a minimum 10 years after the project completion.

Stored at the project level during the project lifetime + microfilms, etc.; then transferred to MoFA.

Filing of the financial records

The accountant is responsible for filing the financial records created or received by the project. To fulfil this responsibility, the accountant must maintain chronological files in which the financial documents have to be filed for future reference. Filing should be performed daily to prevent the accumulation of papers and to ensure that the financial records are maintained in an up-to-date manner at all times. Each financial record should be filed under its code in a chronological order, with a sequential number assigned to every document. Any kind of additions or amendments to the financial document should be filed in a chronological order immediately following the principal document.

Storage of financial records

The financial records of the project should be stored by MoFA for a minimum 10 years after the project completion. The data should be stored within the accounting software, as paper copies, as

scanned copies and as external drives. The Financial Manager should allocate an appropriate storage area for the financial records in paper format and maintain them in locked cabinets, safe from water and fire, to which access is controlled and limited. The Financial Officer should also classify the financial records as "Confidential", or "General". All-important correspondences should be filed. Micro film archiving may also be considered.

Archiving of financial records

In order to prevent an unnecessary pile-up of files in a limited office space, the Financial Manager should make sure that the financial records are archived on a regularly basis. Once a year, the Financial Manager should make sure that the completed or inactive files are archived in a manner that will allow for easy retrieval of the files in case they are required at some future date.

Back- up procedures

To avoid the loss or damage of financial data, the information should be kept in two copies: i) at the computer server of the PCU/MoFA and ii) in the locked cabinets of the PCU office. Only the Project Coordinator, the Financial Manager, and the Programme Accountant are allowed to access the financial records without authorization. The access of external persons is prohibited except for the auditors & IFAD staff. The finance manager must make weekly back-ups of all accounting data and store it on an external hard drive.

5.39 Fixed Asset Management

Fixed asset management is an important process that seeks to track fixed assets for the purposes of financial accounting and to ensure preventive maintenance, and theft deterrence. Adequate Fixed asset maintenance also increases the sustainability of the project.

There are three elements in fixed asset management that require the attention of the Finance Manager

- Purchase of Equipment
- Setting up and maintaining an asset register including verification
- Setting up a plan for disposal and/or handover of the asset once the project is completed

Purchase of Equipment

All procurement and payments for project equipment will be processed in line with the guidance provided in the procurement procedures manual. The accountant financial officer should assign a unique, sequential asset number to all furniture and equipment items purchased (excluding minor items such as stationary). This must be clearly labelled on each item. Each item of equipment must be recorded in the fixed asset register

Fixed Asset Register

The accountant must maintain a register of all (material) project equipment. This will be recorded on the asset management module of the accounting software. The asset register should record the following information for each individual piece of equipment: 1) Asset description, 2) Asset number, 3) Serial number of the item, 4) Officer responsible for asset, 5) Funding of asset (IFAD, government etc.), 6) Location; Date of purchase; and 7) Estimated life. The

Asset Verification Review

The Financial Manager must ensure that a verification count of all equipment recorded in the fixed asset register is performed at least once a year. This should include the following checks:

- Verify that all equipment is still held in the location recorded on the register; and
- Check that equipment is still in a reasonable state of repair.
- Discrepancies between the verification exercise and the fixed asset register should be investigated.
- Where assets are missing or seriously damaged, they should be removed from the asset register. The removal should be formally documented and approved by the Financial Manager and by the MoFA.
- The verification review must be performed by different staff from those who use the equipment, to ensure adequate segregation of duty.

Accounting of fixed assets:

Fixed assets are accounted for at cost. At the acquisition date of the fixed asset, cost is measured by the amount of consideration given. The cost of a fixed asset includes not only its purchase price, but also ancillary charges necessary to place the asset in its intended location and condition for use.

Fixed asset reference code

Each fixed asset is assigned a unique reference. The unique reference code comprises three segments: Category, Type and Purchase Sequence Number. All three segments are used as appropriate when coding an asset.

Category

Category is the first segment of the PROSPER's fixed asset reference code and it describes the category to which the asset belongs.

The category codes are follows:

<u>CATEGORY</u>	<u>Code</u>
Motor vehicles	MV
Motor cycles	MC
Furniture & Fittings	FF
Office Equipment	OE
IT Equipment	IT
Other Equipment	OE

- Type is the second segment of the PROSPER's fixed asset reference code and it abbreviates the type of the asset acquired. For example, AC stands for Air Conditioners; FC stands for Filing Cabinet; OT stands for Office Table; etc.
- Purchase Number is the third segment of PROSPER's fixed asset reference code and it describes the sequential number - the order in which the fixed assets in that particular category were acquired. For example, 001 for the first asset acquired in that category.

Example:

Codes	Description	Segment
FF	Furniture & Fittings	Category
OT	Office Table	Type
001	Purchase number	Purchase number
FFOT001	Office Table in the accounts office	Reference Code

Record of vehicles

The project maintains as part of its fixed asset register, a record of all vehicles (including any donations of such), which shall be entered immediately on acquisition. Each vehicle shall have a file containing details of its purchase, its service history, insurance certificates, accident reports, old logbooks and disposal details.

Vehicle log

Project vehicles shall only be used on official business except where individual officers have been authorized to use the vehicle on a personal to holder basis.

A logbook is kept for each vehicle, recording for each journey:

- The date and time of use
- The start and end destination
- The start and finish kilometer readings
- The total Km travelled

Any defects or damage to the vehicle shall be recorded in the logbook and brought to the attention of the Project Director.

Driving licence

A driver shall only drive those classes of vehicles for which he has a valid license. PROSPER shall have a policy of inspecting all driving license of drivers on an annual basis.

Maintenance of vehicles

The driver/officer shall ensure that regular checks and maintenance are carried out on all vehicles. It is recommended that vehicles in an unsound mechanical condition shall not be driven. Each driver shall inspect the condition of his vehicle before driving it and shall immediately report any defects to the section head and shall record such defects in the logbook. Where possible and practical, a vehicle should be allocated to a single driver who shall be held responsible for its maintenance and security while in use.

Reporting of accidents

At the scene of an accident, a driver shall be responsible for ensuring that:

- Anyone who is injured obtains medical assistance as soon as possible;
- The names and addresses of witnesses are obtained;
- Police report is obtained
- The details of the driver(s) of any other vehicles involved are obtained including:
- Names and address of the driver;
- Name and address of the owner;
- Vehicle type, color and registration number; and
- Name and address of the insurance company.

Any accident involving PROSPER's motor vehicle shall be initially reported to Project Coordinator as soon as possible.

Log book for vehicles

Vehicle operating cost is one of the major items of recurrent cost. A log book will be maintained for each vehicle. This will be prepared in duplicate and signed by the officer in charge. At the end of the month, the original will be sent to Financial Manager for scrutiny. The log book will provide very useful information for the comparison of the fuel consumption of project's vehicles.

Asset handover and disposal plan

In order to maximise the sustainability of the project, it is important to ensure that: i) all assets are handed over to the lead project agency at the end of the project instead of disappearing with individuals, and ii) any asset that is not in acceptable condition or beyond repair is properly disposed of. Therefore, as part of the winding up activities, the Financial Manager must together with the lead

project agency develop an asset handover and disposal plan. The plan should include brief report outlining the following:

- The value of all the assets bought under the project
- Summary of the current condition of the assets,
- To which entity, will the assets be transferred to and on which date and for what purpose.
- List the assets that will be disposed and the reason for being disposed.

The up-to-date fixed asset register should be attached to the handover and disposal plan and it should clearly specify for each asset to which entity it will be handed over or disposed.

The handover and disposal plan should be signed by both the project management and a representative of the lead project entity and a copy should be shared with IFAD and the project auditors conducting the final audit.

SECTION 6: INTERNAL CONTROL

6 INTERNAL CONTROL

6.1 Overview

It is important to ensure that sound internal control arrangements are in place in the implementation of the Project, to assure the donors and other providers of Project funds that their funds are being used in the most efficient and effective manner.

Internal controls comprise all of the policies and procedures adopted by a management unit to assist in:

- Achieving the orderly and efficient implementation of the project
- Compliance with government and donor policies and rules
- The safeguarding of financial resources
- Complete and reliable processing
- The recording and reporting of financial transactions and events
- The timely issue of FM reports for monitoring and management decision making, and
- The detection of fraud and error.

Internal control is aimed at:

- Ensuring that accounts and records are reliable and complete.
- Securing compliance with legislative, statutory, and Project agreement requirements, and adherence to organizational policies.
- Protecting assets, especially cash receipts, from being lost or stolen and safeguarding assets against wastage, fraud and inefficiency.
- Discouraging dishonesty through the implementation of systems and procedures that would make concealment of irregularities possible only through the collusion of two or more persons, and
- Promoting disclosure and transparency.

6.2 Responsibilities for Internal Control

The PCU, the DADUs, the PFIs and benefiting communities, are all responsible for developing, implementing, and monitoring, a sound system of internal controls.

6.3 Critical Elements of Internal Control

The critical elements of internal control are:

Management commitment to effective internal control: All partners in the Project must be committed to implementing effective internal controls. PCU is responsible for maintaining and reviewing the control structures on a regular basis, to ensure that all key controls are operating effectively, and remain appropriate. The attitude exhibited by PCU towards the enforcement of controls, will strongly influence the effectiveness of the internal control mechanism in the Project.

Effective organizational controls: Operational controls include effective organizational structures, well-defined responsibilities, and the segregation of functions. Segregation of functions and separation of duties, within finance functions and the accounting systems should be ensured, in order to assist with the detection and prevention of errors, fraud, or the misuse of funds. The clear specification of financial authorities and delegations is a critical part of effective organisation internal controls.

Capable, trained and honest officers: The PCU should engage qualified and experienced personnel within their structures and ensure that both formal and informal (on-the-job) training is provided to staff, to enable them to effectively carry out their assigned duties.

Clearly understood procedures and documentation: Internal controls should be clearly documented and job descriptions should be made available to all relevant staff. All staff involved in accounting for

expenditure, revenue, assets and liabilities, must understand both the Government and Project policies and procedures. Documents should be simple, easy to use, and designed to ensure that they will be completed correctly, to help reduce misinterpretation of information and errors.

Effective operational controls: Operational controls relate to the completeness and accuracy of processing for financial transactions and events, and are aimed at preventing and detecting errors. Operational controls include sequence checking, use of control totals, reconciliations, and independent checks. Regular reconciliations of bank accounts, and control accounts, will help ensure that the accounting systems are functioning properly, and that the accounting data is being accurately recorded and maintained.

Adequate physical controls: Physical controls are required to safeguard cash and other negotiable instruments (e.g. cheques), as well as inventories and assets. Controllable forms such as receipt books and cheque books must be kept secure, and records must be kept for issues and usage of assets, and controllable forms. Physical assets must be safeguarded and properly maintained, to retain their value and effectiveness.

6.4 Financial Delegations and Authorities

The PCU, in conjunction with the DADUs, must clearly define the financial delegations and authorities for project implementation. Such delegations and authorities should be agreed between PCU and these other stakeholders. The following delegations and authorities are the minimum that should be addressed in establishing the financial arrangements and internal control system for the Project:

- Bank account operations: Authorized signatories for drawing funds from the project bank accounts and the signing requirements for payment withdrawals. Authorized signatories for loan fund replenishment WAs
- Contracts: Authorities to approve contracts for civil works, goods and services, including approval ceilings. Contracts valued below GHS6, 000,000 (USD1, 000,000) should be signed by the Project Coordinator and the Financial Manager (witness) on behalf of PROSPER. Contracts valued from GHS6, 000,000 (USD 1,000,000) should be signed by the Chief Director of MoFA and Project Coordinator (Witness).
- Receiving of civil works, goods and services: Authorities to certify the completion/acceptance of civil works, goods and services
- Expenditure payments: Authorities to approve expenditure claims/vouchers, including approval ceilings, authorities to approve petty cash expenditure claims and authorities to approve advances of funds.
- Receipts: Authorities to receive funds and to issue official receipts.

6.5 General Financial Internal Controls

Financial controls consist of measures adopted by the PCU to protect assets and ensure the accuracy and reliability of accounting records and financial reports. Key internal controls to be implemented by concerned agencies include:

- **Competent and reliable personnel:** The internal control system relies on the people administering it. Employees should therefore be adequately trained, and properly supervised, to enable them to carry out their duties and responsibilities effectively.
- **Separation of functional responsibilities:** One person should never have complete control of a transaction from beginning to end. A clear understanding should exist as to who will issue an approval, what is to be approved, and the limitations of authorization. Approving officers should not have responsibility for posting, or the ability to change accounting records.
- **Assignment of responsibility for every function:** Employee responsibilities should be clearly defined (e.g. an organization chart should be prepared), to avoid overlapping or unassigned areas of responsibility. Staff must know their responsibilities, and whom they report to.

- **Separation of asset custodianship and accounting:** The accounting function should be separated from the custody of assets (e.g. an employee who is entrusted to receive cash should not have access to the cash journals or ledgers).
- **Security measures:** Techniques, procedures, and measures, should be employed to protect assets, and ensure reliable accounting data and reports (e.g. use of mechanical devices such as vaults and cash registers; use of control accounts and subsidiary ledgers).
- **Supervision:** Internal regulations should include the supervision of staff (e.g. establishment of annual estimated expenditures under the supervision of the PC; or the process of setting or recording transactions made by assistants, and the preparation of financial statements, under the supervision of the FM).
- **Regular independent review:** Internal auditors should regularly review and evaluate the system of internal controls, to determine whether it is functioning effectively as planned (e.g. the findings and recommendations of the internal auditor should be submitted to senior management for action).
- **Control of transactions:** Every transaction should be authorized, approved, executed and recorded, according to prescribed procedures (e.g. cash cannot be paid without the authority of PC/SPC).
- **Serially numbered documents:** Project documents should be serially numbered to check completeness of transactions (e.g. cheques, invoices, and vouchers, should be serially numbered).
- **Sequencing:** An accounting control system should be set up in such a manner that proper sequencing is followed with regard to payments and the posting of transactions to ledgers (e.g. payments should not be authorized or made before the goods or services to which the payment relates to has been received).

6.6 Transaction Processing Controls

With sound transaction processing internal controls, employee duties are arranged, and records and procedures are designed, to exercise effective accounting control over assets, liabilities, revenues, and expenditures. The work of employees is also divided, to ensure that no one employee performs a complete cycle of operations (e.g. an employee handling cash would not be assigned to post collections in the accounting records). Procedures to be followed must be defined, and such procedures should require proper authorizations by designated officials, for all actions to be taken.

The table below summarizes general transaction processing, internal control objectives, and internal control outcomes.

Table: Transaction processing controls and outcomes

General objective	Internal control outcome
Validity	Recorded transactions are valid and documented
Completeness	All valid transactions are recorded and none omitted
Authorization	Transactions are authorized according to IFAD and Government policy
Classification	Transactions are properly classified in the Accounts
Accounting/Posting	Transaction accounting is completed
Proper period	Transactions are recorded in the proper period

6.7 Computerized Accounting Systems Controls

At the PCU, computerized accounting system should be used. When using computerized accounting systems, internal controls must also encompass the security and back up of financial accounts and records. The key computerized accounting systems internal controls that must be adhered to include:

- **Password Protection:** Password protection should be implemented and maintained for all IT accounting systems.
- **Back up Procedures:** All IT systems/Accounting Software should be regularly backed up (i.e. daily if possible), and procedures established to restore data and or software, following any operational disruption. Emergency procedures should be set up, to provide business continuity following loss of IT systems. Daily printouts of daily transactions (journals) should be made, checked, and signed by the FM and filed for future reference.
- **Virus Protection:** All IT systems should be protected against the threat of software viruses. Regular virus scan should be carried out (at least once a week).
- **Emergency Procedures:**
 - Electrical power systems supporting IT equipment should have appropriate UPS systems in place, together with backup batteries, which are automatically invoked following a power loss.
 - Batteries will be able to provide power for sufficient time to allow an emergency generator to start up and run at full load.
 - Emergency procedures detailing what actions to take, and including manual procedures to be followed in the event that IT systems are unavailable, should be fully documented.
 - All staff should be aware of the documented emergency procedures, and these should be tested, reviewed and updated at regular intervals.

SECTION 7: SUPERVISION MISSIONS

7 SUPERVISION MISSIONS

Throughout project implementation, GoG and IFAD, will conduct annual financial supervisory missions to develop financial management ratings and ensure compliance with the IFAD's requirements.

During the supervisory missions, IFAD and GOG will assess and monitor the adequacy of the PCU financial management arrangements such as accounting, budgeting, internal controls, flow of funds, financial reporting and the auditing practices. The key findings and recommendations of the mission will be captured in the Aid Memoire.

When preparing for and during a supervisions mission, the necessary supporting actions by the Finance Manager generally will include the following:

- Update and make available for the mission, the project financial information and especially the incurred expenditures by component, by category and by financier as of the last day of the preceding month.
- Update and make available reports on the status of counterpart funding (has the Borrower/Lead Project Agency made available financing proceeds to the Project as planned?).
- Provide a walkthrough of the existing accounting system including its main modules, budgeting, accounting, financial reports, fixed asset register as well as the security settings in use.
- Facilitate checking of the internal controls, by system “walk through” to ensure that approved procedures are consistently being followed.
- Make available Withdrawal Applications, Statement of Expenditures and all supporting documentation regarding expenditures claimed under the SOE thresholds to facilitate the verifying of adequacy, completeness and validity of claims.
- Make available evidence of qualifications and educational background of the financial staff including, organogram of the PCU, CVs, TORs of each position and PCU training plan.
- Update and make available a complete a fixed asset register and facilitate sample test check of physical existence of the asset.
- Make available the manual of procedures regarding financial operations such as processing of transactions, financial management, accounting policies, fixed asset maintenance and records management as well as the lead project agency's anticorruption policy and whistle blowing procedures.
- Prepare and make available the updated bank account reconciliation statement and bank account statements for all designated and project accounts.
- Arrange meeting with the auditors and any other selected party requested by the mission.
- Make available all necessary documentation and contracts regarding procurement not subject to prior review.
- Provide an update on the actions taken regarding past audit recommendations as well as action points outlined in the past aide memoires.
- Make available the most recent AWPBs, annual and Interim Financial reports
- Provide with the latest Budget vs. Actuals reports and analysis.

Supervision, mid-term review and completion report

Project supervision. IFAD will ensure overall PROSPER project technical, fiduciary and financial supervision and will undertake at least one supervision mission annually. This mission will include field

visits for: (i) providing technical guidance; (ii) interacting with the beneficiaries to obtain their views; and (iii) evaluating project outreach and impact on the target group.

Mid-term review. A mid-term review (MTR) will be undertaken, during the first quarter of Project year 4. The main objectives will be to assess: (i) the project achievements against targets (ii) interim project impact; (iii) efficiency and effectiveness of project management; (iv) sustainability arrangements; (v) the validity of project design. The MTR team will also identify implementation constraints and measures to improve the project performance. Based on its findings, the project and its PIM will be adjusted for the remaining project life.

SECTION 8: INTERNAL AND EXTERNAL AUDIT

8 Internal Audit Process

In order to strengthen the quality of the project's fiduciary and financial oversight the Internal Audit Directorate of the Ministry of Food and Agriculture, shall include PROSPER in their annual auditing plan and funds be explicitly allocated from PROSPER to ensure that the project transactions, both financial and procurement-related, are reviewed according to a risk-based selection. The internal audit function will not participate in clearance or approval activities prior to payment so as to maintain an appropriate independence from operational activities.

The determination of the processes, transactions and accounts reviewed will be fully under the authority of the Internal Audit Directorate. Being risk-based will involve the professional judgement of the auditor and take into consideration materiality, complexity, inherent risk, adequacy of controls, criticality to project success and financial reporting, and other aspects as deemed relevant by the internal auditors.

It is key to the success of such arrangements with the Internal Audit Directorate that the internal audit reviews be explicitly included in both the Internal Audit Directorate's annual work plan, and the budget of PROSPER.

8.1 Internal Audit TOR

Scope:

- All PROSPER project activities are within the scope of the Internal Audit Unit. Annually, the Internal Audit Unit develops a work plan that includes areas within the scope to be covered in the year. The areas of focus will be determined based on risk and in consultation with the National Programme Coordinator
- An audit work plan is produced two months before each calendar year.
- Checks are performed according to the audit work plan. Methodology: document review, interviews with PCU staff and field visits.
- The Internal Audit Unit implements the work plan and reports on a timely basis to the Chairman of MoFA Audit Committee, National Programme Coordinator and IFAD.

Audit Scope:

The internal audit reviews would be conducted on the following basis:

- Transactions to be reviewed on an ex-post basis ONLY;
- Field/project office visits bi-annually by the internal audit would be scheduled in advance in agreement with the PCU;
- The internal audit review would cover a sample of financial and procurement transactions selected on a risk basis as determined by the internal audit directorate and assess if they are true, valid, complete and accurate,
- The review would also assess for the sampled of transactions if the expenditures are in agreement with the respective Statement of Expenditure sent to IFAD for approval, and if the designated project account with the Central Bank has been used for the purposes of the project only;
- In addition to the accuracy and validity of the sampled transactions, the internal audit would assess the adequacy of the internal controls and seek to identify potential efficiencies in the processes;
- The resulting reports of the Internal Audit Directorate on the PROSPER will be provided to the PCU and to IFAD for information, action and follow-up.
- Funds (from all financiers, i.e. IFAD, GCF, GoG) are being used in accordance with Loan and Grant Agreements, and only for the purposes of the project.

- Goods and services are being procured in accordance with the relevant IFAD procurement guidelines and Government regulations.
- Review the adequacy and effectiveness of internal controls and make recommendations for improving systems and tools.
- Carry out regular review and monitoring of FM and procurement functions, to ensure compliance with the relevant policies, procedures and practices and appropriateness of system of the project.
- Verify payments for Project activities to ensure appropriateness of documents and transaction.
- Undertake random visits to assess the adherence of the established procedures at all levels, particularly States and communities and to ensure physical existence of project assets and results.
- Review eligibility and appropriateness of the project expenditures incurred at all the levels as well as to provide basic technical services (as required) for the proper recording and maintenance of project accounts at those levels.
- Randomly review procurement transactions to ensure procurement transactions have been procured in accordance with the applicable procedures, the deliveries of goods, works and services are in accordance with contract quantities and quality.
- All necessary supporting documents, records, and accounts are being kept in respect of all project revenues and expenditures.
- There is proper control and safeguarding of cash and portable assets.
- Compliance with the PIM and its supplements, and also compliance with all the Regulations on FM for Use with IFAD-funded Programmes.
- Review the fixed assets procured, including verification through physical checks of inventory and ascertain whether the vehicles and other equipment are appropriately identified as being funded under IFAD assistance, such as project logo on vehicles. Also, to ascertain whether such assets are being utilized in accordance with the relevant Loan Agreements.

Authorization and Reporting Lines of the Internal Audit Unit

The Internal Audit Unit in the discharge of its duties is authorized by the Director of the Internal Audit Agency to have full and complete access to any of the organization's records, properties, and personnel. The Internal Audit Agency is a Public Service institution established by the Internal Audit Agency Act, 2003 (Act 658). The Agency exist as a Central Agency with the object to co-ordinate, facilitate and provide quality assurance for internal audit activities within the Ministries, Departments and Agencies and the Metropolitan, Municipal and District Assemblies.

The Internal Audit Unit reports directly to the Director-General of the Internal Audit Agency.

Ethical Requirements of the Internal Audit Unit

- Internal Audit staff do not have any direct operational responsibility or authority over any of the project activities they review.
- Any Internal Audit staff with real or perceived conflicts of interest must inform the Programme Coordinator immediately.
- The Internal Audit function performs its duties with professional competence and due care.
- Internal Audit ensures confidentiality is maintained over all information and records obtained while carrying out their audit activities.
- The Internal Audit Unit will comply with all IFAD, National and Programme policies, processes, and procedures.

Recommended Internal audit cycle

The internal auditor in the PCU/PSIU will ensure that the following internal audit cycle is followed:

- An audit work plan is produced two months before each calendar year.
- Checks are performed according to the audit work plan. In addition, past years audit recommendations are followed up on
- Methodology: document review, interviews with project staff and field visits.
- Quarterly reports are produced, and the draft report is shared with management for comments
- Finalize the report –quarterly audit reports to be shared with project management for managements response within 6 weeks after the end of each quarter and then with IFAD within 8 weeks after the end of each quarter.

Recommended structure of the internal audit report.

All the internal audit reports submitted to the PCU are recommended to follow the following structure:

Part A: Brief details of the Auditee and Audit:

Part B: Executive Summary

Part C: Follow up on previous Audit Reports

Part D: Findings and recommendations

Annex 1: Summary table of the status of past Audit recommendations.

All IA reports must be to be shared with project management for managements responses within 6 weeks after the end of each quarter and then with IFAD within 8 weeks after the end of each quarter.

8.2 EXTERNAL AUDIT

The project audit is an ex-post review of financial statements, records of transactions & financial systems; It examines the adequacy of accounting systems & procedures, capacity to maintain appropriate accounts & documentation of the project expenditures. The objective of the project audit is to provide credibility and assurance of accountability.

In accordance with the IFAD general conditions and the FAD Handbook for Financial Reporting and Auditing for IFAD Financed Project, the PCU must have its financial statements audited by an external auditor acceptable to IFAD in accordance with internationally acceptable audit standards (ISA or INTOSAI/ISSAI). The Audited financial statements must be sent to IFAD no later than 6 months after the end of the fiscal year. The detailed instruction regarding project audit are outlined in the IFAD Handbook for Financial Reporting and Auditing for IFAD Financed Projects available at:

IFAD is committed to the use of country's financial management systems whenever these are deemed to meet IFAD's minimum requirements. Consequently, the project will be audited by the Ghana Audit Service on a bi-annual basis.

The Audit Cycle and Appointing the Auditor

Annual audits will be conducted at the end of each Government of Ghana's Fiscal Year for the project. In line with its mandate as per the Ghana Audit Service Act (Act 584), the Auditor General is solely responsible for auditing funds under the Consolidated Fund and all public funds as received by Government ministries, agencies and departments. In this regard, and consistent with IFAD's policy to maximise the use of country systems where feasible, the Ghana Audit Service (GAS) will conduct the external audit of AAFORD's financial statements and furnish copies to IFAD within six months of the end of the fiscal year. The technical capacity of the GAS is considered satisfactory having successfully and timeously audited other IFAD-funded projects, namely, RAFIP, GASIP and REP. with qualitative results.

The Interim financial statements of the project will be audited by the Ghana Audit Service on a bi-annual basis: the mid-year audit will concern the IFRs of the first two quarters, while the final year audit will combine the audit of the consolidated annual financial statements and the audit of the IFRs for the third and fourth quarter of the year. The bi-annual audit report of the Project's IFRs will be submitted within a delay of 60 days from the end of each audited period. In case of delays on the submission of the biannual verification and audit report, advance withdrawals for the subsequent reporting period will not be processed.

The ToR of the auditors will be approved by the Fund. The project financial statements including movements in the designated accounts will be audited in accordance with International Standards on Auditing (ISA) and a single opinion will be issued to cover the project financial statements in accordance with the Fund's audit policy. The auditors' report and opinion with respect to the financial statements, including the management letter, will be furnished to the Fund within six months after the end of each fiscal year.

If due to work overload, the GAS will be unable to carry out the audits, the Project will proceed to the recruitment of an independent and qualified audit firm to carry out the audit of the project. The selection of auditors other than GAS shall be on competitive basis and in accordance with the IFAD's procurement guidelines and would be completed within six months of project effectiveness.

The complete audit cycle can be divided into the three main roles carried out by the Financial Manager/PCU, the Auditor and IFAD.

The PCU and the Financial Manager will:

- Timely prepare TORs of the Audit and submit these to the Fund for No Objection,
- manage the selection process of the auditor (if relevant) and appoints the auditor
- Prepare the financial statements for the reporting period
- Make available all the financial information necessary to the auditors
- PCU should respond to the audit findings and recommendations within 2 weeks
- Submit the audit report to the relevant stake holders but to reach the Fund no later than 6 months after the end of the project fiscal year.

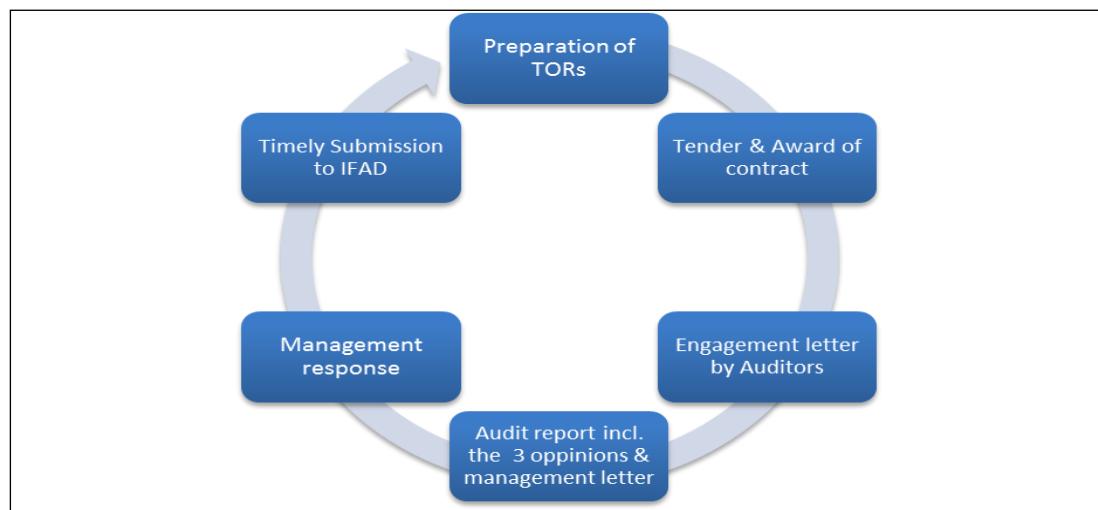
The Auditor will:

- perform the audit work including the three audit opinions (on the financial statements, the Designated Account and the SOEs)
- Indicate any ineligible expenditures
- Provide a management letter

The Fund will:

- Provide a no-objection to the auditors TORs
- Monitor timely submission and review of audit reports

- Follow up on remedial action\apply sanction and /or remedies if relevant including suspension of disbursement and or cancellation of loan balance (Legal Notice is sent to the LPA after 3 months of delay. Suspension of disbursement to the project after 6 months delay.)



8.3 Anticorruption policy

The management of the project funds shall be sufficiently rigorous to safeguard against Fraud and Corruption. Fraud and corruption include, but are not limited to:

- corrupt practice - offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party
- fraudulent practice - any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation
- collusive practice - an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party
- coercive practice - impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party, to influence improperly the actions of a party

IFAD applies a zero-tolerance policy towards fraudulent, corrupt, collusive or coercive actions in projects financed through its loans and grants. 'Zero tolerance' means that IFAD will pursue all allegations falling under the scope of this policy and that appropriate sanctions will be applied where the allegations are substantiated. IFAD takes all possible actions to protect individuals who submit allegations of fraudulent or corrupt practices in its activities from reprisal. The IFAD anticorruption policy is available on the IFAD website at <https://www.ifad.org/en/anti-corruption>. The IFAD website also provides instructions on how to report any alleged wrongdoing to the Office of Audit and Oversight.

It is the Project Coordinator's and the Financial Manager's responsibility to make sure that all PCU staff including the financial department are aware of IFAD's and the lead project agency's anticorruption policy and whistle blowing procedures.

8.4 Compensation of costs and logistics.

In line with the adopted practice by other International Financing Institution, IFAD is in favour of having the project cover all reasonable incremental cost associated with the audit.

It is advised that the cost estimates for the audit are prepared and agreed between GAS and the project well in advance. It should also be noted that IFAD expects fully that field visits will be carried out during the course of the audit, to be planned in advance in collaboration with project in order to facilitate logistics.

8.5 The Audit Report

The Audit Report must include the following elements which should also be reflected in the auditor's TORs:

- An opinion on the Project's financial statements
- A separate opinion on the eligibility of expenditures included in the WA /Statement of Expenditure procedure
- A separate opinion if the use of the Special Account/Designated Account is in compliance with the financing agreement
- In addition to the audit report, the independent auditor will prepare a management letter. This will include comment and recommendations on the adequacy of the financial management system, and on the system of internal control. The management letter should also include a follow up section on the status of implementation of previous years recommendations

SECTION 9: PROJECT COMPLETION AND CLOSURE

9 PROJECT COMPLETION AND CLOSURE

Loans and Grant completion and Closing

The closing of the loans and grant is due six months after the project completion date. Both the completion and the closing date of the loans and grant have financial implications on the project management:

- To ensure that the designated account is completely and timely justified, the Chief accountant/PMU has to develop and submit to the Fund a so-called recovery plan outlining the percentages per withdrawal application that will be recovered and paid respectively. The recovery plan should be submitted to the fund around 6 months before the completion date.
- By the completion date all the project activities must have been finalised. The payments can be done also after the completion date, as long as the commitments/ contracts are signed prior to the completion date. Activities that have continued after the completion date are considered as ineligible expenditures and can therefore not be financed by the IFAD funds.
- After the completion date but no later than the closing date (six months after the completion date) the PMU can still incur expenditures related to so called winding up expenditures e.g. Final Audit, Project completion report, Project staff salaries involved in the winding up activities, PMU maintenance cost, project completion workshop

In order for the Loans and the grant accounts to be closed by IFAD, the Fund requires the confirmation of the last WA, the submission of the Final Audit report and submission of project completion report. The Final Audit Report has to cover, the final project year up to the final expenditures and it can be paid from the loans or grant available balance by using, for example, direct payment or Reimbursement of pre financed expenditures.

Initial Advance Recovery Plan: To ensure that the designated account is completely and timely justified, the Financial Manager/PCU has to develop and submit to the Fund recovery plan outlining the percentages per withdrawal application that will be recovered and paid respectively. The recovery plan should be submitted to the fund around 6 months before the completion date or when the outstanding balance (amount still undisbursed by IFAD is less than the double of the authorized allocation.

Project Completion: At the end of the project, the PCU will prepare a Project Completion Report (PCR), which will include an assessment of the achievements versus the planned project results. The PCR preparation process will include a validation workshop to ensure that key project stakeholders evaluate the project performance. This PCR will be submitted to the Government and IFAD within three months after project completion. The PCR preparation will include the capitalization of innovations, lessons learnt and good practice generated by the project. The PCR will assess the possible scaling-up of some of the project interventions. The internal PCR will be used as the basis for IFAD's PCR. The IFAD's PCR will be focus on an assessment of: (i) the project outcomes and their sustainability and (ii) the projects impacts.

Project Closing : The closing of the IFAD is due six months after the project completion date. Both the completion and the closing date of the loan have financial implications on the project management such as: development and submission of a recovery plan, ensuring eligibility of expenditures and submission of the necessary documents outlined below. Please also refer to section 1.3 of the IFAD Disbursement Handbook.

By the completion date all the project activities must have been finalized, achieved and delivered to the Project.

Activities that have continued after the completion date are considered as ineligible expenditures and can therefore not be financed by the IFAD funds. However, after the completion date but no later than the closing date (six months after the completion date) the PCU can still incur expenditures related to so called winding up expenditures e.g. Final Audit, Project completion report, Project staff salaries involved in the winding up activities, PCU maintenance cost, project completion workshop.

IFAD requires the following to be provided by the PCU in order to close the financing:

- Full recovery of any IFAD advances to the project. In there is balance of funds in the designated account at completion date, the transfer has to be made to the account IFAD indicated
- Confirmation of last withdrawal application
- Submission of final audit report
- Submission of project completion report

The Final Audit Report has to cover, the final project year up to the final expenditures and it can be paid from the loan available balance by using for example direct payment or Reimbursement of pre financed expenditures.

ANNEX A: POTENTIAL RISKS AND MITIGATION MEASURES FOR THE IMPLEMENTATION OF THE CREDIT & GUARANTEE FUNDS AND GRANTS & SUBSIDIES.

1. CREDIT FUNDS

Risk	Rating	Mitigating Measures
1. Diversion of credit to non-productive activities	Medium	1. Tranche disbursement with close monitoring to see whether previous disbursement have been applied to the letter 2. Cashless disbursement, where in place of cash, inputs are given as package. This would minimize the diversion. Some IFAD projects (NRGP, GASIP) adopted this practice in Ghana.
2. Untimely disbursement of credit funds leading to disbursement not coinciding with the crop calendar. Crop calendars captured in business plans are not properly used and disbursements are made without recourse to them	High	1. Disbursements should be made in strict adherence to the crop calendar. 2. Loans approved should be disbursements strictly according to the crop calendar. Business plans should incorporate crop calendars.
3. Late loan approval leading to late disbursement	High	When approval is late, disbursement should not be made in the same year but be done the following cropping season for effectiveness and efficiency.
4. Production risk due to drought, pests and diseases	High	1. General peril insurance from GAIP 2. Supplementary irrigation through boreholes and solar pumps 3. Use of drought resistant seeds for adaption.
5. Marketing risk including side selling, price volatility	High	Strong off-taker agreements binding on all parties through the value chain approach.
6. Non-participation of financial institutions in credit administration.	Medium	Strong Tripartite arrangement which should be implemented to the letter with conditions binding on all parties.
7. Default risk – perception of rural small-holder farmers is that loan funds are government money.	High	1. Loans should go through participating financial institutions by wholesaling through the PFIs and not directly from the project. This would help to nib the freebie mentality of rural farmers in the bud. 2. Use of GIRSAL to underwrite up to 70% of losses 3. Adequate collateral should be provided and cash collateral (10%) through voluntary savings used as part collateral.
8. Risk of Default by financial institutions	Low	Loans to PFIs are to be deducted at source and so PFIs should provide bank guarantees. T-bills/Government Bonds to be used to secure loan funds from wholesale institution/fund manager.

2. GRANTS AND SUBSIDIES

Risk	Rating	Mitigation
1. Distortion of financial market	High	1. Proper targeting of beneficiaries for inclusive growth.

2. Smuggling	High	The use of output-based subsidies through procuring with higher prices. This should however be done within the system of smallholder farmer-off-taker model to ensure inclusiveness
3. Operational risk regarding application process and overall management	Medium	Regular audits, Monitoring and reporting

3. GUARANTEE FUNDS

Risk	Rating	Mitigation
1. Credit risk: crystallization of the guarantee.	High	Re-insurance by Guarantee institution
2. Timeliness of Guarantee funds to honour due liabilities.	High	Re-insurance
3. Political risk	High	Loan applications and all processes to be done by the private sector. Guarantee fund to be run by private company.
4. Overall operational risk of the guarantee funds with respect to application assessment, portfolio monitoring, etc.	Medium	Regular audits, Monitoring and reporting.

Chapter 7: Procurement and contracting

Country Level Procurement Framework

The Ghana Public Procurement Act 2003 (Act 663) as Amended Act 2016 (Act 914) (“the Act”), is the law exclusively governing public procurement of goods, works and services by all departments and ministries and agencies (MDAs). Regulations Rules and Directives have been provided to attend the Act. The Public Procurement Authority (PPA) is exclusively responsible for defining procurement policies, overseeing compliance and grievance redressal systems. In the MDAs, there are dedicated staff for procurement. However, there is a lack of procurement skills/expertise.

Features of the Amended Act 914 of 2016

- The Amended Public Procurement Act 914 has taken good steps toward aligning the public procurement system with international standards. Notable developments include solidifying the scope of application of the law by reducing non-competitive procurement procedures, enabling the use of e-procurement, and introducing framework agreements. Furthermore, the Amended Act includes provisions on institutional arrangements in procuring entities, adds a code of conduct for public officials and employees and private sector participants and addresses conflicts of interest in public procurement.
- Prohibits resorting to the splitting of contracts in order to circumvent the conditions, rules and procedures.
- The Amended Act 914 kept the methods of public procurement that existed under the Act 663 and supplement them with some new and special mechanisms such as the ‘two-stage tendering process’, as well as different procurement methods for complex transactions and contracts of interrelated and multilateral nature such as, separate Standard Bidding documents procurement of IT equipment, Textbooks, Health Sector Goods and also standard Complex time/lumpsum and framework contract templates.
- Obligates the procuring entities to use the Standard Bidding Documents that will be issued by the Ghana Public Procurement Authority for public procurement.
- Provides unit costs of common user items to assist procuring entities estimate costs.
- Obligates procuring entities to publish all tender opportunities on the newly established E-Procurement portal (Ghaneps) that include bidding documents and the recommendations for award. Also, the procuring entities should publish its Procurement Plans.
- Obligates procuring entities, before initiating the procurement process to verify the availability of funds allocated to them through the GIFMIS.
- The Amended Act 914 requires businesses to register with the PPA to be able to bid for goods and services so that a complete register of potential businesses is maintained and available to procuring entities.
- Introduces techniques specifically to promote greater opportunities for SMEs in the public procurement market, either directly or through subcontracting opportunities. Additionally, the law mandates the application and full rollout of e-procurement.

A complaint mechanism for protests/grievances exists, though not robust. The contract provisions provide for dispute resolution amicably for contracts awarded. In case the amicable resolution is not successful, the affected party can initiate arbitration under the Ghana Arbitration Act, to settle the disputes and/or differences.

Procurement assessment of MoFA & GASIP

MOFA has experience of implementing IFAD funded projects. However, the procedures and processes adopted for the projects have not been made applicable to the organization as such. In the absence of national law which safeguards the interests of transparency, fairness, and grievance redressal of the participating bidders/suppliers, it is recommended that IFAD Procurement Guidelines shall be

followed both at the central level and at the decentralized level by all implementing entities. Procurement under the project will be done in compliance with IFAD's procurement guidelines and IFAD Procurement Handbook.

A Procurement Risk Matrix assessment was carried out for MOFA. Using the tool, the inherent risk rating is 2.43 (Medium risk) and if the risk mitigation measures recommended are fully adopted and complied, the Net Risk Rating becomes 2.63 (medium risk).

The detailed PRM assessment is shown below:

IFAD Procurement Risk Matrix

Division	WCA					
Country	Ghana					
Project	PROSPER					
Mission	Design Mission					
IFAD Procurement Consultant	Fuseini	Ahmed Abu				
Date	1st August - 3rd September, 2021			NET RISK RATING		
INHERENT RISK RATING	2.43				2.63	
#	Description of Risk Feature	Rating	Assessment Basis	Remarks	Recommendation /Mitigation	Rating
A	COUNTRY RISK ASSESSMENT	2.20				2.30
1	Legal and Regulatory Framework	2.60				2.60
a	Country procurement law, regulations and manual exist	3	3 they all exist, 2 only two exist, 1 only one exist or none	Public Procurement Act , 2003 [Act 663] as Amended Act 2016 (Act 914) is in place . Public Procurement regulations exist. There are desk instructions on public procurements with step by step guidance (2003-Act 663). However, Regulations are out of date and inconsistent with the Amended Act 2016 (Act 914). Since 2006, the Regulations (Manual) has not been revised.	The Public Procurement Authority should ensure that the Attorney-General develops Regulations to attend the Amended Act 914. Where there are any unclear clauses in the law, IFAD Procurement Guidelines will be applied. Morover the Project Implementation Manual will include the detailed procedures to ensure no gaps in the procurement cycle.	2

b	Existence of Standard Bidding Documents for Goods, Works and Services	3	3 all exist, 2 only for NCB & ICB, none for Shopping, 1 none exists	All 3 exist. Large number and type of tender documents are available on the Public Procurement Authority website (https://ppa.gov.gh/online-documents/standard-tender-documents-revised/). They include Bidding Documents for specialized procurement such as, Development of Textbooks, Information Technology and Health Sector Goods.	Use the national bidding documents for national competitive bidding. For ICB use the IFAD Standard Bidding Documents for Procurement of Goods, Works and Services, (1 st Editions, December 2020). A template for Notice of Intention to Award/Standstill Period and IFAD Policy on Sexual Harassment (SH) and Sexual Exploitation and Abuse (SEA) should be included in the RFB for National Competitive Bidding	3
c	Procurement Monitoring	1	Use PEFA Framework, see worksheet for details	The database of the Public Procurement Authority (PPA) captures 70 percent (by value) of public procurement; the information provides details of contract awards, the value of the contract, the method of procurement, and the successful bidder. However, the information from the PPA database is provisional for FY2016 and FY2017 and has not been independently verified by the Auditor-General. The proposal of publishing the proposed monthly procurement bulletin and implementing the already developed procurement monitoring tool has been addressed.	Use the IFAD internal tools as NOTUS and the CMT, which would publish information regarding contract award, value of contract, method of procurement, and the successful bidder.	2

d	Procurement Methods	3	Use PEFA Framework, see worksheet for details	At least, 70.1 percent of public procurement is conducted through competitive methods (restricted tenders, National Competitive Bidding [NCB], and International Competitive Bidding [ICB]).	Use competitive methods outlined in the procurement law, following IFAD guidelines and procurement manuals.	3
e	Public access to procurement information	3	Use PEFA Framework, see worksheet for details	At least, five of the key six procurement information elements are made available to the public in a timely manner through the PPA's website. However, Annual statistics is outdated; the most recent published consolidated procurement statistics report relates to FY2012.	PROSPER will use the IFAD, UNDB Online, PPA, MoFA and GASIP project websites to publish information regarding contract award, value of contract, method of procurement, and the successful bidder.	3
2	Accountability and Transparency	1.80				2.00
a	Procurement Complaints Management	2	Use PEFA Framework, see worksheet for details	Section 82 of Act 663 (as amended by Act 914) outlines the legal framework for suspending all procurement activities once the ACB receives an official complaint from a dissatisfied bidder. In practice, however, suspension of the procurement process is not always done, especially for very sensitive national issues. Also the ACB is not an independent body but a select body of the PPA that also gives advice and clearance to Procuring Entities for use of Restricted and Sole-Sourced Tendering.	Ensure that the SBD and website of the PROSPER Project indicates clearly information regarding complaints mechanism for procurements conducted under the Project. Also Bidders will be informed at pre-bid meetings of the existence of a Bid Complaints System that can be used if they want to complain a particular procurement action.	2

b	Country Corruption Perception Index score	2	The score is published on Transparency.org. 0 to 29 = 1, 30 to 60 = 2, 61 to 100 = 3	Ghana ranks 75 out of 180 countries in the 2020 Corruption Perception Index according to Transparency International. Nonetheless, the findings on internal and external audits, and assessment of institutions like Transparency International, indicate that integrity and ethical values still require strengthening. Ghana scored 43 points out of a total of 100 points.	All procuring entities as well as bidders and service providers, that is: suppliers, contractors, and consultants shall observe the highest standard of ethics during the procurement and execution of contracts financed under the IFAD funded Projects in accordance with paragraph 84 of the IFAD Procurement Guidelines. The Revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations applies to the Project.	2
c	2-tiered system to handle complaints	2	3 as stated, 2 only a single level system, 1 no system	The ruling of the Appeals and Complaints Board does not prevent any aggrieved party from proceeding to the law courts for redress, as prescribed under Section 78(5) of PPA 663 (as amended by Act 914). However, there is lack of confidence in the complaints mechanism because the body is not independent, given some of its members are representatives from the regulator who are directly involved in procurement operations notably granting concurrent approvals for Restricted Bidding and Sole Sourcing. Again, in instances where the Regulator is also a purchaser, then a complainant in such a case will not have confidence in the review system. Besides there is no Standstill Period in Award of	There should be a 2nd Level Appeal system established within the Project that is independent of the Project management for dissatisfied Bidders/Consultants to appeal against the 1st Level decision.	2

				contracts that would mandate Procuring Entities to notify all Bidders of an impending award for an interested Bidder to decide whether to take action or not.		
d	Existence of a debarment system	1	3 full existence, 2 existence of complaints body that is the authority, 1 does not exist	The debarment process is not yet established by the Public Procurement Authority (PPA) even though the legal regime has provisions for debarment.	PROSPER will ensure that IFAD's debarment list is respected in awarding contracts under IFAD financing; and assist IFAD investigations pertaining to the funded activities.	2
e	Existence of an independent and competent local authority responsible for investigating corruption allegations	2	3 existence of independent Anti-Corruption agency, 2 existence of an office within a government ministry/agency that carries out some/all of these functions, 1 does not exist	The Office of the Independent Special Prosecutor carries out such investigations into instances of corruption by Public Officials. However it has not been able to successfully prosecute a single case.	Other bodies such as Imani Africa, Ghana Anti-Corruption Coalition and Ghana Integrity Initiative puts the government on its toes to investigate and prosecute corrupt government officials.	2
B	PROJECT INSTITUTIONAL RISK ASSESSMENT	2.66				2.96

1	Capability in Public Procurement	3.00				3.00
a	Existence of a Procurement Unit with at least 2 staff members (Design stage, reference is to govt agency) Existence of a Procurement Officer (Implementation)	3	3 as stated, 2 one staff member, 1 does not exist (at Design stage) 3 as stated, 2 someone else doing Procurement, 1 procurement function not consistently handled by anyone	The Ministry of Agriculture (MoFA) has a Procurement Unit that is staffed with competent procurement personnel.	Recruit an additional procurement officer to assist the GASIP Procurement Manager carry out procurement under PROSPER.	3
b	Staff member(s) have at least 7 years experience in donor-funded public procurement	3	3 as stated, 2 for less than 7 years and/or experience in public procurement but not donor-funded, 1 for less than 3 years experience	The head of the MoFA Procurement unit has an MSc and is very experienced in donor procurement management with not less than 15 years experience in procurement management. He is assisted by 4 staff, 2 of them have Master's degrees in various Supply Chain disciplines. Also GASIP has an experienced Procurement Manager who is in charge of GASIP (IFAD-funded project), Procurement. He has a BSc. Building Technology and an MBA in Strategic and Project Management with not less than 15 years of experience in 15 years' experience in Public Procurement and Contract Administration, including donor-funded procurement. He is currently the Procurement Manager for the IFAD-funded Project, GASIP.	There is the need to recruit an additional procurement officer to assist the GASIP Procurement Manager carry out procurement under PROSPER.	3

c	What is the general quality of documents produced by the procurement office?	3	<p>Nine (9) Contracts for Goods, Works and Services (3 per category) were reviewed at MoFA. The review of documentation includes request from user department all through to contract close out. The quality of documentation on file were of satisfactory quality except for Technical Evaluation Reports for Consultancy Services where Annex 1 (ii) "Key Staff", were left out.</p> <p>Similarly, nine (9) contracts for Goods, Works and Services for GASIP were reviewed (3 per category).</p> <p>Documentation on file was good. However, some gaps have been identified at the level of the application of standard procedures for procurement methods and evaluation process.</p> <p>e.g, (i) Bidding document for Goods (Supply of Vehicles); Section III, (Evaluation & Qualification Criteria), did not indicate how deviations from Delivery Period and Payments will be evaluated.</p> <p>(ii) Technical Evaluation Report for Consultancy Services did not have Annex 1 (ii) Evaluation of Key Staff, (iii) Use of wrong template for consultancy services assignment..</p>	<p>PROSPER should ensure that Procurement staff are well experienced in producing bidding documents and evaluation reports</p>	3
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d	Do procurement staff have immediate access to the legal and regulatory framework documents?	3	3 for all, 2 for some, 1 for none	All Legal and regulatory framework documents are on the Public Procurement Authority website and are available for free download	PROSPER staff should know how to get all procurement related regulations and SBDs	3
e	Are the procurement and financial management functions separated?	3	3 for total separation, 2 for some separation, 1 for procurement being done by FM staff	Yes, There is a Procurement Manager and a Project Accountant in GASIP with separate terms of reference. As indicated in the Procurement Act of 2003 (as amended in 2016), a procurement unit facilitates the process, and a procurement committee evaluates bids. The Procurement Unit initiates the Purchase. After the goods and services are received, a Store Receiving Voucher (SRV) is completed by a stores officer. Supplier invoices are processed by the Financial Controller.	PROSPER should ensure that the procurement function and FM function are separated under.	3
2	Public Procurement Processes	2.33				2.92
i	Procurement Methods	2.00				3.00

a	Procurement methods for Goods consistent with IFAD Guidelines	2	3 as stated, 2 for national or international, 1 for none	<p>A sample of three (3) Procurement activities for MoFA for procurement of Goods were reviewed. To a large extent, the National systems for Goods procurement are consistent with IFAD guidelines.</p> <p>The National Standard Bidding document (NSBD) for Goods includes General Conditions of Contracts (GCC) for public sector contracts, the dispute resolution mechanism and enforcement procedures of outcome of the dispute resolution process.</p> <p>However, there is a deviation for periods allowed for advertising under NCB. The PPA stipulates 2 - 6 weeks whilst IFAD requires a minimum of 4 weeks advertising.</p> <p>Similarly, 3 procurement for GASIP were also reviewed. The results of the findings were the same as the findings under MoFA Goods procurement.</p>	<p>The PIM for PROSPER should include clear procurement procedures, responsibilities, and process timelines that are consistent with IFAD Procurement Guidelines.</p>	3
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b Procurement methods for Works consistent with IFAD Guidelines	2	<p>3 as stated, 2 for national or international, 1 for none</p> <p>A sample of three (3) Procurement activities for MoFA for procurement of Works were reviewed. To a large extent, the National systems for Works procurement are consistent with IFAD guidelines.</p> <p>The National Standard Bidding document (NSBD) for Works includes General Conditions of Contracts (GCC) for public sector contracts, the dispute resolution mechanism and enforcement procedures of outcome of the dispute resolution process.</p> <p>However, there is a deviation for periods allowed for advertising under NCB. The PPA stipulates 2 - 6 weeks whilst IFAD requires a minimum of 4 weeks advertising.</p> <p>Similarly, 3 procurement for GASIP were also reviewed. The results of the findings were the same as the findings under MoFA Works procurement.</p> <p>However the there is a deviation for periods allowed for advertising under NCB. The PPA stipulates 2 - 6 weeks whilst IFAD requires a minimum of 4 weeks advertising.</p> <p>Also the Bidding document does not include a template for Environmental, Social, Health and Safety Performance Security.</p>	<p>The Works Procurement methods should be strengthened to include a template in the Bidding documents for Environmental, Social, Health and Safety Performance Security so as to ensure compliance of Contractors' C-ESMP plans during construction. The PIM for the PROSPER will include clear procurement procedures, responsibilities, and process timelines</p>	3

c	Procurement methods for Services consistent with IFAD Guidelines	2	3 for large-value method for firms, small value method for firms and method for individual consultants; 2 for two of the above; 1 for only one or less	<p>A sample of three (3) Procurement activities for MoFA for procurement of Consultancy Services were reviewed. To a large extent, the National systems for Services procurement are consistent with IFAD guidelines.</p> <p>The National Standard Bidding document (NSBD) for Services includes General Conditions of Contracts (GCC) for public sector contracts, the dispute resolution mechanism and enforcement procedures of outcome of the dispute resolution process. The PPA has templates for Large & Complex Time-based/Lumpsum Consultancy assignments, Small Time-based/Lumpsum Consultancy assignments and Minor Consulting Services.</p> <p>However, there is a deviation for periods allowed for advertising under NCB. The PPA stipulates 2 - 6 weeks whilst IFAD requires a minimum of 4 weeks advertising.</p> <p>Similarly, 3 procurement for GASIP were also reviewed. The PPA stipulates 2 - 6 weeks whilst IFAD requires a minimum of 4 weeks advertising.</p>	<p>The Procurement methods for Services under PROSPER would be included in the PIM for the Project including clear procurement procedures, responsibilities, and process timelines</p>	3
d	Easy access to bidding documents by foreign firms	2	3 bidding documents are free and could be issued/sent electronically; 2 foreign bidders have	Though in principle, foreign Bidders are allowed to bid, yet the eligibility requirements do not favour them, such as, Social Security and Tax Clearance certificates requirements for National	The Procurement methods should be included in the PIM for the PROSPER including clear procurement procedures, responsibilities, and process	3

			to wire funds to Project to buy bidding docs; 1 bidding docs not practically available to foreign bidders	Competitive Bidding. Electronic copies of Bidding Documents for MoFA and GASIP are sent to Bidders free of charge.	timelines. These should be in line with IFAD guidelines.	
i i	Procurement Planning	2.33				3.00
a	Are procurement plans prepared ahead of time and consistent with annual work plans/budgets?	2	3 prepared ahead and consistent, 2 one of either, 1 none	Section 21 of PPA Act 663 (as amended in 2016) mandates all procuring entities to prepare and submit annual procurement plans not later than one month before the end of the financial year to its entity's tender committee for approval and publication. A review of the MOFA 2020 Procurement Plans indicated that procurement plans were approved several months late in the year to which the plan relates due to delays in Parliamentary approval of budgets for MDAs. GASIP Procurement Plans showed instances of some delays in approval of their plans and in some instances, expected cashflows were not met, leading to changes in the procurement plan.	The PIM for the PROSPER should include detailed description for the Procurement Plan and a realistic Cashflow forecast to attend the procurement plans for IFAD's approval.	3
b	Do procurement people participate in the annual work planning processes?	2	3 if required by regulation and practised, 2 if required by regulation, 1 if none of above	Budget preparation serves as a coordinating mechanism for the the MOFA and GASIP. Both MOFA and GASIP Procurement staff participate in the preparation of their Annual Work Plans and Budgets.	The PROSPER PIM would clearly stipulate the participation of the procurement staff in the preparation of the AWP&B	3

c	Are Procurement Plans done using an effective format with planned and actual rows across 3 different categories	3	3 for all, 2 for some, 1 for none	The MOFA Procurement Plan uses the PPA procurement planning template which is available on the ppa.gov.gh website for free download. GASIP uses the current IFAD procurement planning template which is available on the IFAD website.	The PROSPER PIM would clearly stipulate the right procurement planning template to use.	3
i i i	Procurement Processes	2				3
a	Minimum number of quotations established by law	3	3 for three or more; 2 for two, 1 if it does not state or less than two	Section 43 (A) of the Amended PPA Act 2016 (Act 914) provides for evaluation of at least 3 quotations. A review of Request for Quotation method used by MoFA showed that at least 3 quotations were evaluated	The PIM for the PROSPER would include clear procurement procedures, responsibilities, and process timelines for all methods	3
b	Minimum number of days for advertised procurement under competitive bidding processes	1	3 for minimum of 30 days; 2 for minimum of 20 days; 1 for less than 20 days or not stated	Section 44 (7) of the PPA Act 2003 as amended provides for at least 2 weeks. For major procurements, 2 weeks may not be sufficient to enable bidders submit competent bids. The Bidding documents/Request for Proposals for both MoFA and GASIP all showed that at least 4 weeks was provided to Bidders/Consultants to prepare and submit their Bids/Proposals.	PROSPER will ensure that the Procurement Plan will include the minimum bidding period, suitable for the different procurement methods.	2

c	Is there enough time provided for bidders to ask questions and receive answers in the bidding process?	3	3 if bidders have a minimum of 3 days for the RFQ method and 7 days for competitive methods to ask questions, 2 if less than 3 days for RFQ and less than 7 but more than 4 days for competitive methods, 1 if not mentioned in RFQ and less than 4 days for competitive procurements	Bidders of the MOFA and GASIP procurement under ICB and NCB are usually given at least 10 days to bid submission to request for clarification and all clarification requests were responded to by both MoAF and GASIP. For RFQ, Bidders are usually given a minimum of 3 days to request clarification.	PROSPER will ensure that bidding documents include the minimum bidding period, suitable for the different procurement methods and also provide sufficient period for bidders seeking clarification.	3
d	Are clarifications provided to all bidders?	3	3 for all, 2 for some, 1 for none	Yes, A review of 18 Bidding documents for the 3 categories of procurement (9 from MOFA and 9 from GASIP), shows that clarifications are sent to all Bidders concurrently.	The PIM for the PROSPER will include clear procurement procedures, responsibilities, and process timelines for all methods. PROSPER will ensure the Procurement Plan will include the minimum bidding period/clarification requests, suitable for the different procurement methods.	3
e	Are bids received prior to the deadline securely stored?	3	3 for all, 2 for some, 1 for none	Yes, both MOFA and GASIP have Tender Boxes that are secured during Bidding.	The PROSPER PIM will include in the procedures that all bids received before the deadline should be securely stored.	3
f	Are procurement securities securely stored?	3	3 for all, 2 for some, 1 for none	Yes, Securities are kept by the MOFA Contracts Officer while in GASIP they are kept in a safe in the Finance Department.	The PROSPER PIM will include in the procedures that all bid securities will be securely stored.	3

g	Are public bid openings conducted for advertised procurements, and within an hour of receipt of bids?	3	3 for both, 2 for bid openings being conducted more than an hour after receipt, 1 for bid openings not being conducted	Yes, A review of the 18 Bid/Proposal Opening and Evaluation Reports from both MOFA and GASIP showed that Bids/Proposals were opened within an hour of receipt of Bids/Proposals.	The PROSPER PIM will include that public bid openings are conducted for advertised procurements, and within an hour of receipt of bids	3
h	Are minutes of bid openings taken, and sent to bidders who submitted bids?	2	3 for both, 2 for minutes being taken but not being sent, 1 for none	Yes, minutes of bid opening are recorded. However, there were instances where minutes of Bid Opening were recorded but not sent to Bidders.	The PROSPER PIM will include requirement that minutes of bid openings be recorded and sent to all bidders who submitted bids.	3
i	Are evaluations conducted by a suitably qualified ad-hoc evaluation committee?	3	3 for both, 2 for qualified but not ad-hoc, 1 for ad-hoc or none	Yes	The formation of the evaluation committee should be based on the nature of the procurement. This should be in the PROSPER PIM.	3
j	In evaluation, is responsiveness based on criteria requirements in the bidding documents?	2	3 for all, 2 for some, 1 for none	Yes, in MOFA and GASIP, responsiveness is based on criteria requirements in the bidding documents	The PROSPER PIM should refer to the procedures for evaluation. IFAD through its close follow up monitoring will ensure proper procedures are followed.	3
k	Are evaluations completed within the bid validity period?	2	3 for all, 2 for some, 1 for none	There are usually some delays in the evaluation of Bids.	The indicative timelines and IFAD service standards for the procurement procedures that will be incorporated in the PROSPER PIM will be closely monitored by IFAD	3
l	Are conditions precedent to contract effectiveness clearly stipulated in the contract? (i.e., advance payment security, performance security, insurance, etc)	3	3 for all, 2 for some, 1 for none	Yes	The PROSPER PIM will include clear procurement procedures, responsibilities respecting contract management	3

m Does the agency maintain a complete record of the process? This would include copies of all public advertisements, pre-qualification documents (if used, the pre-qualification evaluation report documenting any decisions not to pre-qualify certain potential bidders), the bidding documents and any addenda, a record of any pre-bid meetings, the bid opening minutes, the final bid evaluation report (including a detailed record of the reasons used to accept or reject each bid), appeals against procedures or award recommendations, a signed copy of the final contract and any performance and advance payment securities issued, etc.	1	3 for all, 2 for some, 1 for none	A review of MoFA and GASIP procurement files showed some instances of incomplete documentation.	PROSPER will ensure that complete documentation of procurement processes is kept on procurement files at the Project Office, including all related documents and the records for transactions implemented by other implementing agencies. Provide sufficient working area/rooms and space for record keeping/filing. This will be included in the procurement section of the PIM. The project will start using NOTUS as this will ensure that all procurement documentation is filed in NOTUS for No Objection in all stages of procurement and non-procurement activities (AWPB/PP).	2
n Are all contracts awarded advertised publicly?	2	3 for all, 2 for some, 1 for none	Some contracts were yet to be published on the PPA website.	PROSPER will ensure that all contracts awarded are published on the relevant websites (PPA, UNDB Online, IFAD, PROSPER)	2

i v	Contract Administration and Management	2.55				2.91
a	Existence of authority levels in the contract management process	3	3 for existence, 2 for some practice, 1 for none	<p>There's always a client's representative for each contract in MoFA and GASIP. In contract management at MoFA, for example, in terms of payment, invoices from suppliers or contractors are taken through series of approval levels before final approval by the Chief Director of MoFA.</p> <p>Similarly in the case of GASIP the National Projects Coordinator does the final approval after initial review by technical lead for an activity.</p>	The procedure will be well illustrated in the procurement section of the PIM	3
b	Existence of approval thresholds for contract amendments	3	3 for existence, 2 for some practice, 1 for none	<p>All Contract amendments under MoFA are approved by the Chief Director of MoFA.</p> <p>GASIP goes through IFAD's NO objection processes.</p>	The procedure will be well illustrated in the procurement section of the PIM	3
c	Is there an effective contract monitoring system/framework in place?	2	3 for all, 2 for some, 1 for none	<p>The M&E teams and Technical Leads for all activities of MoFA and GASIP undertake regular monitoring of all projects. Components Heads and their respective officers all conduct regular supervision exercises to ensure successful execution of projects.</p>	The procedure will be well illustrated in the procurement section of the PIM	3
d	Is there a process to monitor delivery of goods to verify quantity and quality?	2	3 for all, 2 for some, 1 for none	<p>Yes, the MoFA has a Contract Management Team which includes End Users to receive, inspect and accept goods delivered.</p> <p>In GASIP, there is an effective system for goods receipt note affirmation by</p>	The procedure will be well illustrated in the procurement section of the PIM	3

				both the supplier and the receiver of goods.		
e	Is there a framework for approval of deliverables and payment process for consulting services contract?	3	3 for all, 2 for some, 1 for none	in both MoFA and GASIP, Consultants are paid on deliverables in the contract and components heads in charge of implementing such activities will certify alongside M&E recommendation before payment is made.	The procedure will be well illustrated in the procurement section of the PIM	3
f	Is there a process for resolution of final payment and contract closure?	3	3 for all, 2 for some, 1 for none	In MoFA and GASIP, final payments are normally issued on completion of contracts. In works contract for instance, the Infrastructure engineer and the independent consultant confirm that all defective works have been corrected before final payment. In goods and consultancy procurement similar measures are taken by the relevant heads before final payments are issued.	The procedure will be well illustrated in the procurement section of the PIM	3
g	Are contract disputes handled in accordance with a formal complaints/arbitration system?	3	3 for all, 2 for some, 1 for none	The MoFA and GASIP have not suffered any issue of contractual disputes yet. However, the form of contracts signed between the project and suppliers & contractors has provisions on dispute resolution, mainly through amicable resolution or by arbitration.	IFAD through its close follow up will ensure proper procedures are followed. These procedures would be included in the PIM.	3

h	Are works contracts supervised by independent engineers or a named project manager?	3	3 for all, 2 for some, 1 for none	Works contracts under MoFA and GASIP are supervised by independent engineers who are also engaged separately. The Infrastructure Engineer is the Project Manager for low value works contracts at MoFA and GASIP.	Whenever needed, an independent consulting firm/individual consultant will be recruited to supervise the works. These procedures will be illustrated and included in the PROSPER PIM.	3
i	Are contracts completed on schedule and within the approved/ contracted contract price?	1	3 for all, 2 for some, 1 for none	Most contracts are completed on schedule and are completed within budget. In an instance at MoFA where the final contract price was higher than the budget, the scope was reduced.	Contract supervision and monitoring, and application of the conditions of contract will be improved through formation of contract management and monitoring teams, led by the National Projects Coordinator and Focal persons, including the technical and the procurement teams, and beneficiaries (if necessary); Close monitoring will be carried out to ensure adherence to stipulates of the sections in the respective Contract Documents and to minimize poor performance of service providers. These procedures will be included in the PIM.	2
j	Does the organization have contract registers that register all contracts (with names, prices and dates), per procurement category?	3	3 for all, 2 for some, 1 for none	MoFA Procurement Unit does have a Contracts Register though not compliant with IFAD's requirement. In the case of GASIP, procurement unit keeps a contract register for all contracts under the project, though it is not submitted regularly to IFAD.	The PROSPER PIM will require submission of Contracts Register to IFAD monthly.	3

k Are adequate contract administration records maintained? (These would include contractual notices issued by the supplier, contractor, purchaser or employer; a detailed record of all changes or variation orders issued affecting the scope, qualities, timing or price of the contract; records of invoices and payments, progress reports, certificates of inspection, acceptance and completion; records of claim and dispute and their outcomes; etc.)	2	3 for all, 2 for some, 1 for none	<p>In both MoFA and GASIP, contract records are maintained satisfactorily. Payments are based on deliverables in the contract and components heads in charge of implementing such activities will certify alongside M&E recommendation before payment is made. Variation and change orders are well documented.</p>	<p>PROSPER will ensure that complete documentation of procurement processes is kept on procurement files, including all related documents and the records for transactions implemented by other partners will all be included in the PIM.</p>	3
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Risk Rating System

3 L: Low Risk
2 M: Medium Risk
1 H: High Risk

Risk Mitigation measures proposed

The major risk mitigation measures recommended are adoption of (i) setting up of a procurement unit with a procurement specialist; (ii) Standard Bidding Documents including contract templates embedding the bid process, clarifications, evaluation and complaint handling mechanism and policy on preventing fraud and corruption and dispute resolution; (iii) contract management maintenance of contract registers and contract monitoring.

It is to be ensured that contract management is not merely reporting the contracts but continuously monitoring the performance against the deliverables, conditions of the contract, validity and frequent review and resolution of implementation bottlenecks; (iv) preparation and adoption of procurement manual consistent with IFAD Procurement Guidelines and Procurement Handbook which will require IFAD's concurrence. Any changes/amendments/modifications in the approved Procurement Manual also requires IFAD's no objection and (v) Procurement plan for the initial 18 months of project implementation listing out all procurement activities to be taken up by the project consolidated at the PCU level to be prepared and submitted along with the first AWP&B-For the subsequent years of implementation procurement covering the 12 month period will be sufficient -The procurement plan will be updated at least semi-annually or as required to reflect the actual project implementation needs - All procurement plans and its revisions will have to be approved by IFAD- Any procurement undertaken which is not as per the approved plan will not be eligible for IFAD financing; The summary of the risk matrix is provided below.

The risk matrix will be reviewed annually and based on the observations/ review, implementation arrangements mitigating measures will be revised.

Key Issues of the Risk Assessment Matrix

No.	Risk factor	Initial Risk	Mitigation measures	Residual risk
	Regulations are out of date and inconsistent with the Amended Act 2016	High	The Public Procurement Authority should ensure that the Attorney-General develops Regulations to attend the Amended Act 914.	Medium
	The database of the Public Procurement Authority (PPA) only captures 70 percent (by value) of public procurement	Medium	Use the IFAD internal tools as NOTUS and the CMT, which would publish information regarding contract award, value of contract, method of procurement, and the successful bidder.	Low
	Suspension of the procurement process when the ACB receives a complaint from a dissatisfied Bidder is not always done, especially for very sensitive national issues.	High	PROSPER Project will indicate clearly, information regarding complaints mechanism for procurements conducted under the Project. Also Bidders will be informed at pre-bid meetings of the existence of a Bid Complaints System that can be used if they want to complain a particular procurement action.	Medium
	The debarment process is not yet established	High	PROSPER will ensure that IFAD's debarment list is respected in awarding	Medium

	by the PPA even though the legal regime has provisions for debarment.		contracts under IFAD financing; and assist IFAD investigations pertaining to the funded activities.	
	Low rating on Corruption Perception Index	High	PROSPER will ensure that procuring entities as well as bidders and service providers, that is: suppliers, contractors, and consultants shall observe the highest standard of ethics during the procurement and execution of contracts financed under the IFAD funded Projects in accordance with paragraph 84 of the IFAD Procurement Guidelines.	Medium
	Lack of confidence in the complaints mechanism because the body is not independent	High	PROSPER should establish a 2nd Level Appeal system established within the Project that is independent of the Project management for dissatisfied Bidders/Consultants to appeal against the 1st Level decision.	Medium
	The debarment process not yet established by the Public Procurement Authority (PPA) even though the legal regime has provisions for debarment.	High	PROSPER will ensure that IFAD's debarment list is respected in awarding contracts under IFAD financing; and assist IFAD investigations pertaining to the funded activities.	Medium
	The Office of the Independent Special Prosecutor has not been able to successfully prosecute a single case even though there have been complaints from interested parties about corruption.	High	Other bodies such as Imani Africa, Ghana Anti-Corruption Coalition and Ghana Integrity Initiative puts the government on its toes to investigate and prosecute corrupt government officials.	High
	Insufficient time to enable bidders submit competent bids.	High	PROSPER will ensure that the Procurement Plan will include the minimum bidding period, suitable for the different procurement methods.	Medium
	Incomplete records of procurement process	Medium	PROSPER will ensure that complete documentation of procurement processes is kept on procurement files at the Project Office, including all related documents and the records for transactions implemented by other implementing agencies.	Medium

	Publication of Contract awards on the PPA website not up to date.	High	PROSPER will ensure all contracts awarded will be published on IFAD and PROSPER websites.	Medium
	Contracts not completed on schedule and within the approved/ contracted contract price?	High	PROSPER will ensure that Contract supervision and monitoring, and application of the conditions of contract will be improved through formation of contract management and monitoring teams, led by the National Projects Coordinator and Focal persons, including the technical and the procurement teams, and beneficiaries (if necessary)	Medium
	Contracts Register is not regularly updated and not submitted to IFAD Monthly as required	Medium	PROSPER will ensure regular updates of the Contracts Register	Low

Methods and Prior Review Thresholds

In view of the above risk rating and given the specific thresholds for procurement financed under the Project will be stipulated in the Letter to the Recipient (LTR), the following procurement thresholds and prior review thresholds are recommended:

Procurement Thresholds*		
Currency: US\$		
GOODS/NCS		
Shopping	NCB	ICB
≤ 70,000	> 70,000 to < 200,000	≥ 200,000
WORKS/NCS		
Shopping	NCB	ICB
≤ 190,000	> 190,000 to < 800,000	≥ 800,000
CONSULTING SERVICES/NCS		
CQS	QCBS	
≤ 70,000	≥ 100,000	

* Direct Contracting, Single Source Selection, Fixed Budget Selection, Quality-based Selection and Least-Cost Selection methods will be selected on a case by case basis. ICS is to be used for all selection for individual consultants, regardless of value. For Non-consulting Services (NCS), please use the thresholds for Goods, Works or Services, based on the procurement or selection methodology being used.

Prior Review Thresholds (USD)

Goods	Works	Services
≤ 70,000	≤ 150,000	≤ 60,000

Procurement Regulations applicable to PROSPER: PROSPER will adopt the Amended Ghana Public Procurement Act 2016 (Act 914), the Procurement Regulations (to be revised soon), and the IFAD Procurement Guidelines 2010. The Ghana Public Procurement Regulations will be subject to further

assessment by IFAD when it is issued. Ghana national procurement systems will be followed for procurement below ICB thresholds. For International Competitive Bidding (ICB), the IFAD Procurement procedures will be used.

Applicability

IFAD's procurement guidelines specify that national procurement systems will be used under the conditions that the systems are assessed as satisfactory or better. The Project will adopt the Amended Public Procurement Act 914 of 2016, the Procurement Regulations, and the IFAD Procurement Guidelines 2010. National systems will apply to all procurement except international competitive bidding (ICB) for contracts above an agreed threshold. The IFAD guidelines state that ICB procurement will follow the procedures recommended by IFAD. The Ghana procurement systems can be relied upon to undertake procurement below the agreed ICB thresholds. Procurement of goods and consultancy services shall be done in accordance with the provisions of IFAD Procurement Guidelines and Procurement Handbook, 2010, and as amended from time to time. (The IFAD Procurement Guidelines can be accessed from https://www.ifad.org/documents/38711624/39421027/procure_e.pdf/e1a99511-d57d4695-a05b-3d9b597d0149 and the IFAD Procurement Handbook can be accessed from https://www.ifad.org/documents/38711624/39421018/proc_handbook_e.pdf/2febc53a4244-4447-a788-d06a632fd3b5). In the absence of national law which safeguards the interests of transparency, fairness, and grievance redressal of the participating bidders/suppliers, IFAD Procurement Guidelines shall be followed both at all implementing levels. IFAD Procurement guidelines takes precedent over Government of Ghana rules and regulations, to the extent such are inconsistent with the IFAD Procurement Guidelines.

Institutional Arrangements

The 'Lead Implementing Agency for PROSPER is MoFA which has overall responsibility for the execution of the project and retains overall responsibility and accountability for the project to IFAD and the Government and will ensure linkages to other relevant Ministries, Departments and Agencies, such as the Ministry of Finance, the Ministry of Environment, Science, Technology and Innovation (MESTI), the Ministry of Trade and Industry, Ministry of Roads and Transport (Department of Feeder Roads), Ministry of Sanitation and Water Resources (Community Water and Sanitation Department), the Ministry of Local Government and Rural Development, the Environmental Protection Agency, the Agricultural Extension Services Directorate of MoFA and the Departments of Agriculture at the Regional and District levels. A network of 166 Business Advisory Centres (BACs) and 57 Business Resource Centres (BRCs) that has been established across the country, would under a tripartite management arrangement between REP, GEA and participating District Assemblies, provide high-value business development services to the business community.

PROSPER Procurement Activities will be implemented under two institutional arrangements, namely the PCU and the ARB APEX Bank at the Bank of Ghana. With regard to procurement management, a Procurement Manager and Procurement Officer with the required qualifications and experience will be competitively recruited (See Annex 1 of this report for Terms of Reference). With additional Technical Assistance to strengthen procurement capacity, the institutions can undertake implementation, facilitation, and coordination of the Project with reduced risk.

Project Management at the Central Level

At the central level, the PCU will operate within the supervision of the Agricultural Extension Services Directorate (DAES), which will provide oversight and strategic direction. The responsibilities of the PCU will include the overall coordination of the activities implemented under the project and the implementation of Component 3: Project management and policy engagement.

Procurement activities under the various components/subcomponents are as follows:

- Component 1: Development of rural institutions and socioeconomic infrastructure.
- Subcomponent 1.1 Capacity building of rural institutions, enterprises and households comprises a range of institution-building and skills development activities to enable target communities to modernise their farming, move towards efficient off-farm as well as on-farm natural resource management, and take ownership of and accountability for their own development initiatives. Procurement activities under this subcomponent are further broken down into:
 - Community mobilisation, cluster identification and planning and Capacitation of rural institutions and enterprises

Procurement arrangements under this subcomponent are as follows:

The PCU will develop terms of reference for recruiting a consultant (Technical Support Agency) through an appropriate selection method (Depending on the size and complexity of the assignment).

The TOR is submitted to IFAD for NO.

The scope of the assignment will include:

- Community mobilisation
- Organization of Workshop/consultation with stakeholders at Regional and District level. It will also involve Regional/national departments of MoFA and other ministries.
- Cluster identification
- The technical support agency will
 - Assist in the establishment of a Cluster Committee,
 - hold Meetings at community level for identification of cluster
 - provide training of trainers for extension staff
 - Cluster planning
 - Cluster consultation and synthesisation meetings
 - Preparation of cluster plans
 - The ToR will have clear deliverables to be monitored through key performance indicators
 - A REOI is published as per IFAD requirements,
 - A shortlist is recommended to IFAD for NO,
 - Request for Proposal is sent to shortlisted firms,
 - Proposals are received and evaluated, and
 - A contract is signed between the Project and the Consultant to provide technical support to the Districts for the activities identified in the TOR.
- Alongside the above activity, an MOU will be signed between PROSPER and the implementing District Assemblies to carry out public awareness campaigns. See Appendix 1

Household nutrition and diet

The procurement arrangements will be similar to 1.1.1 above. The scope will include the following activities:

- a Participatory Needs Assessment in each target community and entail training on household (HH) methodologies and financial literacy.
- A Knowledge, Attitude and Practice (KAP) study conducted to understand better the local issues around nutrition and diet, and to serve as a baseline for the SBCC(SBCC) strategy.
- dedicated training on post-harvest management, and nutrition education and SBCC for communities around healthy and sustainable diets, considering socio-cultural triggers of malnutrition in all forms such as teenage pregnancies, gender-biased intra-household food

distribution, household economy, gender imbalances as determinants of undernutrition, and environmental health.

Subcomponent 1.2 Development of socioeconomic infrastructure seeks to realize the “public goods” investments prioritized by target communities through the Cluster Planning process with three complementary types of climate-resilient socioeconomic infrastructure: Off-farm/watershed works and hazard mitigation measures; Feeder roads and farm tracks; and Communal social infrastructure.

Works Procurement under socioeconomic infrastructure will involve the following: soil and water conservation structures, such as contour bunds, reforestation and shelter belts, bench terraces, tied ridges, water harvesting and storage ponds, as well as climate change hazard mitigation measures.

The procurement arrangements will be as follows:

- The PCU will recruit an engineering firm to carry out feasibility studies (to determine the technical feasibility and economic viability of the investment), produce designs, assist the PCU with bidding/selection of contractors and supervise the construction of the infrastructure.
- The Works procurement will follow the procurement process for Goods, Works and Non-consulting Services outlined in section K below.
- Upon completion of the works, the Project will hand over the management of the infrastructure to the District Assembly.
- The maintenance of the infrastructure will be carried out through contributions from members of the Water Users Association.
- The Ghana Irrigation Development Authority will provide technical support during construction and maintenance of the infrastructure.
- The implementation of the “upgrading of strategic feeder roads and farm tracks” is similar to the “soil and water conservation structures” and would follow the same procurement procedures. The Department of Feeder Roads in the District will provide technical support during construction and maintenance upon completion.
- The procurement approach under (i) and (ii) above will be followed for the “Communal social infrastructure.”
- Component 2: Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains.

Subcomponent 2.1 Sustainable marketing linkages and business development

Value chain analysis. This will involve studies to examine in depth the status and characteristics of the selected value chains and map the VC actors. This assignment will be carried out through a normal consultancy selection.

Under this subcomponent, Advisory services contract (MOU) will be signed between PROSPER and 10 BRCs and 20 BACs to provide support to the implementation of PROSPER at the various District Assemblies. The MOU will define the object of the engagement and obligations of each party to the agreement.

Procurement under the Creation of and support for partnerships will involve:

- Training for the preparation of 2 types of business plans; Basic BPs will be financed by the project Matching Grant scheme and Advanced BPs to be submitted to the Blended Finance Facility. A consultant will be recruited through the normal consultant selection process. The mode of

selection will follow the normal consultancy selection process. The scope of the assignment will include:

- Training sessions in the development of green bankable propositions, with particular attention to potential enterprises dedicated to women and youth.
- Evaluation of BBPs for supporting request for a Matching Grant.

Subcomponent 2.2 Access to rural financial services

Under this subcomponent, PROSPER will act as a facilitator for the achievement of the outputs. Agreements will be signed between the ARB Apex bank and (Clusters and MSMEs) for the BFF. Common Management Arrangements will be developed between the ARB APEX Bank and other participating Institutions ((i) IGREENFIN Phase I from the Green Climate Fund (GCF) with concessional financing at 0% interest rate (1% for solar-power devices); (ii) IFAD's Agricultural Refinancing Facility (ARF) on how the BFF will be managed and the obligations of the different parties under the arrangements.

Again, the ARB APEX Bank will sign MOU with participating RCBs regarding the types of financial products they will offer to various value chain actors and other terms of the engagement.

Component 3. Project management and Policy engagement

- Project Coordination and Monitoring and Evaluation
- Recruitment of Project Delivery Team including:
- Staff of the PCU
- Safeguards and Climate Change Specialist (SCCS),
- Social Inclusion, Gender and Vulnerability Specialist
- This will be carried out using the most efficient and effective selection methods that are in consonance with IFAD Procurement Guidelines.

PCU Goods and Equipment

Vehicles and equipment for project monitoring will be procured through the appropriate procurement methods for Goods and in line with IFAD Procurement Guidelines.

Project Monitoring

A web-based M&E system will be installed and utilized using an appropriate consultant selection process. Audits and Independent Verifications would lend themselves to Least Cost Selection procedures as outlined in the IFAD Procurement Guidelines.

The PROSPER PCU will be responsible to manage and oversee overall Project-related procurement including International Competitive Bidding (ICB), National Competitive Bidding (NCB) procurements and selection of consultants for consultancy contracts as well as National Shopping. The majority of the procurement activities under PROSPER will be implemented through the application of NCB method. Appropriate thresholds that can maximize the efficiency of procurement implementation but manage the governance risks will be specified in the Letter to the Borrower (LTB).

The Procurement Manager and Procurement Officer will oversee and carry out PROSPER procurement activities (except those enrolled under sub-component 2.2 that will be implemented by ARB APEX Bank and other stakeholders (GCF & ARF) in coordination with PCU members and specialized and technical units of MoFA.

The POs will report to the Project Coordinator and their main responsibilities are to:

- establish and update procurement procedures for the Project based on the IFAD Procurement Guidelines;
- prepare and update the annual procurement plan (in coordination with relevant staff of the PCU) based on the AWPB;
- ensure the timely and transparent procurement of goods, works and services as identified in the procurement plan and in accordance with the applicable rules and procedures;
- prepare bidding documents and coordinate the preparation of relevant inputs such as TORs, technical specifications and bills of quantities by technical staff or consultants;
- supervise the bidding processes including advertisements, bid opening, bid evaluation, negotiation and selection of contractors; prepare bid opening minutes and bid evaluation reports;
- draft contracts for signature by authorized Project representatives and contractors;
- manage the procurement monitoring database system; prepare periodic reports on the status of procurement for the Project;
- compile and confidentially keep up-to-date reports, documents and records of all procurement activities, ensuring proper documentation, transparency and ease of reference; maintain procurement files;
- monitor the administrative implementation of contracts in coordination with the Finance Unit;
- constantly review procurement arrangements in relation to the procurement plan to ensure consistency with the financing agreement and identify weaknesses, if any, and measures that should be undertaken to mitigate the risks posed by any weaknesses;
- maintain close liaison with IFAD on all issues pertaining to procurement;
- participate in Project management meetings and IFAD supervision missions, including the preparation of all information required, in particular the procurement records for facilitating post-procurement reviews;
- train Project and implementing partners staff on procurement issues; and
- carry out any other activities that are assigned by the Project management

PROSPER will establish a procurement monitoring system in order to i) fast track each step of PROSPER procurement process; ii) monitor the overall procurement processes of the Project putting in place corrective actions when needed; iii) ensure the right timing of procurement processes and that tender documents are accurately prepared; follow up on requests of No Objections.

Performance based contracts: For Contracts, MoU and Framework Agreements between PCU and vendors, it is suggested that performance-based contracts in the delivery of hardware and software goods and services will be adopted. Such contracts will focus on outputs and outcomes of service provision, with clear milestones, with triggers for contract extension linked to achievements. There will be no automatic extensions in time or scope. All contracts, MOUs and Framework Agreements will include payment schedules with performance incentives and penalties, monitoring and quality assessment, and value-for-money assessment. They will also define the key responsibilities of the partners at national and field levels, and will be jointly monitored and supervised. This is not dissimilar to current government personnel procedures which incorporate performance-based assessment.

Prior and Post Reviews: IFAD will undertake prior and post reviews of procurement made. (a) Prior review is when IFAD is required to provide a No-Objection (NO) at key stages of a procurement process. This requirement and the associated prior review thresholds will in the Letter to the Borrower. The Country Project Management Teams and the PCU are required to use the No-Objection Tracking and Utility System (NOTUS) to manage NOs. (b) Post review is the assessment by IFAD of the procurement processes conducted by the Borrower/Recipient for a sample of contracts that are not subject to prior preview. Post

reviews will cover procurement planning, procurement process, contract awarding and management, and risk identification and mitigation. The project will be required to submit to IFAD the bidding document, the bid evaluation report and the draft contract documents for the prior review of procurement of goods, works and non-consulting services and the draft RFP, the technical evaluation report, the combined evaluation report and the negotiated draft contract and the minutes of negotiations in case of procurement of consulting services. 99 The procurements covered under prior review, thresholds for the same and the thresholds for the mode of procurement will be specified in the Letter to Borrower (LTB). Transparency and anti-Corruption. In line with the IFAD General Conditions on Agricultural Development Financing and IFAD Policy on Preventing Fraud and Corruption in its projects, the project should provide a commitment to abide by these provisions and establish credible deterrent mechanisms and internal controls and cooperate fully with IFAD and the notified Government investigative agencies/authorities. The consultants and the suppliers will also be made aware of the provisions and are compliant to these provisions. The detailed measures will be included in all the bid documents, contracts and Grant agreements ensuring IFAD rights for auditing, investigating provisions and debarment.

Transparency framework. IFAD's applies a zero-tolerance approach in cases where investigation determines that fraudulent, corrupt, collusive, or coercive actions have occurred in projects financed through its loans and grants. Project design includes several measures to promote transparency: (i) autonomous central project office and relevant district project management offices, operating on the basis of good governance; (ii) annual independent audit; (iii) verification of fiduciary compliance during supervision; (iv) independent impact assessments; and (v) more efficient public financial management systems and ensuring of transparency by strengthening state oversight.

Guiding principles of Procurement

General Provisions

The procurement of goods and consulting services under the project is to be undertaken by observing the following specific requirements.

Procurement is to be carried out in accordance with the IFAD's Procurement Guidelines, the respective Loan/ Grant agreement, and any duly agreed amendments thereto.

Procurement is to be conducted within the project implementation period, except where the financing agreement provides for retroactive financing and then within the limits therein specified.

The cost of the procurement is not to exceed the availability of duly allocated funds as per the financing agreement.

Procurement is to be consistent with the duly approved annual work plan and budget (AWPB) including a procurement plan for at least the initial 18 months and subsequently updated annually.

Procurement is to result in the best value for money as defined by the IFAD Procurement Guidelines.

Transparency, Competition, Fairness and Elimination of Arbitrariness

Public procurement should be conducted in a transparent manner to bring competition, fairness and elimination of arbitrariness in the system. This will enable the prospective bidders to formulate competitive tenders with confidence. The following are some important measures to achieve the same and, thus, secure best value for money:

The text of the bid document should be user-friendly, self-contained, comprehensive, unambiguous, and relevant to the objective of the procurement. The use of terminology used in common parlance in the industry should be preferred.

The specifications of the required goods/terms of reference for consultants should be framed giving sufficient details in such a manner that it is neither too elaborately restrictive as to deter potential bidders or increase the cost of procurement nor too sketchy to leave scope for sub-standard supply.

The bid document should clearly mention the eligibility criteria to be met by the bidders such as minimum level of experience, past performance, technical capability, manufacturing facilities, financial position, ownership or any legal restriction etc. Restrictions on who is qualified to bid should not stifle competition amongst potential bidders.

The procedure for preparing and submitting the bids; deadline for submission of bids; date, time & place of public opening of bids; requirement of earnest money and performance security; parameters for determining responsiveness of bidders; evaluating and ranking of bids and criteria for full or partial acceptance of bids and conclusion of contract should be incorporated in the document in clear terms. Bids should be evaluated in terms of the criteria already incorporated in the bid document, based on which bids have been received. Any new condition, which was not incorporated earlier, should not be brought into consideration while evaluating the bids.

Sufficient time should be allowed to the bidders to prepare and submit their bids.

Suitable provisions should be kept in the bid document allowing the bidders reasonable opportunity to question the bid conditions, bidding process, and/or rejection of its bid and the settlement of disputes, if any, emanating from the resultant contract.

It should be made clear in the bid document that bidders are not permitted to alter or modify their bids after expiry of the deadline for receipt of bid till the date of validity of bids.

Negotiations with the bidders for procurement of goods must be avoided. In case of consultancy services negotiations may be conducted with the highest combined ranked consultant, to clarify certain aspects and to confirm the team of experts proposed.

The name of the successful bidder to whom the contract is awarded should be appropriately notified by the project for the information of general public through its website or any other means.

Efficiency, Economy and Accountability

Public procurement procedures must conform to exemplary norms of best practices to ensure efficiency, economy and accountability in the system. To achieve this objective, the following key areas should be taken care of:

To reduce delays, PROSPER will prescribe appropriate time frame for each stage of procurement; delineate the responsibility of different officials and agencies involved in the purchase process and delegate, wherever necessary, appropriate purchase powers to the lower functionaries with due approval of the competent authority.

PROSPER will ensure conclusion of contract within the original validity of the bids. Extension of bid validity must be discouraged and resorted to only in absolutely unavoidable, exceptional circumstances with the approval of the competent authority after duly recording the reasons for such extension.

Value for money

Underpinning all of the above is the need to obtain value for money for all project procurement activities through the optimum combination of several factors, including:

Applying sound, internationally recognized procurement principles.

Ensuring that the goods, works or services procured meet the requirements for the task and are not over-specified.

Ensuring that the goods, works or services are contracted on the best possible terms, taking into account their expected life cycle.

Ensuring that the provider/supplier of the goods, works or services is qualified, legally entitled and competent to execute the contract.

Best value does not necessarily mean the lowest initial price option, but rather represents the best return on investment, taking into consideration the unique and specific 101 circumstances of each procurement activity; the balance of time, cost and quality required; and the successful overall outcome of the contract in meeting its original objectives.

Codes of Conduct and Conflicts of Interest

Codes of Conduct

Negative perceptions of procurement can quickly and easily be formed by individuals or groups looking in at the process from the outside. It is therefore imperative that procurement is not only conducted in an ethical, transparent and fair manner, but that it is seen to be conducted that way.

The ethical conduct require that no person shall use his/her authority, position or office for personal gain, which will be defined as soliciting, accepting or otherwise benefiting from anything of material value, in any form, either in person or indirectly through close relatives or associates, as a result of procurement financed by IFAD. The officials of PROSPER and its implementing entities shall respect the confidentiality of information gained in the course of duty and not use such information for personal gain or for the unfair benefit of any bidder or supplier or contractor. Information given in the course of his or her duty shall be true, fair and not designed to mislead.

Gifts and Hospitality

Any official of PROSPER involved in IFAD- funded procurement activity shall:

- not be permitted to accept any business gifts from current or potential suppliers, contractors or consultants unless such gifts are of very small intrinsic value such as a calendar or business diary.
- refrain from accepting any business hospitality that might be viewed by others as having an influence in making a business decision as a result of accepting that hospitality; and
- has a duty to promptly report refer any cases of irregular practices which include but not limited to fraud and corruption as defined in IFAD's Anti-Corruption Policy by a colleague, bidder, supplier, contractor or consultant to IFAD and National Authorities as required.

Mis-procurement

IFAD shall have the right not to finance contracts which are not procured strictly following the procedures as set forth in the Procurement Guidelines and Procurement Handbook, IFAD Letter to the Borrower, and will cancel such portion of the Financing. If mis-procurement continues, IFAD may suspend the Financing or even go up to the cancellation of the Financing.

Good Governance and Accountability Policies

The IFAD Procurement Guidelines and Anti Corruption Policy, which are adapted to this Project through the Financing Agreement and IFAD General Conditions for Agricultural Development Financing, require zero tolerance to prohibited practices. Therefore, the procurement process also requires a strict adherence to these Guidelines and Policy.

Pursuant to this policy, the following provisions shall be applied throughout the project implementation: For the purpose of this provision, the terms set forth below are defined:

- “Corrupt Practices” mean the offering, giving, receiving, or soliciting directly or indirectly of anything of value to influence improperly the actions of another party;
- “Fraudulent Practices” is any act or omission including a misrepresentation that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
- “Collusive Practices” is an arrangement between two or more parties, designed to achieve an improper purpose, including to influence improperly the actions of another party;
- “Coercive Practices” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party, or the property of the party to influence improperly the actions of a party.

- “Obstructive Practices” mean: deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede an IFAD investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or acts intended to materially impede the exercise of the IFAD’s inspection and audit rights provided for under sub-clause (e) below.

The Borrower and IFAD will reject a proposal for award if it determines that the bidder or consultant recommended for award, or any of its personnel. Or its agents, or its sub-consultants, subcontractors, service providers, suppliers and/or their employees has directly or indirectly engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question; IFAD will declare mis-procurement and cancel the portion of the loan/grant allocated to the contract if it determines at any time that representatives of the borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, coercive, collusive or obstructive practices during the procurement or implementation of the contract in question without the borrower having taken timely and appropriate action satisfactory to the DP to address such practices when they occur, including failing to inform the DP in a timely manner at the time they knew of the practices.

IFAD will declare a consultant or firm ineligible, either indefinitely or for a stated period of time, to be awarded a future IFAD financed contract if it at any time determines that the bidder, supplier, contractor, service provider or consultant has engaged in corrupt, fraudulent, coercive, collusive or obstructive practices in competing for, or in executing, an IFAD-financed contract; and

All contracts financed out of the proceeds of the project has a provision requiring supplier, contractor or consultants to permit both the Borrower and IFAD to jointly or separately inspect their accounts and records relating to the performance of the contract and to have them audited by auditors appointed by the Borrower and/or IFAD

All staff involved in the procurement process has a duty to report to the Project Coordinator and IFAD (i.e. through its Country Director) of any suspected instances of prohibitive practices when identified.

In the case of collusive behavior, if the evidence suggests that all or some of the bidders or consultants are involved, the evidence should be reviewed by the Project Coordinator, and if necessary, the procurement process is cancelled and all of the involved firms or individuals are sanctioned which could be up to the debarment. If the procurement is still in process, then the procurement must be cancelled and reinitiated only after the matters have been addressed properly.

Complaint Handling Mechanisms (CHM)

There are three distinct types of complaints that are typically found in a Project; i.e., (a) complaints concerning bid protest from aggrieved contractors, suppliers, service providers and consultants, which are addressed during or immediately after the bid process, (b) performance disputes, which are governed by the General Conditions of Contract (GCC) and Special Conditions of Contract (SCC), and, (c) non procurement related complaints from any parties.

A complaint is any notification regarding an alleged illegal or improper procurement action and/or conduct of procurement officials, consultants, and/or sub-contractors directly or indirectly supporting a project or associated with its implementation, which the complainant believes is wrong, either under the law or on the grounds of unacceptable behavior.

The PCU shall ensure the confidentiality of any complainant and shall hold harmless any person reporting a complaint, oftentimes referred to as a “whistle blower”, with provisions to shield complainant(s) or public official(s) from retaliation when they provide information that they reasonably believe to be a violation of the provisions of the agreed procedures.

All procurement related complaints shall be addressed to the PCU and s/he shall respond within 7 business days. If PCU needs more time due to complex investigation related to the complaints, then it shall state so in writing to the complainants, but in any case a complaint shall be put into closure within 30 business days.

The complainant need not be personally aggrieved or impacted, and may be acting merely in accordance with a sense of civic duty, such as an NGO or private citizen, in bringing an occurrence to the attention of project authorities.

All complaints, whether notified by persons who feel personally aggrieved or acting out of a sense of civic duty, will be acknowledged and acted upon by responsible authorities in accordance with the procedures specified in this section.

Concerning bid protests, from time to time, with and without justification bidders, suppliers, contractors, service providers and consultants may choose to lodge a complaint concerning some aspect of the contract award process. In the event the contract has been awarded and a contractual relationship exists between the parties, there are established dispute mechanisms in the GCC that shall be followed, up to and including judicial review.

A formal mechanism to satisfactorily respond to bid protest complaints must be followed, consistent with this Manual and the steps to be followed by aggrieved bidders, suppliers, contractors and consultants and the complaints procedure will be specified in the Bid/Request for Proposal documents.

Complaints may also be addressed directly to IFAD, to which IFAD will resolve the complaints within its service standard.

Conflict of Interest

It is a requirement of the IFAD Procurement Guidelines that any public official of the Borrower/recipient involved in IFAD-funded procurement activity shall declare any personal interest that may affect, or might reasonably be deemed by others to affect, impartiality in any matter relevant to his duties (conflict of interest).

Upon being aware of such a situation of this nature arising or having the potential to arise, the official(s) concerned should immediately recuse themselves from any aspect of the procurement process to avoid being placed in a position of conflict.

Where IFAD becomes aware of a situation where a conflict of interest may have existed but was not declared then this is sufficient grounds to declare mis-procurement in line with the IFAD Procurement Guidelines.

Where there is doubt that a conflict of interest, or potential conflict of interest, may exist or arise, IFAD may be consulted for advice or guidance, however the general principle is that if there is uncertainty then it is safer to recuse oneself from the process than to risk a negative perception of the process and mis-procurement being declared.

A firm/entity/individual participating in a procurement process under this project shall not have a conflict of interest. Any firm/entity/individuals found to have a conflict of interest shall be ineligible for award of a contract.

A conflict of interest is a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations, and that such conflict of interest is not acceptable under the FABS Project. The Recipient will take appropriate actions to manage such conflicts of interest which may include rejecting a proposal for award if it determines that a conflict of interest has flawed the integrity of any procurement process.

A firm shall be considered to have a conflict of interest in a procurement process if:

- such firm is providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of a project that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm.; or
- such firm submits more than one bid, either individually or as a joint venture partner in another bid, except for permitted alternative bids. This will result in the disqualification of all bids in which the Bidder is involved; or
- such firm (including its personnel) has a close business or family relationship with a professional staff of the Recipient (or of the project implementing agency, or of a recipient of a part of the grant) who: (i) are directly or indirectly involved in the preparation of the bidding documents or specifications of the contract, and/or the bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved acceptable to IFAD throughout the procurement process and execution of the contract; or
- such firm does not comply with any other conflict of interest situation as specified in the Bidding Documents relevant to the specific procurement process.

It is the duty of all project staff and any other public employee directly or indirectly involved with the procurement process and particularly the preparation of bid documents, bid evaluation, contract negotiations, contract management and payments to avoid any potential conflicts of interest. A conflict of interest arises when the individual has a direct or indirect relationship with a bidder, consultant, contractor, service provider or supplier.

In the event that a project staff or a member of the procurement committee (PC) or an employee who is directly involved with the procurement process feels that there is the potential for a conflict of interest they shall declare it to the PC and remove themselves from the procurement process.

Standard of Ethical Conduct

All project staff and consultants involved in procurement activities, shall observe the Code of Business Ethics as outlined below.

No individual shall use his/her authority or office for personal gain. Personal gain includes accepting or requesting anything of material value from bidders, prospective bidders or suppliers for the individual, his or her spouse, parents, children or other close relatives, or for other persons from whom the individual might gain direct or indirect benefit of the gift.

An individual shall seek to maintain and enhance the reputation of the Government by:

- Maintaining the highest standards of honesty and integrity in all relationships both inside and outside the Entity in which he works.
- Developing the highest standards of professional competence.
- Using funds and other resources for which he/she is responsible to provide the maximum benefit to the Government

Conflict of interest - An individual shall declare any personal interest that may affect or might reasonably be deemed by others to affect impartiality in any matter relevant to their duties.

Disclosure of personal relationships – an individual shall declare any relationship with a bidder, supplier, contractor, service provider or consultant and shall take no part in either the decision making process or the implementation of any contract where such a relationship exists. A personal relationship is defined as consanguinity or affinity up to the third civil degree.

Confidentiality and accuracy of information - An individual shall respect the confidentiality of information gained in the course of duty and shall not use such information for personal gain or for the unfair benefit of any bidder, supplier, contractor or consultant.

Information given by an individual in the course of their duty shall be true, fair and not designed to mislead.

Competition - All bidders, suppliers, contractors and consultants shall be treated with fairness and impartiality, and avoid any business arrangement that might prevent the effective operation of fair competition.

Examples of Unethical Conduct

The following are examples of the type of conduct prohibited by this Code of Ethics:

- Revealing confidential or “inside information” either directly or indirectly to any bidder or prospective bidder;
- Discussing a procurement with any bidder or prospective bidder outside the official rules and procedures for conducting procurements;
- Favoring or discriminating against any bidder, prospective bidder or consultant in the Preparing of technical specifications, terms of reference or standards or the evaluation of bids and proposals;
- Destroying, damaging, hiding, removing, or improperly changing any formal procurement document;
- Accepting or requesting money, travel, meals, entertainment, gifts, favors, discounts or anything of material value from bidders or prospective bidders, suppliers, contractors or consultants;
- Discussing or accepting future employment with a bidder or prospective bidder, suppliers, contractors or consultants;
- Requesting any other person to violate the public procurement rules or procedures;
- Ignoring evidence that the Code of Ethics has been violated; and
- Ignoring illegal or unethical activity by bidders or prospective bidders, suppliers, contractors, service providers or consultants, including any offer of personal inducements or rewards or otherwise.

Debriefing: bidders and consultants whose offers are unsuccessful have the right to request a debriefing from the Project Manager, however no debriefing will be delivered until after the contract has been signed. The debriefing will be limited to the content of the bidder's bid or consultants' proposal and in no way will cover the content of any other firms offer or provide any information on the details of such other than information in the public domain such as minutes of opening and the Summary of Evaluation.

The reasons for this are four-fold:

It increases the levels of transparency in the procurement process,

It will provide essential guidance (especially to local firms) on the relative strengths and weaknesses in their offers. Local firms will be able to take the opportunity to strengthen their bids and proposals in the future leading to a more competitive local market.

The more equitable potential bidders and consultants feel the process to be, the more likely they are to submit bids or pursue shortlisting again increasing the overall levels of competition.

It will provide a benchmark for unsuccessful bidders and/or consultants, i.e. they will become aware of the quality and pricing levels required to win contract awards.

The overall goal of this debriefing process is to improve the level and quality of competition.

When de-briefing bidders and consultants care should be taken to ensure that no commercial confidences are breached, i.e. it is acceptable to give an indication of where a bid or proposal was weak but not acceptable to disclose details of other bids and proposals received. Debriefing's should be requested in writing and may either be delivered in writing or in a meeting chaired by the Project Coordinator at the Project Coordinator's option. If a meeting is held it must be documented and signed by both parties and a copy of the minutes of the meeting placed on the relevant contract file.

. To facilitate the de-briefing process simultaneously to the notice of award or award of contract (services) being sent to the successful bidder or consultant, all un-successful bidders and consultants will be sent a in a Notice of an Awarded Contract, the following details:

- The name of each bidder or consultant submitting an offer
- Bid prices as read out at bid opening
- In case of services, the technical points score of each consultant
- The name and evaluated price of each bid or proposal and in the case of services the financial score
- The name of bidders or consultants whose bids or proposals were rejected and the grounds for the rejection
- Name of the winning bidder or consultant, the amount of the contact, the duration and final scope of the contract.
- Details of how to request a de-briefing from the Project.
- In case an unsuccessful bidder or consultant feels that it has valid grounds for a complaint regarding the procurement process, it may lodge a complaint in accordance with the process outlined in the Bidding Document or Request for Proposals as the case may be.

Project Procurement Plan

It is a requirement of the IFAD Procurement Guidelines that at the outset of each project, the Borrower/recipient, in conjunction with IFAD, establishes a procurement plan covering the first 18-months of the project followed by 12 months successive plans synchronised with the Annual Work Plans and Budget during implementation.

Planning is a critical part of the procurement process to enable objectives and priorities to be set, workloads to be estimated and resources allocated. It enables the procuring entity to plan, organise, forecast and schedule its procurement activities and to identify potential areas for aggregation of needs. As far as possible, procurement planning should be integrated with financial planning of a project so that budgets and procurement needs are synchronised as far as is practical.

Each procurement plan shall identify procedures which must be implemented by PROSPER to ensure consistency with the IFAD Procurement Guidelines. As provided in appendix I, paragraph 1 of IFAD's Procurement Guidelines, IFAD review of and no objection to the Borrower/Recipient's procurement plans is compulsory and the first 18 months procurement plan and the update for the subsequent 12 months procurement plan submitted by the Borrower/Recipient must include as a minimum:

- A brief description of each procurement activity to be undertaken during the period and name of the implementing agency responsible for the procurement;
- The estimate value of each procurement activity;
- The method of procurement to be adopted for each procurement activity and; d. The method of review IFAD will undertake for each procurement activity indicating either post review or prior review.
- Any amendments to the Consolidated Procurement Plan shall be subject to the Fund's no objection.

Updating a plan

As already stated above, the initial 18-month project procurement plan is required to be prepared at the outset of each project with successive 12 month procurement plans to follow during the course of implementation.

Once this initial plan receives a ‘no objection’ from IFAD the plan should form the basis of the procurement activity for the project.

It is important however that procurement plans are not static documents. They should be considered as ‘live’ documents and updated on a regular basis. Any major adjustments or amendments should be done promptly, but in any event, plans should be reviewed and updated at least annually but ideally every six months. Any major adjustment or amendments would require IFAD no objection.

Prior Review by IFAD

In accordance with the IFAD Project Procurement Guidelines, the following will be subject to prior review by IFAD:

- Award of any contract for goods and equipment to cost USD 70 000 or equivalent or more. The following will be reviewed:
 - Prequalification documents and shortlist when prequalification is undertaken;
 - Bid Documents for goods and works;
 - Evaluation Reports and Recommendations for Award; and
 - Draft contracts and subsequent amendments
- Award of any contract for works and equipment to cost USD 150 000 or equivalent or more. The following will be reviewed:
 - Prequalification documents and shortlist when prequalification is undertaken;
 - Bid Documents for works;
 - Evaluation Reports and Recommendations for Award; and
 - Draft contracts and subsequent amendments

Award of any contract for consulting services estimated to cost USD 60 000 or equivalent or more. The following will be reviewed:

Prequalification documents and shortlist when prequalification is undertaken;

Request for Proposal (RFP);

Technical Evaluation Report;

Combined (technical and financial) evaluation report and the recommendation for award; and

The minutes of Negotiation, draft contracts and subsequent amendments.

All direct contracts above the prescribed procurement method thresholds (indicated in the Letter to the Borrower issued by IFAD) shall be undertaken in accordance with the provisions of IFAD Procurement Guidelines for direct contracting and single source selection and subject to IFAD prior review. All the single source selection of consultancy services (national/international organizations/UN agencies) would require a detailed proposal including budget and deliverables, which will be evaluated by the project and submitted to IFAD’s prior review before entering into the contract.

In addition to prior review threshold of consultancy services (ii) above, the first two procurement actions of consultancy services, irrespective of the selection methods, in a Project year, will also subject to IFAD prior review.

IFAD Prior Review Portal – NOTUS

IFAD has introduced a new system to manage ‘No Objections’ for project procurement and non-procurement related activities requiring prior review. The system, known as NOTUS (No Objection Tracking Utility System), has been rolled out across IFAD-financed projects/Projects.

NOTUS is a user-friendly tool that will systematize the submission, monitoring, review, commenting, and archiving of documents sent by projects to IFAD for ‘No Objection’. It will significantly mitigate risks (e.g. data loss) from use of different and often manual methods of document naming, versioning, submission and archiving, as well as streamline the no objection process. Ultimately, NOTUS will ensure better organization and efficiency in these processes, and in turn help project implementing agencies and IFAD realize important productivity gains.

All actions, which require IFAD prior review, will only be uploaded in NOTUS portal by the project team. PCU will nominate 3-4 staff members to IFAD for providing access to the portal. This access requires a two factor authentication. Only the staff members who have been granted access will be able to upload the documents/comments/replies. PCU will inform IFAD about the changes in the nominations forthwith during implementation.

Contract Management

Good contract management is necessary for all contracts therefore the guidelines below applies equally to goods, consulting and non-consulting services. Effective contract administration is critical to successful contract implementation and meeting the objectives of the procurement requirement. Contract administration procedures are designed to ensure that:

- the supplier performs the contract in accordance with the terms and conditions specified in the contract;
- the procuring entity fulfils its obligations and duties under the contract; and
- swift remedial or preventative action is taken when problems arise or are foreseen.

The procuring entity has the overall responsibility for contract management, but will draw on other resources, such as technical expertise, payment services, legal services and supply management systems, as required. Where such other services and systems are used, the procuring entity will remain responsible for monitoring their performance and ensuring that their activities, in relation to the contract, are completed on time and in accordance with procurement rules. Day-to-day contract management/administration will often be assigned to an end user or technical expert.

Contract management responsibility

The procuring entity will always retain overall responsibility for contract management but not necessarily the day-to-day functional activity which can often be undertaken from outside the procuring entity if deemed to be appropriate. For example, the procuring entity will normally retain control of contract amendments, payments and dispute resolution, but may allocate day-to-day liaison with the supplier, contractor or consultant to the end user.

When considering the most appropriate person or team to manage/administer the contract the procuring entity should take into account:

- whether supervision needs to be conducted by a person with appropriate technical skills, such as for construction contracts or the installation of complex plant and machinery. If so, contract administration is best allocated to the end user or an external consultant;
- where contract administration is likely to be time-consuming or require skills not available within the procuring entity, an external contract administrator should be appointed, such as a project manager for a major construction contract;

- where goods are to be delivered directly to the end user, contract administration is best allocated to either the end user or procurement staff;
- where a consultant is required to work with the end user in conducting a study, providing advice or building capacity, contract administration is best allocated to the end user and particular counterpart staff may need to be designated to work with the consultant.
- Where services are provided in support of the general management or administration of the procuring entity, contract administration is best allocated to the member of staff responsible for that function.

The nominated Contracts Manager or Contracts Management Team should:

- carry out a review of the contract to assimilate the details of the requirements and the program for fulfilling them;
- ensure that a signed copy of the contract is received from the supplier, contractor or consultant;
- ensure that any required performance security or advance payment security is received from the supplier, contractor or consultant;
- ensure that the procuring entity meets any immediate obligations, such as advance payment;
- for larger contracts, prepare a contract implementation plan, showing key milestones, such as dates for mobilisation, deliveries or completion of certain deliverables or sections of work, and the procuring entity's obligations, such as providing access to a works site, payment or approval of reports.

The contract implementation plan is a key management tool to ensuring that the contract is performed as intended and within the obligations undertaken in the contract by both parties. It enables the Contract Manager to formulate an expediting plan for the contract to proactively ensure that deliverables are received on time.

Monitor implementation of contracts

The task of contract monitoring is to ensure that both parties to the contract perform in accordance with that contract and to take action as required to address any problems or delays, whether actual or anticipated.

For goods contracts ensuring that goods are delivered on time, that the goods are acceptable to the procuring entity, in terms of quantity, quality and supporting documentation, and that the procuring entity meets its obligations to pay for the goods delivered.

When managing services contracts, the focus is on ensuring that services are delivered on time and to an acceptable quality. This can be difficult, as the quality of services, particularly consultancy services, can be subjective and difficult to measure. A good working relationship with the consultant and ongoing monitoring of services is therefore important, to ensure successful contract performance. The procuring entity must also ensure that it meets its obligations, particularly where the performance of consultancy services is dependent on certain inputs or information from the procuring entity or where staff must be made available to benefit from capacity building initiatives.

Register of Contracts: Procurement carried out under the Project will be recorded and registered against the Procurement Plan. In addition, all contracts, with or without prior IFAD approval, will be listed in the Register of Contracts maintained by the procuring entity with the dates of approval as provided by IFAD. When a contract is amended, the amendment will be recorded in the Register of Contracts. If a contract is cancelled or declared ineligible for financing by IFAD, this information will be written in the Register of Contracts. As this register facilitates the review and approval of payment requests on contracts, it is to be updated and submitted to the IFAD country Project director on a monthly basis. The sample form to be

used and instructions are detailed in Annex 6 of IFAD's Loan Disbursement Handbook. It will also be necessary that the PCU prepare annual statistics disaggregated by type and methods of procurement, for the overall procurement transactions carried out for the Project.

Documents/Records Required:

All correspondence and documentation relating to contract administration must be kept on the procurement file. In particular, records are required of:

- all invoices and other payment documents;
- all documentation relating to contract performance, such as delivery notes, progress reports and other deliverables;
- all contract variations;
- all contract amendments;
- all documents relating to claims under the contract, including warranty claims;
- all documents relating to contract disputes and dispute resolution.

The IFAD General Conditions for Agricultural Development Financing require that Borrower/recipients retain documents and records for review by IFAD at any time within a period of ten (10) years after completion of the bid or contract. The following table shows what procurement files, folders or dossiers should contain:

Document	Preferred format
(i) A copy of the published advertisement or shortlist (if applicable) *	Hard and/or Soft copy
(ii) A copy of the published pre-qualification and invitation documents and any amendments, extensions or clarifications that were requested and issued*	Hard and/or Soft copy
(iii) A record of tender opening signed by all present	Hard and/or Soft copy
(iv) A full copy of each bid received and evaluated, plus clarifications requested and responses received	Hard and/or Soft copy
(v) A copy of the evaluation report*	Hard and/or Soft copy
(vi) Signed minutes of all meetings relating to the procurement, including pre-bid and negotiation meetings where these were held	Hard and/or Soft copy
(vii) A contract award notice*	Hard and/or Soft copy
(viii) Any letter of tender acceptance to the supplier, contractor or consultant*	Hard and/or Soft copy
(ix) The signed contract document and contract acceptance*	Hard and/or Soft copy
(x) Any contract amendments*	Hard and/or Soft copy
(xi) All contractual correspondence between the procuring entity and a supplier, contractor or consultant	Hard and/or Soft copy
(xii) Post-contract documents relating to the fulfilment of contract obligations, in particular photocopies of bank guarantees or payment guarantees	Hard and/or Soft copy
(xiii) Signed minutes of any meetings related to contract management, including contract progress or review meetings	Hard and/or Soft copy

(xiv) Signed delivery documents evidencing delivery of supplies or signed completion certificates in relation to a contract for services or works under the contract, including any contract delivery records	Hard and/or Soft copy
(xv) A copy of all invoices for works, services or supplies, including work papers verifying the accuracy of payments claimed and details of the actual payment authorized	Hard and/or Soft copy
(xvi) A copy of cumulative payment worksheets/records evidencing management of all payments made	Hard and/or Soft copy
(xvii) A copy of all submissions to and all decisions of the appropriate approval authority related to the procurement, including the approval of the invitation documents, approval of the evaluation report(s), contract award, approval of contract documents and contract amendments and any decision to suspend or cancel procurement proceedings	Hard and/or Soft copy
(xviii) A copy of any claims made by the procuring entity with respect to any warranty, non-warranty, short supply, damage and other claims upon the provider or upon the procuring entity	Hard and/or Soft copy
(xix) In the case of IFAD prior review, all submissions and correspondence in relation to the seeking of IFAD's no-objection	Hard and/or Soft copy
(xx) any other communications relating to the procurement in question, including internal entity correspondence	Hard and/or Soft copy
* Ideally, drafts of these published documents and reports should also be retained for completeness and to provide a full picture of how the published document evolved. It is, however, accepted that where issues of space exist this may not always be possible in practice.	

Procurement Methods

- Goods and Works and Non-consulting Services
- International Competitive Bidding (ICB)

ICB is the most competitive and transparent, therefore, the preferred procurement method. Other methods exist only because ICB cannot always be used. ICB is used for procurements with the highest monetary threshold. The procedure for ICB is lengthy to ensure quality of bids and approvals at various stages from IFAD, about several steps shall be observed in all cases to safeguard against misuse of the funds.

These are:

Preparation of bidding documents:

Prepare full documentation that is detailed enough for prospective bidders to make realistic and accurate bids.

There will be no use of trade names for vehicles and equipment, (e.g., Toyota Land Cruiser); rather request bids for 4x4 LWB, station wagon with 7 to 10 seats, engine size in the range of e.g. 2.0 to 3.0 litres etc. plus other requirements such as radio, air-condition etc.

All bidding documents for the procurement of goods, works and services would be prepared by the procurement Manager with the support of the technical expert(s), who would supply specifications, terms of reference, Bills of Quantities and evaluation and post-qualification criteria as required.

All bidding documents and contracts for the procurement of goods, works and services financed by IFAD loan and grant would include a provision requiring bidders, suppliers, contractors, sub-contractors and consultants to permit IFAD to inspect their accounts, records or other documents relating to the bid submission and contract performance and to have them audited by IFAD-appointed auditors and investigators, as appropriate

Goods and equipment should be grouped into sizeable packages to cater for economies of scale, efficient and timely procurement.

Submit prepared bid documents to IFAD to obtain the no objection.

Once the no objection is obtained to the Bidding document, PCU shall publish Requests for Bids as specific procurement notices in at least one newspaper with national circulation in Ghana and published on the United Nations Development Business website and on the IFAD website. Notification shall be made in sufficient time to enable prospective bidders to obtain bidding documents and prepare and submit their responses. ICB opportunities are advertised for a period of no less than 45 days.

The Project shall also advertise in the dedicated government portals or its own website and at least two local dailies of nationwide circulation following the format prescribed by IFAD.

Bidding documents should be available for free download over the project website or other reliable websites, however a small fee equal to the cost of printing a bidding document may be charged for the bidders who are interested in getting hard copies

All bidders will be given enough time to prepare and present their bids. For vehicles and equipment and related items, the bidding period shall be 42 days at least while for complex bids such as civil works where site inspections are necessary, 60 days will be given.

Bid security may be required for ICB. When used, the Project shall ensure that the bid security is in the amount and form specified in the bidding documents and shall remain valid for a period sufficient to give the Project reasonable time to act if the security is to be called (generally four weeks beyond the validity period for the bids). Bid securities should be established in specific amounts, not percentages. Bid securities shall be released to unsuccessful bidders once the contract has been signed with the winning bidder.

Alternatively to a bid security, the Project may require bidders to sign a declaration stating that if they withdraw or modify their bids during the validity period or they are awarded the contract and fail either to sign it or to submit a performance security before the deadline set in the bidding documents, the bidder will be suspended from eligibility to bid on any contract with the entity that invited the bid for the period specified in the bidding documents

The bidding document should state the deadlines for the submission of clarification requests and the deadline for the PCU's responses to those requests.

The PCU may hold a prebid conference, in which it will explain the nature of the ICB and bidders ask questions. The PCU is free to respond to those questions during the conference or defer answering them. Whether or not the PCU chooses to answer these questions during the conference, it shall issue a question and answer (Q&A) document to all bidders who have requested and received the bidding document, providing the responses to all the questions asked. The Q&A document shall not indicate the source of the questions, only the questions and responses

The Project should ensure that the tender box where Bids must be submitted is open and accessible and that the tender box has two locks, with each key to the lock kept by a different officer and that the tender box remains locked until the time for tender opening.

Each Bid that is delivered shall be placed unopened in the tender box by the person delivering the tender or by the staff of the Project immediately upon receipt of the tender if it is delivered by post. If a tender is too large to be placed in the tender box, it shall be received in the manner determined by the Project if no other manner is set out in the tender document.

Late bids shall not be accepted under any circumstances. Opening.

Bid opening.

Once the deadline for receiving bids has passed bids will be opened. All bidders shall be at liberty to attend the opening ceremony in person or through their appointed representatives. The bid prices shall be read out lot by lot as stipulated in the bidding documents. Tenders submitted later than the specified period shall be rejected and returned unopened.

A bid opening committee shall be appointed by the Project Coordinator consisting of at least three members and not more than five members. The Project procurement Manager or his/her authorized designate shall be the Secretary

The terms of the committee shall be as follows:

Immediately after the deadline for submitting bids, the bid opening committee shall open all bids received before that deadline.

Check that the bids are marked for the correct bid opening.

Check for any withdrawals and confirm that such withdrawal is authentic. Any bid withdrawn in writing shall not be eligible for evaluation or consideration in the bid process.

Check that bid packaging shows no sign of tampering. If there is damage, then this must be stated and included in the minutes

Those submitting bids or their representatives may attend the opening of proposals/bids. All bidders' representatives present must sign a register, detailing their name and the name and address of the company they represent.

The bid opening committee shall assign an identification number to each bid and write it on each copy of the bid document.

As each bid is opened, the following shall be read out loud and recorded in a document to be called the bid opening register—

The name and address of the person submitting the bid;

The currency of the bid and total price, where applicable including any modifications or discounts received before the deadline for submitting bids.

The total price of the bid may not be read out where a bid consists of numerous items that are quoted separately

The total price of the bid shall not be read out where a bid is preceded by a technical evaluation and such bid has not met the technical evaluation criteria. Where a bidder has failed the technical evaluation, the entity shall return the financial proposal unopened.

If applicable, what has been given as bid security or whether samples have been submitted where applicable;

The number of pages paginated/serialized by each bidder for each bid submitted

The number of copies submitted with the original bid

No bidder shall be disqualified by the procuring entity during opening of bids.

The Committee shall provide a copy of the bid opening register to each person submitting a bid;

Each member of the bid opening committee shall —

(i) Sign each original and copies of bid on one or more pages as determined by the bid opening committee; and

(ii) Initial, in each bid, against the quotation of the price and any modifications or discounts, where applicable.

The bid opening committee shall prepare bid opening minutes which shall set out the following: -

A record of the procedure followed in opening the bids; and

The particulars of those persons submitting bids, or their Representatives, who attended the opening of the bids.

To acknowledge that the minutes are true reflection of the proceedings held, each member of the bid opening committee shall—

Initial each page of the minutes;

Append his or her signature as well as initial to the final page of the minutes indicating their full name and designation.

A person who causes the physical loss of bid documents commits an offence.

The chairperson should close the bid opening meeting, reminding bidders that they must not seek to influence the evaluation process and that the successful bid will be communicated in due course.

Where bid openings for more than one procurement process are conducted at the same time, they must be conducted consecutively, with one opening completed, recorded and bid removed before the next opening commences.

Bid Evaluation.

Bid evaluation shall be done by the Evaluation Committee appointed by the Project Coordinator. It is recommended that the committee be appointed in good time before the opening of the bids so that the evaluation committee members block their calendars and make sufficient time for the Bid evaluation.

The Evaluation committee should include members with a relevant type of skills, knowledge and experience relevant to the procurement requirement as far as possible, which may include:

Technical skills;

End-user representatives;

Procurement and contracting skills;

Financial management or analysis skills;

Legal expertise.

The PROSPER procurement manager shall be the secretary.

The terms of reference for the evaluation committee shall be as follows: -

Examine all bids received if they conform to all the eligibility and other mandatory requirements in the bid documents.

Evaluate and compare all the responsive bids other than bids rejected as non-responsive.

Assess the technical and financial aspects of the bids as per criteria in the documents as well as undertake the negotiation of the process

Carry out the evaluation with due diligence if needed.

No member of the committee shall communicate with the bidder who has submitted a bid that is under consideration of the evaluation.

Each member of the evaluation committee and those providing support to the committee shall sign a statement of impartiality and non-disclosure as well as conflict of interest before the commencement of bid evaluations.

Bid evaluation is important and any delay at this stage may involve requesting bidders to extend validities or lead to price increases. The evaluation committee should carry out the evaluation and quality of goods should be evaluated against costs. The lowest bidders should not necessarily be selected but the best value for money bid considering Project needs. Special considerations such as standardizing on model of goods/equipment should be considered at this stage. The evaluation team must use only the criteria provided for in the bid documents and no other criteria should be introduced.

Bid Evaluation consists of the following stages:

Review and list the requirements, instructions and evaluation criteria. The Evaluation Committee should review and list the requirements, instructions and evaluation criteria specified in the bidding document and ensure that they are clearly understood, seeking clarification from the person(s) responsible for writing the document, whenever necessary. The evaluation must apply the criteria specified in the bidding document, and no new or altered criteria may be introduced.

A preliminary evaluation. The preliminary examination is conducted to determine whether tenders have complied with the basic instructions and requirements of the bidding document. It enables evaluators to eliminate the weakest tenders without spending time and effort on a detailed evaluation. If no pre-qualification has been conducted, the preliminary examination can also be used to assess whether bidders meet the mandatory requirements.

The preliminary examination is conducted on a pass/fail basis, with tenders that are not substantially compliant being rejected. The criteria to be used in the preliminary examination depend on the requirements and instructions of the bidding document, so the preliminary examination must always begin with a review of the bidding document to list the requirements to be met. As guidance, the preliminary examination might typically examine whether:

- the tender has been submitted in the proper format;
- any required tender security has been submitted in the proper form and amount and is valid for at least the period required
- the tender has been submitted without material reservations or deviations from the terms and conditions of the bidding document;
- the tender has been duly signed and authorized;
- the right number of copies of the tender have been submitted;
- the tender is valid for at least the period required;
- all required key documents and information have been submitted;
- any required samples have been submitted;
- the tender meets any other key requirements of the bidding document;
- there have been no alterations or changes to the tender documents, except those that are part of the tender requirement;
- tenders that do not pass this review have been eliminated.

In every evaluation process, the Evaluation Committee shall require bidders to self-certify their eligibility and declare any criminal convictions, administrative sanctions (including debarments under the Agreement for Mutual Enforcement of Debarment Decisions or the “Cross-Debarment Agreement” and/or temporary suspensions that have been imposed on the contractor and/or any of its directors, partners, proprietors, key personnel, agents, subconsultants, subcontractors, consortium and joint venture partners. As part of this exercise, Bidders shall search the World Bank List of Ineligible Firms and Individuals, available at <http://worldbank.org/debarr>, for the names of their companies and directors and provide a print-out of the search result. If any sanction is declared, the procuring entity will need to undertake prior consultation with and seek clearance by IFAD who will examine whether this case of cross-debarment meets IFAD’s own standards for debarment regardless of the estimated value of the proposed contract.

Assessment of responsiveness. When evaluating tenders, the evaluation committee must decide whether a tender is “responsive” (i.e. meets the procuring entity’s requirements) or “non-responsive” (i.e. does not meet the procuring entity’s requirements).

In practice, few tenders are perfect, and the key test is therefore for the evaluation committee whether a tender is “substantially responsive” or not. A substantially responsive tender is defined as a tender that conforms to all the instructions, requirements, terms and conditions of the bidding document without material deviation, reservation, or omission. In other words, minor (or “non-material”) errors or problems can be accepted by the evaluator(s) or corrected by the bidder, while tenders with major (or “material”) errors or problems must be rejected.

As a general rule, a material deviation, reservation, or omission is one that:

- substantially affects the scope, quality or performance of the goods, works or services; – would substantially limit the procuring entity’s rights or the bidder’s obligations under the contract; or

- would unfairly affect the competitive position of other bidders if corrected.

Determining whether a deviation is material or non-material is a decision for the evaluation committee and one that must be based on the tender contents only. The identification of material and non-material deviations will vary with the tendering procedure, depending on the particular requirements of each. However, decisions on what constitutes material and nonmaterial deviations must be applied consistently to all tenders subject to the same evaluation process. In deciding whether deviations are material or non-material, the evaluator(s) should consider the impact on key factors, such as cost, risk, time and quality of the procurement.

As guidance only, material deviations, reservations or omissions are likely to include:

- unacceptable delivery or completion schedules;
- unacceptable technical details, such as design, materials, workmanship, specifications, standards or methodologies;
- unacceptable counterproposals on key contract terms and conditions, such as payment terms, price adjustments, liquidated damages, subcontracting or warranty.

Technical and commercial evaluation. Only tenders that pass the responsiveness test proceed to the technical evaluation. It is usually conducted on a pass/fail basis; only tenders that are responsive, or substantially responsive, to the requirements of the bidding document are included in the subsequent financial evaluation. Non-responsive tenders are eliminated.

The commercial evaluation is conducted by assessing whether the tender conforms, or substantially conforms, to all the terms, conditions and requirements of the bidding document. The criteria will therefore depend on the bidding document but might include: – acceptance of key contract conditions, such as payment, warranty and liquidated damages for delay;

- delivery schedule for goods within the specified time period;
- completion schedule for incidental services within the specified time period, where installation and commissioning or user training is required;
- availability of spare parts and consumables;
- service arrangements, such as a requirement for local agents.

As with the technical evaluation, the commercial standard must be set by the terms and conditions of the bidding document, and tenders should be evaluated as responsive or non-responsive against this standard. No extra benefit should be given to tenders that exceed the standard required, except when the evaluation method (e.g. merit-point-based) or dedicated non-price criteria.

Any procurement in lots for which the bidding document has been written and issued shall be evaluated and awarded as lots.

- Any evaluation procedure in which bids above or below a predetermined cost estimate are automatically disqualified is unacceptable. If the Project intend to use predetermined costs as the basis for evaluating or assessing bids, the project cost and applicable percentages must be clearly expressed in the bidding document.
- If the lowest tender evaluated is seriously unbalanced or front-loaded in the opinion of the borrower/recipient, the bidder(s) may be required to produce detailed price analyses for any and all items in the bill of quantities to demonstrate the internal consistency of those prices with the proposed construction methods and schedule.
- After evaluation of the price analyses, if the bid prices are found to be balanced, the Project may award the contract to the bidder with the lowest tender evaluated. If the bid prices are found to be unreasonably low, the Project may require the performance security to be increased, at the bidder's expense, to a level sufficient to protect the borrower/recipient against financial loss in the event of default by the successful bidder under the contract.
- If, after evaluation of the price analyses, bid prices are still found to be unreasonably high, the Project shall reject all bids and recommence the procurement.

Correcting tenders and seeking clarification from bidders. If the information provided in a tender is unclear, the Evaluation Committee may seek clarification from the bidder. Clarifications cannot be used to amend the price of the tender (save for the correction of arithmetical errors), correct material deviations or make other significant changes to any aspect of the tender.

Requests for clarification must be addressed to the bidder in writing and must state that a written response is required by a specified date. The request must also state that the bidder's failure to respond to the request may result in the rejection of its tender.

If a tender includes non-material deviations, errors or omissions, the evaluator(s) may choose to accept or to correct them. To ensure that the evaluation is fair to all bidders, the non-conformity should be quantified and expressed in monetary terms whenever possible. This amount should then be added to the tender price, for the purpose of the financial evaluation only, to reflect the price or cost of the missing or non-conforming item.

For example, where a tender for goods does not include the price of a spare part or consumable item, the price of the missing item should be added to the tender price, using the highest price for the same item from the other tenders. As a further example, if a tender includes a slightly later delivery date than required by the bidding document and this delay is acceptable to the procuring entity, the later delivery could be quantified and expressed in monetary terms, using the monetary penalties for liquidated damages contained in the draft contract.

Financial evaluation. Only tenders that have passed the technical evaluation are financially assessed to determine the lowest tender evaluated. Unless otherwise required by the instructions in the bidding document, the Evaluation Committee shall use the below procedure to determine the evaluated price of each tender:

- Take the total tender price as read out at the tender opening, including or excluding particular costs, as indicated in the bidding document (e.g. the bidding document may give particular instructions concerning the inclusion of all taxes and duties in the tender price or the exclusion of provisional sums and contingencies but the inclusion of competitively priced dayworks in tenders for works);
- Correct any arithmetical errors. The procedure for correcting arithmetical errors is normally stated in the bidding document and must be used. If no specific procedure is stated in the bidding document, or there is a discrepancy between the unit price and the total price obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. Bidders should be notified in writing of any arithmetical corrections made and requested to agree to the corrections in writing;
- Apply any non-conditional discounts offered by bidders. Discounts, or any other change in price, are not permitted after the tender closing date and only nonconditional discounts should be considered in the evaluated price of the tenders. Conditional discounts, such as discounts for prompt payment by the procuring entity, must not be considered in the financial evaluation but should be included (as a contract term) if the tender is accepted.

If so stated in the bidding document, bidders may be permitted to offer conditional (or cross) discounts (i.e. discounts that are conditional to the simultaneous award of contracts for more than one lot).

Conditional discounts should also be excluded from the main financial evaluation.

On completion of the financial evaluation and determination of the successful tender(s), a further financial comparison should be conducted to consider any conditional discounts. This comparison must identify the best overall value for money for the procuring entity (i.e. the combination of contract awards that offers the lowest total price);

- Convert all tenders to a single evaluation currency for comparison purposes, using the currency and the source and date of the exchange rate specified in the bidding document;
- Determine the total evaluated price of each tender.

The Evaluation Committee will then rank the Tenders, and conduct a post-qualification on the lowest tender evaluated.

The evaluation of bids shall be carried out within a maximum of 30 days.

Reporting

The evaluation committee shall prepare an evaluation report containing a summary of the evaluation and comparison of bids and shall submit the report to the person responsible for procurement for his or her review and recommendation and submission to the accounting officer for approval.

The report prepared under paragraph shall include:

A summary of all bids received and opened;

The results of the preliminary evaluation, with reasons why any bid was rejected;

details of any minor deviations accepted and the way in which such deviations were quantified and taken into account in the evaluation and comparison of the bids;

The evaluated price of each bid, showing any discounts, corrections or adjustments to the bid price and any conversion to a common currency

the ranking of the bids each according to its total evaluated price

the results of any confirmation of qualification conducted and

A recommendation to award the bid to the lowest evaluated bidder.

The evaluation report shall be signed by each member of the evaluation committee.

The evaluation committee may, after bid evaluation, but prior to the award of the bid, conducts due diligence and present the report in writing to confirm and verify the qualifications of the bidder who submitted the lowest evaluated responsive bid to be awarded the contract in accordance with this Act.

The conduct of due diligence may include obtaining confidential references from persons with whom the bidder has had prior engagement.

To acknowledge that the due diligence report is a true reflection of the proceedings held, each member who was part of the due diligence by the evaluation committee shall:

Initial each page of the report; and

Append his or her signature as well as their full name and designation.

Notice of Intention to Award

Bidders shall be notified of the outcome of the procurement after the evaluation report is internally approved after securing IFAD's NO in the case of contracts subject to prior review. The notification to the bidders shall be through a notice of intent to award (NOITA). A bidder may request a debrief and/or submit a protest upon receipt of the NOITA. An award is then made to the lowest evaluated responsive bidder once all protests and/or appeals have been resolved.

The evaluation team will make a report and a recommendation for award to the lowest evaluated bidder to the Project Coordinator who will award the bid based on the evaluation report. The PCU will then seek for a no objection from IFAD before awarding the bid.

If the Project finds it necessary to reject all bids, the Project Coordinator must seek IFAD no objection (NO)

Notification of Award

The Project Coordinator shall award the contract, within the bid validity period, to the bidder that meets the appropriate standards of capability and resources and whose bid has been accepted in accordance with the bidding documents. A bidder shall not be required, as a condition of award, to assume responsibility for work not stipulated in the bidding documents or to otherwise modify the bid as originally submitted. The NOA is issued by the procuring entity once the pertinent approvals have been obtained.

In preparing the NOA, the procuring entity should:

Ensure that the approval of the decision to award the contract has been received in writing. The recommendation for a contract award is made in the evaluation report, so the written approval of that report must be received.

Ensure that the number of days to allow for bid challenges/protests have passed
Obtain any other necessary approvals, including financial approval for commitment of the required funds.
Ensure that the successful bidder's tender is still valid and that any modifications to the tender have been confirmed in writing by the bidder.

Prepare the NOA – see below for guidance on contents.

Ensure that the NOA is signed by the authorized signatory of the procuring entity.

Dispatch the NOA to the successful bidder, retaining evidence of dispatch, such as proof of posting.
Sending the NOA as an e-mail attachment is a valid means of notification. The contract has now entered into force. (Unless otherwise stated in the bidding document, the tender is no longer valid if the notice of tender acceptance contains any provisions that are contrary to the tender – i.e. a counteroffer.)
Ensure that the bidder's confirmation of receipt of the NOA is received.

Performance Security

If the person submitting the successful bid refuses to enter into a written contract in writing as required, he or she shall forfeit his or her bid security and the procurement process shall proceed with the next lowest evaluated bidder

A successful bidder shall submit a performance security equivalent to not more than ten per cent of the contract amount before signing of the contract if provided in the bid document. In case the contract is not fully or well executed, the performance security shall unconditionally be fully liquidated by the Project as compensation without prejudice to other penalties provided for.

The performance security shall be determined in accordance with the form provided for in the bidding document and may be paid in form of a bank guarantee, issued by an authorized financial institution. The bid document shall provide for, if necessary, other forms of performance security that may be requested from the successful bidder. The bank or authorized financial institution shall be obliged to give to the Project all the amount of the performance security upon claim by the Project.

If the contractor is foreign, the guarantee shall be issued by a local bank or authorized financial institution issued by a corresponding bank in Ghana recognized by the Bank of Ghana.

Once the performance security is provided by the successful bidder, the contract is signed between the Project Coordinator and the successful bidder.

Delivery and payments

Under no circumstances, will payments for goods and services be realised before receipt of the goods or the services have been delivered and physical verification of the receipt of vouchers and the actual goods undertaken.

The inspection and acceptance shall be done by the Inspection and Acceptance Committee appointed by the Project Coordinator to ensure that the correct quantity is received and the technical standards have been met.

Notwithstanding the appointment of a Contract Manager who will manage the procurement subject on a day to day basis, it is the Inspection and Acceptance Committee who issue Interim / Progress / Completion / Final Certificates as required and who confirm that payment may be made.

The appointment letter for the Inspection and Acceptance Committee members should make clear the duties of those members and insist that they satisfy themselves personally that work has been done in accordance with the contract before authorizing payments.

- The inspection and acceptance committee shall be comprise a chairman and at least two other members, including the head of the user component appointed on the recommendation of the Procurement officer.
- The inspection and acceptance committee shall immediately after the delivery of the goods, works or services—
 - inspect and where necessary, test the goods received;
 - inspect and review the goods, works or services in order to ensure compliance with the terms and specifications of the contract;
 - Accept or reject, on behalf of the Project, the delivered goods, works or services.
 - Ensure that the correct quantity of the goods is received;
 - Ensure that the goods, works or services meet the technical standards defined in the contract
 - Ensure that the goods, works or services have been delivered or completed on time, or that any delay has been noted;
 - Ensure that all required manuals or documentation has been received; and
 - Issue interim or completion certificates or goods received notes, as appropriate and in accordance with the contract.
- For complex and specialized procurement contract, a contract implementation team shall be appointed, which shall include members from the procurement function, and the head of the component, the relevant technical department and a consultant where applicable.
- For the purpose of managing complex and specialized procurement contracts the contract implementation team shall be responsible for:
 - Monitoring the performance of the contractor, to ensure that all delivery or performance obligations are met or appropriate action taken by the procuring entity in the event of obligations not being met;
 - ensuring that the contractor submits all required documentation as specified in the bidding documents, the contract and as required by law;
 - ensuring that the Project meets all its payment and other obligations on time and in accordance with the contract.
 - ensuring that the contractor delivers the right quality, at the right price and within the specified timeframe in the contract;
 - reviewing any contract variation requests and making recommendations to the Project Coordinator for consideration and such reviews for variation shall be clearly justified by the technical department in writing backed by supporting evidence and submitted to the head of the procurement manager for processing;
 - manage handover or acceptance procedures as prescribed;
 - make recommendations for contract termination, where appropriate;
 - ensure that the contract is complete, prior to closing the contract file including all handover procedures, transfers of title if need be and that the final retention payment has been made;
 - ensure that all contract administration records are complete, up to date, filed and archived as required;
 - ensure that the contractor acts in accordance with the provisions of the contract;
 - Ensure discharge of performance guarantee where required;

The Project may co-opt a member of the contract implementation team from another procuring entity or outsource;

Where a supplier/contractor furnished the Project with a performance security, the Security shall be returned to the supplier/contractor within thirty (30) days following the final acceptance by the Project. The thirty (30) days referred to shall include the retention period except in cases of procurement for works where the period shall commence from the date of practical completion or handover, whichever is earlier.

No works, goods or services contract shall be paid for before they are executed or delivered and accepted by the Project except where so specified in the bid documents and contract agreement. Such an advance payment shall not be paid before the contract is signed. Under exceptional circumstances advance payment may be granted and shall not exceed twenty per cent (20 %) of the price of the bid and shall be paid upon submission by the supplier/contractor to the Project of an advance payment security equivalent to the advance itself and that security shall be given by a reputable bank or any authorized financial institution issued by a corresponding bank in Ghana recognized by the Bank of Ghana, in case the supplier/contractor is a foreigner.

Specific Evaluation Procedures for Works procurement

There are 3 methods of evaluating bids for works:

- Lowest-Price or Lowest Evaluated Cost method
- Merit-point Bid Evaluation Method
- Life Cycle Costing Method for Works contracts

Depending on the nature of the Works, the Project could decide to use any of the 3 methods. For the purpose of this PIM, the Lowest-Price or Lowest Evaluated Cost method is explained.

a. Preliminary examination

The first stage of Preliminary Examination is common to all the three methods (Goods, Works and Non-consulting Services) and consists of verification of bidder's eligibility, completeness of submitted tender, bid validity period, compliant bid security or bid-securing declaration, legal capacity for signature, absence of a court conviction for offences related to taxation laws, labour or environmental laws, administrative conditions stipulated in the bidding documents. Only bids who pass the Preliminary Examination stage are admitted to detailed technical, commercial and financial evaluation by the Evaluation Committee.

Technical Evaluation

The detailed technical evaluation is conducted by assessing whether the tender conforms, or substantially conforms, to all the technical conditions and requirements of the bidding document. It is done on a pass/fail basis. The criteria will be based on those stipulated in the bidding document, and may include: program of execution/completion schedule (work-plan) for the works within the specified time period and/or meeting key milestones of the construction programme; plant/equipment and materials to be incorporated into the works along-with workmanship meet the standards or codes specified in the bidding document or equivalent; use of construction methods specified in the bidding document or acceptable alternatives including observance of Health and Safety requirements and Environmental and Social safeguards (i.e. an acceptable Environmental and Social Management Plan submitted by the bidder as per applicable IFAD-SECAP requirements stipulated in the bidding documents); tender based on the design specified in the bidding document or an acceptable alternative design, if alternatives are permitted in the bidding document; compliance with applicable regulations, such as those concerning labour; and/or

acceptance of key contract conditions, such as the prescribed maintenance period (Defects Notification Period), dispute resolution, liability and performance security; any deviations concerning such key contract terms will lead to rejection of the bid as nonresponsive technically; Presence in the bid of deviations that are considered as “minor deviations” by the Evaluation Committee like minor deviations in the terms of required insurance policies, minor deviations in liquidated damages, minor deviations in payment terms which are acceptable under the project’s and the government’s financial rules; such minor deviations can be accepted by the Evaluation Committee provided that these are quantifiable in monetary terms and are taken into consideration in the financial evaluation stage; subcontracting within the amounts and in the manner permitted by the bidding document, with subcontractors meeting requirements specified in the bidding document.

The standard for responsiveness must be set by the terms, conditions and requirements of the bidding document, and tenders should be evaluated as responsive or non-responsive against this standard.

Tenders that are substantially responsive may be accepted, despite of minor deviations, errors or omissions which must be quantified and taken into account in the financial evaluation. No extra credit should be given to tenders that exceed the stipulated standard.

The technical evaluation of tenders for works will require technical input from staff qualified in the relevant field as well as staff representing the end-user.

Financial Evaluation

The aim of the Financial Evaluation is to determine the Lowest Priced among technically responsive tenders or the Lowest Evaluated Cost in case some tenders have acceptable minor deviations that have financial impact on the price of deviating tenders and must be added to the respective bid prices of deviating tenders for fairness in the competition. If the tender is subdivided into lots; then the financial evaluation shall be processed by the Evaluation Committee on lot by lot basis.

The Lowest-Priced tender per each Lot or the Lowest Cost in case of the presence of acceptable minor deviations shall be awarded subject to post-qualification of the winning bidder. The Financial Evaluation process shall adhere to the following rules:

Arithmetic corrections of the bidders’ calculations of the tender price shall be conveyed by the Evaluation Committee in writing to the respective bidder who must correspondingly accept such arithmetic corrections in writing (it is not uncommon that bidders may have arithmetic errors in the calculation of the offered prices (unit rate x quantity and totals) in the Bill of Quantities).

Conditional Discounts by bidders are not acceptable. A conditional discount is one that is linked to the prices of other bidders (like 5 % less than the cheapest price) or that are linked to certain actions by the procuring entity (like if the award is granted within 30 days from the date of Bid Opening than the bidder will offer 5 % discount). If the lowest priced or lowest cost evaluated tender is seriously unbalanced or front-loaded in the opinion of the Evaluation Committee, the bidder(s) may be required to produce detailed price analysis for any and all items in the bill of quantities to demonstrate the internal consistency of these prices with the proposed construction methods and schedule. After evaluation of the submitted cost breakdown, if the bid prices are found to be balanced, the Evaluation Committee may recommend to award the contract to the bidder with the lowest evaluated tender. If bid prices are found to be front-loaded then the Evaluation Committee may require the performance security of this bid to be increased as a pre-condition for award, at the respective bidder’s expense, to a level sufficient to protect the borrower/recipient against financial loss in the event of default by the successful bidder during performance of the contract.

If bid prices of all bidders are still found to be unreasonably high compared to the cost estimate prepared by the design Engineer as well as through a survey of prevailing market prices, then the Evaluation Committee must recommend to the borrower/ recipient to reject all bids and recommence the procurement based on a revised bidding document that revisits/re-adjust the factors that caused the bid

prices to come higher than expected (potentially over-specification of the quality of works or unreasonably short period for completion of the works or other conditions of contract that are onerous and drove bidders' prices upwards).

Abnormally Low Bids (ALB) shall be investigated in order to determine the reasons thereof as per the process explained in Module 9. If the bidder fails to convince the TEC in writing of the substantiation of the advantageous situation it enjoys on this particular tender which allows this bidder to bid low, then this bid shall be rejected due to the risks it poses towards the ability of this bidder to successfully complete the contract at this abnormally low price.

If pre-qualification did precede the tendering, then post-qualification will have to be carried out to determine whether the bidder, to be recommended for award, is qualified as per the criteria in the postqualification requirements.

Limited International Bidding (LIB)

LIB is essentially ICB by direct invitation without open advertisement. It may be an appropriate procurement method when:

when the number of suppliers is limited, or
other exceptional circumstances justify departure from full ICB procedures.

Under LIB, Project shall solicit bids from a list of potential suppliers broad enough to ensure competitive prices; this list shall include all suppliers when there is only a limited number. Domestic preference is not applicable in the evaluation of bids under LIB. In all respects other than advertisement and preferences, ICB procedures shall apply, including publication of the award of contract.

National Competitive Bidding

NCB is a scaled-down version of ICB designed for national use with procurements that are unlikely to attract foreign competition due to their nature or scope. NCB may be the most appropriate procurement method when foreign bidders are not expected to be interested because:

of the size and value of the contract,
the works are spread out geographically or over time,
the works are labour-intensive, or
the goods, works and non-consulting services are available locally at prices below the international market price. NCB procedures may also be used in cases where the advantages of ICB are clearly outweighed by the administrative or financial burden involved. NCB shall be advertised in at least one newspaper with wide national circulation.

NCB opportunities are advertised for a period of no less than 30 days. Under NCB, all bids shall be valid for a period of no less than 90 days. The currency of the procurement can be limited to the national currency of Ghana; however, if foreign firms wish to participate in NCB, they shall be allowed to do so under the prevailing NCB terms and conditions applicable to national bidders.

Shopping

Shopping is a procurement method based on a comparison of price quotations from several suppliers (in the case of goods), several contractors (in the case of civil works) or service providers (in the case of non-consulting services) to ensure competitive prices and is an appropriate method for procuring limited quantities of readily available off-the-shelf goods, low-value standard specification commodities or simple low-value civil works, when cost and efficiency considerations do not justify more competitive methods. Under shopping, the Project is free to invite as many bidders as is practical but shall receive no less than three quotations by the submission deadline. The Project must seek IFAD's NO to proceed to evaluation where fewer than three quotations are received.

Requests for quotations shall include a description of the goods or works, as well as the quantity or specifications, as appropriate, and the desired delivery (or completion) date and place. Quotations may be submitted by mail, fax, or electronic means. The evaluation of quotations shall follow the same principles as open bidding. The terms of the accepted offer shall be included in a purchase order or brief contract.

Direct contracting

Direct contracting is contracting without a competition (single-source) and may be used in exceptional circumstances such as those listed below. A sufficiently detailed justification shall be submitted to IFAD to obtain its NO and shall include the rationale for the choice of direct contracting instead of competitive procurement and the basis for recommending a particular firm in all such cases. Direct contracting could be justified under any of the following circumstances:

An existing contract for goods, works or non-consulting services awarded through procedures acceptable to the Fund may be extended for additional goods, works or non-consulting services of a similar nature. IFAD shall confirm that no advantage could be obtained from further competition, that the prices on the extended contract are reasonable and that the monetary addition to the contract does not exceed 10 per cent of the original contract value. Provisions for such an extension, if deemed likely in advance, shall be included in the original contract;

The need to standardize equipment or obtain spare parts compatible with existing equipment may justify additional purchases from the original supplier. For these purchases to be justified, the original equipment must be suitable, the number of new items shall be less than the existing number and the price must be reasonable;

The required equipment is proprietary and obtainable from only one source;

The contractor responsible for the process design requires the purchase of critical items from a particular supplier as a condition of a performance guarantee;

Procurements of low value as agreed with IFAD and as defined in the letter to the borrower;

In other exceptional cases, such as the response to natural disasters.

Lack of time to conduct a competitive procurement is not an acceptable justification for direct contracting.

Force Account

Force account work (such as construction, equipment installation and non-consulting services) is work performed by a government department in the borrower/recipient country using its own personnel and equipment. In certain circumstances, this may be the only practical procurement method. The force account method requires the borrower/ recipient to set maximum aggregate amounts for use of the method, for which IFAD shall give its NO, and apply the same rigorous quality checks and inspection as for contracts awarded to third parties. Use of the force account method shall be justified and may be used, subject to IFAD's NO, only under any of the following circumstances:

the quantities of construction and installation works involved cannot be determined in advance; the construction and installation works are small and scattered or located in remote areas where qualified construction firms are unlikely to bid at reasonable prices;

the construction and installation works must be undertaken without disrupting ongoing operations; specialized non-consulting services, such as aerial surveys and mapping, can be provided only by specialized branches of the government as a matter of law or official regulations in Ghana for considerations such as national security; or

urgent repairs requiring prompt attention to prevent further damage, or works to be undertaken in conflict zones where private firms may not be interested.

Procurement of commodities

The market prices of commodities such as grain, animal feed, cooking oil, fuel, fertilizer and metals fluctuate according to supply and demand at any given moment. Many are quoted in established commodity markets. Procurement often involves multiple awards for partial quantities to guarantee a secure supply. Multiple purchases over a period of time take advantage of favourable market conditions and allow inventories to be kept low.

A list of prequalified bidders may be drawn up, with periodic invitations extended to its members. Bidders may be invited to quote prices linked to the market price at the time of or prior to shipment. Bid validities shall be as short as possible.

A single currency in which the commodity is usually priced in the market may be used for bidding and payment. The currency shall be specified in the bidding document.

Bidding documents may permit faxed or electronically submitted bids, and in such cases, either no bid security is required or standing bid securities have been submitted by pre-qualified bidders. Standard contract conditions and forms consistent with market practices shall be used.

Procurement from United Nations agencies

There may be situations in which specific goods, works and services may be directly procured from United Nations agencies. In this case, their own procurement procedures are to be followed. Likely cases include the procurement of:

- (a) small quantities of off-the-shelf goods, primarily in the fields of education and health;
- (b) health-related goods for the treatment of humans and animals, including vaccines, drugs and pharmaceuticals, preventive health and contraceptive devices, and biomedical equipment, when:
 - (i) the number of suppliers is limited;
 - (ii) the United Nations agency is uniquely or exceptionally qualified to procure such goods and related incidental non-consulting services (if applicable); and
 - (iii) the Project uses the standard form for an agreement between the Project and a United Nations agency for the procurement of supplies and the provision of certain services agreed to by IFAD;
- (c) low-value contracts for simple works when the United Nations agencies act as contractors or directly hire small contractors and skilled or unskilled labour; or
- (d) goods, services or works in exceptional cases, such as natural disasters and emergencies declared by the borrower/recipient and recognized by IFAD.

Procurement of Consulting Services

Principles

The procurement of consulting services under the IFAD will be guided by the following principles:

- The need for high quality services;
- The need for economy and efficiency;
- The aim to give qualified consultants from Ghana and all other eligible IFAD member countries an opportunity to compete in providing services;
- The need to encourage the development and use of local consultants; and
- The importance of transparency in the selection process.
- Definition of Consultants

The term “consultants” includes a wide variety of consulting firms, engineering firms, management firms, architectural firms, legal practices, university and research institutions, auditors, banks, UN agencies and other multinational agencies, as well as individuals.

Consultants may associate with each other to complement their respective areas of expertise, or for other reasons. Such an association may be for the long term (independent of any particular assignment)

or for a specific assignment. If “association” takes the form of a joint venture or of a sub-consultancy, all members of the joint venture shall sign the contract and shall be jointly and severally liable for the entire assignment.

Selection Methods

Contracts for the procurement of consultancy services may be awarded on the basis of:

- Quality and Cost Based Selection (QCBS),
- Quality Based Selection (QBS),
- Fixed Budget Selection (FBS),
- Least Cost Selection (LCS),
- Consultants' Qualification (CQS),
- Individual Consultants' Selection (ICS), and
- Single Source Selection (SSS).

Quality- and Cost-based Selection (QCBS) Method

This is considered the standard (or “default”) method of selection for most consulting services and should be used when:

- a compromise between quality and cost is favoured;
- the scope of work of the assignment can be precisely defined and the terms of reference (ToR) are well-specified and clear;
- the client and the consulting firm can estimate with reasonable accuracy the needed level of effort (key staff working time), as well as other associated inputs and costs to the consultancy.

The technical and financial aspects of each proposal received are assessed and scored on a scale of 100 points. During final evaluation¹⁴ however, the respective technical and financial scores are adjusted by applying the weighted percentage stated in the request for proposals (RFP) before being combined into a total score.

The best compromise between the technical quality and cost of the services is often achieved by allocating 70–80 per cent of the total points to the technical features of the proposal and 20–30 per cent to the financial score. Whatever ratio is decided, it is imperative that it be clearly declared in the RFP so that bidders are aware of the weighting to be applied and can factor it into the preparation of their proposal.

The main technical evaluation criteria (or “primary criteria”) must also be specified in the RFP. These should include:

- relevant experience in similar assignments;
- the quality of the methodology proposed;
- the minimum expected qualifications and experience of the key staff proposed.

Subject to the nature of the assignment, they may also include:

- provisions for training/capacity-building of local staff;
- the extent of participation by nationals among key staff in the assignment

Once the criteria have been selected, 100 points are divided among the above-mentioned technical criteria relative to their importance to the assignment. These points must also be declared in the RFP.

The following table provides an example of a typical point distribution.

Consultant's specific experience:	5 to 10 points
Methodology, approach and workplan:	20 to 50 points
Key personnel:	30 to 60 points

Transfer of knowledge:	0 to 10 points
Participation by nationals	0 to 10 points
Total:	100 points

As these primary criteria are rather wide-ranging, they should be divided into sub-criteria to (i) emphasize the important components of the criteria, and (ii) increase accuracy and comparability among different evaluators and constraining their subjective judgements.

Each sub-criterion has its own maximum score. The sub-scores are combined into the total score for the primary criteria. The number of sub-criteria should be kept to the basic minimum (usually not more than 3) and may not need to be disclosed in the RFP depending on the procuring entity's policy. Beware, however, of having too many subcriteria, since this may render the evaluation process more of a mechanical exercise rather than a substantive evaluation.

Some examples of the primary criteria shown in the table above are: – Responsiveness to ToR and adequacy of the proposed implementation methodology: if 40 points were awarded in total, they could be divided into:

- Degree of innovation = 25 points
- Level of detail = 10 points
- Proposed workplan = 5 points

thus placing greater emphasis on an innovative technical proposal and less on the workplan.

– Key personnel: it is normal to use sub-criteria for key staff to evaluate their qualifications, technical experience, national/regional knowledge or experience and, if relevant, language proficiency.

If 40 points were also awarded to this primary criterion, they could be divided as follows:

- General qualifications20 = 10 points
- Suitability for the assignment21 = 15 points
- Experience in the country/region = 15 points

thus yielding a fairly balanced point spread among the sub-criteria

However, that these are the total points available for these sub-criteria. The points then need to be apportioned across the key personnel to show the maximum amount of points available for each person.

In a scenario where three key personnel may be required for the assignment, the apportioning of points may be as follows:

- Team leader = 50%
- Specialist 1 = 30%
- Specialist 2 = 20%

This informs bidders that the “team leader” is considered a highly important position for this work and that “specialist 1” is considered slightly more important than “specialist 2”. It also clarifies the maximum number of points available for allocation to each individual position as follows:

The RFP must also specify the minimum qualifying technical score for a technical proposal to proceed to the financial evaluation. The minimum qualifying score is usually 70 per cent.

Finally, in addition to specifying the weighting for technical and financial scores, the RFP must indicate the formula for awarding points for each proposal price. The lowest-priced proposal commonly receives 100 points, while the points for the other proposals are inversely proportional to the price of the lowest proposal i.e. obtained the following formula:

$S_f = 100 \times F_m / F$, in which “ S_f ” is the financial score,

“ F_m ” is the lowest price, and

“ F ” the price of the proposal under consideration.

SECTIONS OF A REQUEST FOR PROPOSALS

The template to be used will define the structure and overall content of the RFP document. However, there are some generic requirements that any competition/bidding document for consulting services should include. These are as follows:

References, contact points and contractual arrangements

This identifies the overall procuring entity (i.e. the Ministry of Food and Agriculture), the end-user (if different), contact points for the competition/bidding process and the project for which the assignment is being undertaken. For identification purposes, each procurement activity must have its own unique reference number, which is to be stated on the document.

The description and scope of the services required

This is critically important. Without a clear statement of requirements and specifications, the procurement is likely to fail.

Relevant information on proposal submission

There are generally sections in the RFP entitled “information to consultants” or “instructions to consultants” and a section entitled “bid data”, with information to assist the consultant in preparing its proposal. These sections include issues such as:

- consultant eligibility;
- the last date for consultants to request clarifications;
- the currency of the proposal;
- the proposal submission deadline;
- the date when proposals will be opened;
- how long proposals will be valid;
- the address and any specific instructions for submitting a proposal (i.e. two-envelope proposal, number of copies, in hard or soft copy, references).

Rules governing the procurement process

Rules governing the procurement process are:

- The IFAD Project Procurement Guidelines;
- The IFAD Procurement Handbook and ancillary documents;
- National procurement system regulations and ancillary documents.

The evaluation criteria and methodology that will be applied

There are a number of reasons why the evaluation criteria must be included in the bidding documents:

- to be able to determine the proposal that best meets the requirements;
- to ensure that all proposals are evaluated against the same parameters;
- to provide prospective consultants with details of these criteria and inform them about the basis for the contract award decision.

The evaluation criteria will be specific to each individual procurement activity. However, some criteria are common to all procurement processes. For example:

- technical competence/expertise;
- experience/track record;
- cost;
- methodology, key experts, etc.;
- compliance with RFP requirements

The prime selection criterion for consulting services is unlikely to be the lowest cost. The overall competence of consulting firms, their relevant experience and the quality of the technical proposal submitted are usually far more important than the simple cost of the services, and the evaluation is therefore more of a compromise between the professional quality of the services supplied and the cost of those services.

This compromise is achieved through the use of a merit-point scoring system, in which points are awarded for technical capability and cost, based on criteria specified in the RFP, with the consultant

scoring the highest points in the combined quality and cost evaluation being recommended for the contract award.

Budget

If the selection method is fixed budget selection (FBS), disclosure of the budget is mandatory. For selection methods other than quality-based selection (QBS) and FBS, the RFP should show either: – the estimated number of key staff and input time (estimated level of effort by the consultant in person-months); or – the estimated budget. For other methods the RFP shall provide either the estimated budget or the estimated number of key experts and input time, underscoring that this information is indicative only and that consulting firms shall be free to provide their own estimates based on their proposals.

Qualifications criteria to be applied

If no assignment-specific shortlisting has been conducted and the Project has relied on a recent prior list, consultants must include documentary evidence of their qualifications to be considered for a contract.

These generally include:

- experience and past performance on similar contracts;
- ability to complete the services;
- financial position (i.e. audited accounts or statements of financial solvency from a bank);
- legal and/or tax status (i.e. copies of valid trading licences or tax clearance documents);
- the minimum requirements to be met for evaluation purposes.

Type and conditions of the proposed contract

It is considered good practice for the Project to provide consultants with a template of the proposed contract and the contractual conditions (including payment arrangements and timing) to which they will be subject in the event they are awarded a contract. This early disclosure of contractual requirements has a number of benefits such as:

- It gives consultants an opportunity to make a bid/no bid decision based on a complete picture of the procurement process;
- By disclosing the contract template and contractual conditions at the outset, there can be no argument later in the process that consultants were not aware of contractual provisions or obligations (this is particularly relevant with respect to payment terms);
- It speeds up the process from contract award to contract signing, since the consultant has already seen and agreed to the format and general conditions of the contract by virtue of submitting the proposal.

THE SELECTION PROCESS

The selection process involves the following steps:

Preparation of Terms of Reference (TOR);

Preparation of cost estimate and budget;

Advertising for Expression of Interest (EOI) or Statement of Capability;

Preparation of the short list of consultants based on evaluation of EOIs;

Preparation and issuance of the Request for Proposals (RFP) to the short-listed consultants.

Receipt of proposals;

Opening and Evaluation of technical proposal (i.e., evaluation of quality);

Invitation of firms that qualified from on the technical evaluation to opening of their financial proposals.

Evaluation of financial proposal (i.e., evaluation of cost of services);

Combined quality and cost evaluation;

Negotiations and award of the contract to the firm with the highest combined quality and cost score.

The above steps are elaborated below:

The Terms of Reference (TOR) shall define the objectives of the assignment, scope of assignment outlining services necessary to carry out the assignment, clearly state the expected outputs, and shall

include background information which would facilitate the preparation of the proposals. In general, the TOR should clearly state WHAT the Project wants done, while it is the responsibility of the consultants to show HOW that will be done.

Advertising: To obtain expressions of interest (EOI) or statement of capability, the assignment shall be advertised in at least one newspaper with national circulation in Ghana and published on the United Nations Development Business website and on the IFAD website. Sufficient time (at least 14 days) should be allowed for the preparation and submission of EOI. To enable submission of comparable EOIs from prospective consultants, the advertisement should specify minimum information to be submitted and the shortlisting criteria. This should include:

Eligibility criteria

Company profile, including name of the country in which the firm is registered;

Experience of consultant in similar assignments, including brief descriptions of most recent relevant assignments (location, client, cost, staff involved);

Financial capabilities (for large and complex assignments).

This will be assessed on a pass/fail method.

Short List of Consultants: The shortlist is obtained from evaluation of EOIs submitted in response to the advertisement. Based on the results of the assessment, create a shortlist of the three to six highest-ranked consultants. If there are fewer than three shortlisted consultants, seek an NO from IFAD even if the procurement is post-review.

Preparation and Issuance of the Request for Proposals (RFP): the RFP will consist of (i) Letter of Invitation (LOI) Requesting Proposals, (ii) Instructions to Consultants (ITC), (iii) Proposal Data Sheet (PDS), (iv) Qualification and Evaluation Criteria, (v) Proposal Forms (Technical/Financial), (vi) Terms of Reference(TOR), (vii) Conditions of Contract and (viii) Revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations.

Receipt of Proposals: Sufficient time shall be allowed for preparation and submission of proposals.

Depending on the complexity of the assignment, 6 weeks shall be allowed. The technical and financial proposals shall be submitted at the same time but in separately marked envelopes.

Opening of the proposals shall take place immediately after the closing time for submission of proposals.

The technical proposal shall be opened but the financial proposals shall remain sealed and deposited in a safe place until the technical proposals have been evaluated.

EVALUATION OF PROPOSALS USING THE QUALITY AND COST-BASED SELECTION (QCBS) METHOD

The following are the steps for evaluating proposals using the Quality and Cost-based Selection method:

Review requirements

The Evaluation Committee should review the list of requirements, instructions, terms of reference and evaluation criteria specified in the RFP and the maximum number of points allocated to each criterion. It should ensure that these are clearly understood and seek clarification from the person responsible for writing the RFP, where necessary.

The evaluation must apply the criteria and scores specified in the RFP, and no new or altered criteria may be introduced. The selection of sub-criteria to the main criteria and their respective scores will need to be set by the Evaluation Committee if not already set and disclosed in the RFP document.

Conduct a preliminary examination

The preliminary examination is conducted to determine whether proposals comply with the basic instructions and requirements of the RFP. It enables the evaluators to eliminate the weakest proposals without spending time and effort on a detailed merit-point evaluation. The preliminary examination can also be used to determine whether consulting firms meet the mandatory eligibility requirements.

The preliminary examination is conducted on a pass/fail basis in which proposals that are not substantially compliant are rejected. The criteria to be applied in the preliminary examination depend on the

requirements and instructions in the RFP, so the preliminary examination must always begin with a review of the RFP to list the requirements to be met. As guidance only, the preliminary examination might typically include checks to ensure that:

- the proposal has been submitted properly (all forms and documents required, including, in particular, the proposal submission form);
- the proposal has been submitted without material reservations or deviations from the terms and conditions of the RFP;
- the proposal has been duly signed and authorized (including any power of attorney required in the RFP); an original copy of the proposal has been submitted;
- letter(s) of incorporation (or other documents indicating legal status) are included;
- a joint venture agreement (or, if applicable, a letter of intent to enter into a joint venture agreement, if awarded the contract) is submitted;
- a separate sealed financial proposal has been submitted (this depends on the procurement method used), and no financial details are contained in the technical proposal;
- the proposal is valid for at least the period required;
- the language required by the procurement document has been used;
- CV signed by the proposed key experts have been submitted;
- audited financial statements (or documents demonstrating financial capacity) have been submitted, as applicable;
- the Declaration of Eligibility Form has been submitted. In every evaluation process, the borrower/recipient shall require bidders to self-certify their eligibility and declare any criminal convictions, administrative sanctions (including debarments under the Agreement for Mutual Enforcement of Debarment Decisions or the “Cross-Debarment Agreement”)⁵¹ and/or temporary suspensions that have been imposed on the consultant and/or any of its directors, partners, proprietors, key personnel, agents, subconsultants, subcontractors, consortium and joint venture partners. As part of this exercise, consultants shall search the World Bank List of Ineligible Firms and Individuals, available at <http://worldbank.org/debarr>, for the names of their companies and directors and provide a print-out of the search result. If any sanction is declared, the procuring entity will need to consult with IFAD as to the applicability of the MBD cross-debarment agreement regardless of the estimated value of the proposed contract and shall not take a decision with respect to rejection of the proposal until the procuring entity receives IFAD’s final determination on the issue;
- any additional documentation required by the RFP has been submitted

Proposals that do not pass the preliminary examination shall be eliminated. However, the Evaluation Committee may consider omission of submission of an administrative document (like company registration or audited statement) as minor and ask the consultant to submit such missing document through a clarification.

Conduct a detailed technical evaluation

The detailed evaluation must be conducted only for proposals that have been determined to be substantially responsive during the preliminary examination. The actual evaluation criteria, together with the maximum points for each criterion, are determined and described in the RFP.

Where a detailed technical evaluation uses a merit-point system, the following procedure should apply: the full TEC shall discuss the criteria and any sub-criteria to ensure that all members have a common understanding of the criteria and their relative importance. This should include a discussion of:

- the rating system to be used for the technical evaluation;
- the scores to be used with the rating system;
- the definitions of the scores

the TEC shall prepare the scorecards and tables which the TEC members will use during the evaluation to ensure uniformity of the information and scoring data collected;

each member of the TEC shall independently evaluate the proposals, considering each proposal and awarding scores against each criterion; the evaluator shall record his/ her evaluation using a score and shall sign the respective scoresheet indicating his/her overall observations as to the strengths and weaknesses of each proposal;

the TEC facilitator or the Evaluation Committee chairperson shall call a meeting to compare notes about strengths and weaknesses of each proposal and then collect, collate and compare scores;

the scores from each evaluator shall be compiled during the meeting to produce a scoresheet for each proposal, and the average score for each proposal shall be calculated;

the full Evaluation Committee shall compare the scores of each evaluator for each proposal to verify that there has been a consistent approach to the evaluation and a common understanding of the criteria in each proposal by all Evaluation Committee members

the Evaluation Committee shall note any significant deviation from the average score or inconsistencies in scoring and discuss them, and each evaluator shall explain and justify their scores when required;

when the Evaluation Committee agrees that the approach has been inconsistent or discussions reveal a misunderstanding of a criterion or the contents of a proposal, one or more evaluators may be permitted to adjust their individual scores;

no evaluator shall be obliged to make adjustments to their scores.

The TEC shall agree on which committee member may adjust their score and for which proposals or criteria the scores may be adjusted.

An adjustment shall be permitted only to the extent necessary to correct any inconsistency in the approach or genuine misunderstanding of a criterion or contents of a proposal.

When any score is adjusted, the original scoresheet shall be retained as part of the evaluation record, and the adjusted score shall be recorded on a new scoresheet.

A score adjustment shall be completed as soon as possible after the original meeting, and an additional meeting shall be called; until such time as an additional meeting is called, the TEC facilitator shall keep all copies of individual and consolidated scoresheets in a secure location.

Once all individual TEC members scores have been finalized, the full TEC will calculate the final average technical score for each proposal and conduct all other aspects of the evaluation.

The average scores for each proposal is compared against the minimum qualifying score provided in the RFP. Proposals not obtaining this minimum score are eliminated from further consideration

Individual evaluation

Each TEC member must individually evaluate the technical proposals on the basis of the evaluation and qualifications criteria specified in the procurement document (RFP, RCQ, REOI) and adhere to the stipulated evaluation methodology. The technical proposals must be evaluated against the established criteria based on their individual merits, not compared and ranked against each other.

Individual evaluation worksheets are provided to TEC members to facilitate the evaluation process. On each spreadsheet, each TEC member must:

assess the contents of each proposal with respect to each criterion

score the proposal for each criterion;

take detailed notes of specific strengths and weaknesses that will substantiate the individual ratings for each evaluation criterion

Each technical proposal shall be rated and scored for all criteria one after the other, rather than rating and scoring all technical proposals for one criterion and then moving on to the next.

TEC members may not discuss their individual ratings or scoring of the technical proposals outside the scheduled TEC meetings. If any TEC member attempts to force a change of the score of another member, inside or outside the proceedings room, they may be disqualified from the panel.

The individual evaluation worksheets, duly signed by each TEC member, shall be retained by the procurement department. The TEC shall prepare the technical evaluation report (TER) based on averaging of the score of all the individual evaluators.

TEC members have the right to hold a dissenting opinion, and the justification for such an opinion, if applicable, shall be documented in the TER.

In the case of shortlisting or during the proceedings of proposal evaluation, the results of the reference-checking process may be incomplete due to time constraints, failure of the references to respond or other factors beyond the facilitator's control.

If the reference-checking process raises concerns, causes the TEC to question its initial rating and scoring and/or if insufficient information is collected within the allotted time frame, the TEC may decide to allow additional time for the process to continue and reconvene as soon as possible once the missing information has been obtained or the conclusion has been reached that the missing information will not be available within a reasonable time frame.

The Project will make its best effort to verify references; however, if they are not received for a particular consulting firm, the TEC should not penalize the consulting firm for lack of responses from their previous references (clients).

Conduct interviews, if required

Interviews may be conducted as part of a merit-point evaluation for complex assignments, provided that this was clearly stated in the RFP. Consulting firms must be given reasonable notice of the arrangements for any interview and, within reason, the TEC should be flexible as to the precise date and time of the interview to give the consulting firm's representative a reasonable opportunity to attend. This is particularly important when foreign consultants are invited for an interview.

Interviews may be conducted as part of the technical evaluation process, in accordance with the evaluation criteria established in the RFP.

Interviews are typically held only with key staff or consultants, such as the team leader and one or more key experts.

Interviews must be managed by the TEC chairperson but involve the committee members responsible for the merit-point evaluation. The questions to be addressed during the interview must, to the extent possible, be planned and agreed on in advance by all members involved in the merit-point evaluation. Detailed minutes must be kept of the interview and the subsequent discussion and decision on the number of points to be awarded. These minutes should be included in the TER

Prepare a TER for submission and approval

The TER should include the following information:

- the proposal opening record for the technical proposals (and any minutes produced);
- the results of the preliminary examination, indicating the rejection of any proposals as non-responsive to important aspects of the RFP and the TOR during the detailed technical evaluation and the reasons for their rejection;

- the technical scores awarded by each evaluator to each proposal;

- a summary of the relative strengths and weaknesses of each proposal;

- an analysis of any significant scoring discrepancies or inconsistencies and an explanation of any adjustments made to scores;

- the total technical score for each proposal;

- a list of the proposals that reached the minimum technical qualifying mark and a recommendation to open the financial proposals of these bidders;

- a recommendation to reject all other proposals.

The TER must be signed by all TEC members and submitted for review and approval by the Project Coordinator, who shall then forward it to IFAD for its no objection (NO), if applicable.

Once the Project Coordinator (and IFAD, if applicable) approves the TER, the consultants/firms shall be informed about their scores.

If no consulting firms obtain the minimum qualifying technical score, the TEC, subject to IFAD no-objection, reserves the right to reject all proposals and to invite a new competition. The new competition shall be based on a new shortlist of consultants to be established through a “request for expression of interest” and may include adjustments to the TOR of the assignment and/or relevant contract parameters, as appropriate. The new TOR, shortlist and RFP shall be subject to IFAD’s no-objection.

Inform consulting firms

Once the TER has been signed and IFAD’s NO has been obtained (if applicable), the Project can proceed to the next stage of the process. It should:

- notify the consulting firms whose financial proposals are to be opened of the date, time and location for the financial proposal opening and conduct the proposal opening;
- notify consulting firms whose proposals have been rejected, stating that their financial proposals will be returned unopened on completion of the evaluation process;
- not provide any debriefs or information at this stage on why a proposal was rejected. Debriefs can only be requested once the notice of intent to award has been issued.

Conduct the financial evaluation

The financial evaluation is conducted to determine the evaluated price of proposals, to compare the proposals and to determine the successful proposal (i.e. the proposal that should be recommended for a contract award). The financial evaluation and determination of the successful proposal depends on the evaluation methodology.

Notwithstanding the content of this section, there are general good practices that should be followed, unless otherwise required by a national procurement system adopted for the project. They are:

- determine whether the financial proposals are complete and include all corresponding inputs in the technical proposal, costing any missing items and adding them to the proposal price (e.g. the RFP may state that all taxes and duties are to be included in the evaluation);
- correct any arithmetical errors using the procedure stated in the RFP. If no specific procedure is stated in the RFP and there is a discrepancy between the unit price and the total price obtained by multiplying the unit price by the quantity, the unit price shall prevail and the total price shall be corrected. Consulting firms should be notified in writing of any arithmetical corrections made and asked to agree to the corrections in writing;
- determine whether all items are included in the proposal price and add the cost of any missing items;
- convert all proposals to a single evaluation currency for comparison purposes, using the currency and the date and source of the exchange rate specified in the RFP;
- determine the total evaluated price of each proposal;
- assign the financial score of each proposal.

Prepare a combined evaluation report to submit for approval

A combined evaluation report includes details of both the technical and financial evaluation. Since the TER has already been issued, it is usually appropriate to prepare a specific financial report and add the technical report as an annex.

The financial evaluation report should include the following information:

- the bid opening record for the financial proposals (and any minutes if produced), including the total proposal prices and technical scores read out at the financial proposal opening;

- the evaluated price of each proposal, following any corrections or adjustments to the price and the conversion to a single currency;
- the financial scores of each proposal and the methodology for assigning financial scores;
- the weighting of technical and financial scores;
- the total score for each proposal;
- a recommendation to award the contract to the consultant with the highest total score, subject to any negotiations required;
- the currency and price of the proposed contract, subject to any changes following negotiations;

It is good practice to include the areas or issues that require negotiations in the financial evaluation report.

All evaluation reports must be signed by all staff involved in the evaluation.

Conduct Contract Negotiation

The purpose of negotiations is to discuss and finalize certain details of a contract with the successful consultant prior to contract signature. Negotiations should lead to a contract acceptable to both parties and therefore reduce the likelihood of disputes or the need for contract amendments.

Negotiations are not held with the intention of making substantial changes to a contract or obtaining price reductions from the successful consultant. The only exceptions are:

- when the single sourcing/direct contracting method of procurement has been used; or
- when price has not been a factor in the bid evaluation process (i.e. quality-based selection)

Areas that may be subject to negotiations

Negotiations cannot include the price or the substance of proposals except under the conditions outlined in section 1 (consultants qualification selection and sole-source selection, as applicable). Rather, negotiations should focus on minor technical, contractual or logistical details.

As guidance only, negotiations may normally deal with the following areas:

- minor alterations to technical details, such as the terms of reference, proposal assignment methodology or staffing;
- minor amendments to the special conditions of contract;
- mobilization arrangements;
- inputs required from the procuring entity;
- finalization of payment arrangements;
- agreement on the final completion schedules to accommodate any changes required by the procuring entity;
- clarification of details that were not apparent or could not be finalized at the time of tendering;
- the consultant's tax liability.

Negotiations must not be used to:

- substantially change the technical quality or details of the proposal, including the consultant's tasks or responsibilities;
- materially alter the contract terms and conditions stated in the RFP document;
- reduce fee rates (see above) or reimbursable costs, except where changes are required to reflect any agreed changes to the technical proposal; or
- substantially alter anything that was a critical or deciding factor in the evaluation of the tenders or proposals.

The consultant must not be allowed to substitute key staff, unless the procuring entity and the consultant agree that delays in the procurement process, changes in the terms of reference or other circumstances reasonably beyond its control make it necessary and unavoidable.

The negotiation process

The technical evaluation committee will have made recommendations in the evaluation report about whether negotiations are required and the issues that need to be addressed. The recommendation to negotiate should be approved by the appropriate approval authority before any preparations are made. Once approval is obtained, the following steps should be taken to prepare for and conduct the negotiations:

- The procuring entity must name a negotiating team to handle the negotiations (see notes for assistance in selecting staff);
- The successful consultant must be invited for negotiations. The letter of invitation should propose the time, date and location of the negotiations and may state that the consultant's proposal has been evaluated as the successful proposal; it is important, however, that no contractual commitment be made to the consultant at this stage (i.e. the letter must not make any reference to acceptance of the proposal or the award of the contract);
- The negotiators should prepare by reviewing the RFP document, the proposal from the successful consultant and the evaluation report to identify areas in need of negotiation. For each area, the procuring entity should identify and quantify the objectives it wishes to achieve from the negotiations, and where possible, set maximum and minimum negotiating parameters;
- When negotiating with the successful consultant, it is important for the negotiators not to commit the procuring entity to any arrangements or agreements during the negotiations;
- A record of the negotiations must be prepared and recommendations issued on how to proceed;
- It is important that the record of what has been agreed to in the negotiations be signed by the consultant at the conclusion of the negotiation;
- Approval of the recommendations should be sought, proceeding as appropriate. If the recommendation is to further negotiate with the successful consultant or to negotiate with the next ranked consultant, repeat this process from step 2 onwards.

Following negotiations, the recommendations made to the appropriate approval authority may include:

- Proceed with contract award to the successful consultant, making the changes agreed on during the negotiations;
- Revise the objectives of the negotiations and negotiate further on specific areas;
- Terminate the negotiations if they have failed to result in an acceptable contract, and seek internal approvals and IFAD's NO, where relevant, to hold negotiations with the next best-ranked consultant;
- Cancel the procurement proceedings if it is believed that the original RFP document was flawed, the need has changed or the budget is insufficient for the requirements. The results of any negotiations and resulting recommendations must be approved at the appropriate level in the procuring entity before any contract award or other commitment is made to any consultant.

Records

A record of any negotiation must be made and kept in the procurement file at the procuring entity. At a minimum, this record should include:

- the name of the consultant with whom negotiations were held and the names of the bidder's representatives;

- the names of all procuring entity staff involved in the negotiations;
- the time, date and location of the negotiations;
- the areas subject to negotiation and the main points or requests made on each side;
- the final agreement reached on each area of negotiation;
- any points where agreement was not reached or further discussion is required.

The record of the negotiations must be signed by all participating staff of the procuring entity and the consultant's representative. Any other correspondence or information related to the negotiations must also be kept in the procurement file, including the letters inviting the consultant to negotiate and the procuring entity's preparation of its negotiating position.

Notice of Intent to Award (NOITA)

This notice is sent to the successful bidder or consultant (prior to the award), as well as the unsuccessful bidders. It informs the bidder that they have been successful without constituting any contract between the procuring entity and the bidder or establishing any legal rights or obligations for the procuring entity or bidder.

The NOITA is a document that provides important information to the successful bidder/consultant. An unsuccessful bidder may – upon receipt of the NOITA – request a debrief or file a protest.

If there are no protests within 10 working days of a NOITA's issue, a notification of award is issued to the successful bidder/consultant. If there is a national system for lodging protests, the number of days stipulated in that system takes precedence.

IFAD recommends use of the NOITA template, which can be found on its website: www.ifad.org/project-procurement.

Notification of Award (NOA)

The Project shall award the contract, within the bid validity period, to the bidder/ consultant that meets the appropriate standards of capability and resources and whose bid has been accepted in accordance with the bidding documents. A bidder shall not be required, as a condition of award, to assume responsibility for work not stipulated in the bidding documents or to otherwise modify the bid as originally submitted.

The NOA is issued by the Project once the pertinent approvals have been obtained. In preparing the NOA, the procuring entity should:

- Ensure that the approval of the decision to award the contract has been received in writing. The recommendation for a contract award is made in the evaluation report, so the written approval of that report must be received.
- Ensure that the number of days to allow for bid challenges/protests have passed
- Obtain any other necessary approvals, including financial approval for commitment of the required funds.
- Ensure that the successful bidder's tender is still valid and that any modifications to the tender have been confirmed in writing by the bidder.
- Prepare the NOA – see below for guidance on contents.
- Ensure that the NOA is signed by the authorized signatory of the procuring entity.
- Dispatch the NOA to the successful bidder, retaining evidence of dispatch, such as proof of posting. Sending the NOA as an e-mail attachment is a valid means of notification. The contract has now entered into force. (Unless otherwise stated in the bidding document, the tender is no longer valid if the notice of tender acceptance contains any provisions that are contrary to the tender – i.e. a counteroffer.)

- Ensure that the bidder's confirmation of receipt of the NOA is received.

Once the contract is signed, the Project shall post the results, identifying the procurement, the name of the winning bidder and the price, duration, and summary of the scope of the contract in a newspaper with national circulation and send them to IFAD for posting on its website. This contract award notice is mandatory for all contracts. In case the procurement activity necessitated an advertisement at the beginning of the bidding process, the publication of contract award should follow the same advertisement method used for the announcement of the Project.

QUALITY-BASED SELECTION (QBS)

QBS is appropriate for the following types of consulting assignments:

- Complex or highly specialized assignments with need for demonstrable innovation by the consultants, e.g., country economic studies, urban master plan, financial sector reforms;
- assignments with high downstream impact, e.g., policy studies, management studies, engineering design of complex infrastructure;
- assignments which could be carried out in different ways, such that it is difficult to compare proposals (examples include management advice, policy studies)

For these types of assignments, short-listed consultants shall be asked to submit technical proposals and the firm with the highest technical proposal invited to submit a financial proposal and negotiate a contract.

SELECTION UNDER FIXED BUDGET (FBS)

FBS is used when:

- the assignment is simple;
- it can be clearly defined;
- the budget for the services is strictly limited.

It is often used for clearly defined and simple assignments when available budget is fixed and with no room for financial flexibility.

Bidders are invited to submit their best technical proposal within the fixed budget price, and the contract will be awarded to the highest-scoring technical proposal within that budget.

When using FBS, most of the steps in preparing the evaluation criteria are the same as for QCBS, the primary difference being that there is no requirement to provide weighting for financial and technical scores, as the award is based purely on the highest technical score within budget.

Other specific aspects of FBS are:

The RFP must indicate the available budget and request consulting firms to provide their best technical and financial proposals within the stated budget in separate sealed envelopes.

Because the budget is fixed, the ToR must be carefully prepared to ensure that it and the budget are consistent and realistic so that the consulting firm can perform all the expected tasks.

Technical proposals will be evaluated, and consultants who achieve the minimum technical score will be invited to a public opening of their financial envelopes.

Consultants whose technical proposals fail to obtain the minimum technical score will have their financial envelopes returned unopened.

Any financial proposals that exceed the indicated budget shall be rejected.

The consulting firm that has submitted the highest-ranked technical proposal within the indicated budget will be selected for contract award.

LEAST-COST SELECTION (LCS)

LCS is appropriate when selecting consulting firms for routine low-value services such as simple engineering design or supervision, where well-established practices and professional standards exist. There may also be budgetary constraints or pressures that necessitate having cost as the main driver for procuring certain services.

Technical proposals are examined to ensure that they obtain a specified minimum technical score, and the bidder with the lowest-priced tender of those achieving that minimum technical score will be selected for contract award.

The advantage of this selection method is that the procuring entity acquires competent services at the lowest price. The disadvantage, however, is that because the award is based on the lowest-priced proposal that achieves a minimum technical threshold score, the process will generally not result in acquiring the highest degree of technical qualifications, experience or expertise available. Although this disadvantage can be offset by the price, if more of a balance between financial and technical aspects is desired, and if financial resources are available, then consideration should be given to using QCBS.

When using LCS, most of the steps in preparing the evaluation criteria are the same as for QCBS, the primary difference being that there is no requirement to provide weighting for financial and technical scores, as the award is based purely on the lowest-priced proposal meeting the stated minimum technical threshold.

CONSULTANTS' QUALIFICATIONS-BASED SELECTION (CQS)

Selection based on consultants' qualifications may be appropriate for very small assignments for which the issuing of a detailed RFP as well as preparing and evaluating competitive proposals are not justified. Following the advertisement of a request for expressions of interest (REOI), firms submit their expressions of interest (EOIs) or profiles, which are then evaluated. Only the highest-ranked firm will be invited to submit a combined technical and financial proposal. If such proposal is responsive and acceptable, the firm will be invited for negotiation. Both technical and financial aspects of the proposal may be negotiated. If negotiations with the selected firm fail, the procuring entity may terminate the negotiations after obtaining IFAD's no objection (NO) and invite the second-ranked consultant to submit a combined technical and financial proposal.

SOLE-SOURCE SELECTION (SSS)

As with single sourcing (direct contracting) for any other type of procurement, SSS of the consulting firm lacks the benefits of competition in terms of quality and cost. It is not transparent in selection and may encourage unacceptable practices. Therefore, SSS should be used only in exceptional circumstances and only after securing IFAD's NO.

Any request for SSS by a borrower/recipient must be accompanied by a detailed justification, which will be carefully examined by IFAD to ensure that no alternative selection methods can be used.

- To receive IFAD's NO, it must be demonstrated that there is a clear advantage to SSS over competitive selection. Examples of such circumstances are: tasks that are a natural continuation of previous work done by the consulting firm;
- situations in which rapid selection is essential, such as an emergency;
- selections of low-value as agreed with IFAD and as defined in the letter to the borrower;
- only one firm is qualified or has the necessary experience for the assignment.

Lack of time to conduct competitive procurement is not an acceptable justification for the use of SSS.

INDIVIDUAL CONSULTANTS SELECTION (ICS).

Individual consultants shall be hired for assignments in which (i) teams of personnel are not required, (ii) additional professional support (e.g. by the home office of a consulting firm) is not required, and (iii) the

experience and qualifications of the individual are the paramount requirement. When coordination, administration or collective responsibility could become difficult because of the number of individuals, it would be advisable to hire a firm.

The process is implemented through an EOI procedure. Individuals submit their CVs in response to an openly advertised REOI which are subsequently evaluated. Only the highest-ranked individual consultant will be invited to submit a combined technical and financial offer, which is then negotiated with the client. If negotiations with the selected individual fail, the procuring entity may invite the second-ranked individual for negotiations, subject to IFAD's NO for prior review procurements.

Individual consultants may be selected on a sole source basis with due justification in exceptional cases, such as for:

- tasks that are a continuation of previous work that the consultant has done and for which the consultant was competitively selected;
- certain assignments expected to last less than three months;
- emergencies arising from natural disasters; and
- when the individual is the only consultant qualified for the assignment.

ABNORMALLY LOW BIDS (ALB)

An ALB is one in which the bid price appears so unreasonably low that it raises material concerns with the borrower/recipient in relation to the capability of the bidder to successfully deliver the contract at the price offered. This poses a potential problem when the most responsive or highest ranking bidder appears to offer a price that is abnormally low, compared with the Project's estimate, prevailing market conditions and/or other responsive bids.

An ALB is not in and of itself negative, but requires additional investigation and examination because it could be indicative of risks such as:

- lack of technical or commercial competence;
- an intent to apply variations to, or not follow the design standards or specifications;
- an intent to not comply with environmental or labour laws.

ALBs may represent risk flags for any, all, or combinations of the risks identified above, across all procurement categories. Examples of how these potential risks could apply in the different procurement categories are presented below.

Examples of potential risks of ALBs by procurement categories

- Goods: under-priced goods with intent to deliver products of suboptimal quality, ultimately compromising effectiveness, durability and value for money.
- Works: under-priced works, with intent to introduce variations to design specifications, cut corners on quality inputs, and/or employ workers under unlawful conditions.
- Consulting Services: under-priced consulting services, with intent to substitute the experts whose resumes are used in the technical proposal with freelance experts recruited for lower fees.
- Non-consulting services: under-priced non-consulting services, with intent to use inputs of suboptimal quality, employ workers under unlawful conditions, and/or make claims later to raise the price
- Inversely, there may be valid reasons for a very low bid price, such as: human error; quotation without profit to gain market entry; economy of manufacturing process; technical solutions chosen; or favourable conditions available to the bidder for the supply of products or services, or for the execution of the work.

The potential problems associated with ALBs only appear during the contract implementation stage, which is why ALBs need to be addressed at the evaluation stage. The process for dealing with an ALB,

from identification through clarification and decision, is only applied to highly ranked bids that are substantially responsive based on the technical evaluation as non-responsive bids are rejected for consideration in any event.

Process for dealing with ALBs

The process for addressing ALBs should be applied and executed carefully to ensure that bidders with valid reasons for a low price are not excluded. The ALB process is triggered during the evaluation stage, when the most responsive or highest ranked and potential winning bid according to the evaluation criteria appears to have an abnormally or unreasonably low price. This process comprises three steps:

- (i) identification;
- (ii) clarification and analysis; and
- (iii) decision and reporting.

The entire process must be carried out and/or supported by qualified subject matter experts.

1 Identification

Determining that a bid price is abnormally low may not be easy. A combination of approaches is recommended in order to minimize the scope for subjectivity. With some variations in approaches and methodologies across organizations, the basic process for identification mainly entails comparing the bid price with:

- The cost estimate provided by the Project's engineer or subject matter experts on the related procurement;
- The price offered by other bidders with substantially responsive bids;
- Prices paid in similar contracts in the recent past.

Comparing the bid price with the engineer or subject matter experts should be accompanied by due diligence and analysis to ensure that the cost estimates are accurate and reliable. To the extent possible, updating must be undertaken prior to the start of the evaluation process. Cost estimates may be high for various reasons; for example, they may have been based on outdated information, methodologies irrelevant to the bidder's proposal or assumptions that subsequently became invalid; or they may have been made too early in the design process to accurately cost project components.

Comparing the bid price with prices offered by other substantially responsive bids. This approach applies a mathematical formula to calculate a threshold under which a price may be identified as risky. Given that the reliability of such methods reduces with the number of responsive bids, it is recommended that this approach be used with a minimum of five responsive bids. However, the approach should be applied with caution due to the inherent statistical bias attached to such an approach and the false sense of objectivity that it may convey. Therefore, the mathematical approach is recommended only in combination with other methods to confirm the abnormally low characteristic of a bid price.

Example formula (World Bank, 2019) The formula below uses the value that is one standard deviation below the mean/average price as a threshold or to determine a "risk zone".

Step 1: Calculate the average price of submitted responsive bids/tenders.

Excel formula: $AVERAGE([Range\ of\ Prices])$

Step 2: Calculate the standard deviation.

Excel formula: $STDEV([Range\ of\ Prices])$

Step 3: Calculate the risk threshold.

Excel formula: $AVERAGE([Range\ of\ Prices])-STDEV([Range\ of\ Prices])$

Prices below the result obtained in step 3 fall within the risk zone.

Comparing the bid price with prices paid in similar contracts in the recent past. This approach is quite effective, although it may prove difficult to find one or more projects similar enough to serve as reliable benchmarks.

2. Clarification and analysis

Once an ALB is identified, further investigation is needed during which the borrower/recipient will seek to determine:

- The scope and type of error, i.e. if some items are priced abnormally lower or if certain items/types of items are consistently underpriced;
- Whether the low price is a mistake or miscalculation, or whether it is indeed as intended, therefore requiring more detailed explanation and justification from the bidder. Significantly lower prices than the estimates or other comparisons may be the result of an arithmetical error or misunderstanding of the requirements.

In the event that an ALB cannot be explained by mistakes or miscalculations, a more detailed analysis is required, in which the bidder is requested to provide explanations and clarifications on the proposed cost, with supporting data and documentation. To the extent possible, explanations provided by the bidder should be corroborated or supported by information already provided by the bid, without making any material changes to the substance of the bid, technically or financially.

The Project seeks clarification based on analysis of the scope of under-pricing and/or the nature of the price elements that are abnormally low. The clarification requested should focus on the rates of costs that have been determined to be abnormally low, stating the rationale/benchmarks that were utilized for the analysis.

The Project should also specify in which form the information should be provided, to enable the bidder to respond accurately. Specific templates may be used for this purpose.

Examples of clarifications that may be sought from bidders to justify ALBs

- Sources, quantities, rates or prices for services, materials and supplies. Note: where prices for input resources are identified as abnormally low, the bidder should submit appropriate justification to support its pricing of the respective input;
- Information regarding the economy of the manufacturing process, services provided, or construction methods to be adopted;
- Technical solutions chosen or any exceptionally favourable conditions available to the bidder for supply or execution;
- Labour rates or cost;
- Whether the bidder is quoting for the first time, or whether they have a record of delivering similar goods/works/services at a similar price;
- Transportation distances;
- Overheads, contingency and profit margins (this might include organizational and project management arrangements, contingency margin for risks in the price calculation or profit margin used for the bid price calculation);
- Source and mode of acquisition of the proposed construction equipment (e.g. hire, lease, purchase agreement);
- Compliance with applicable standards and regulations, e.g. labour laws, social and environmental laws and regulations.

The clarification and analysis stage is an iterative process in which further clarification may be requested if needed upon analysis of the initial documentation provided. Bidders should be given sufficient time to provide any requested clarifications and/or detailed price analyses. A period of no less than 5-10 business

days is recommended. A longer period should be allowed if validation by the bidder's external auditor is required. As with the identification step, analysis must be carried out by fully qualified personnel and/or subject matter experts.

Furthermore, with regard to providing the information, any act or omission, including a misrepresentation, that knowingly or recklessly misleads or attempts to mislead a party in order to obtain a financial or other benefit or to avoid an obligation, constitutes a fraudulent practice, which may trigger IFAD's investigation process under the Revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations.

3. Decision and reporting

On examination of the explanation, price analyses and required documentation provided by the bidder, the borrower/recipient may make one of the following three decisions:

Accept the bid, if the evidence supplied is satisfactory and accounts for the low level of prices and costs (in which case the bid is not considered abnormally low);

Reject the bid, if the evidence provided does not satisfactorily account for the low price or costs offered.

If a bid is rejected or if the bidder fails to provide increased performance security, the borrower/recipient may award the contract to the next highest-ranked bidder, provided that this bid is not determined to be abnormally low. Should the second-ranking bid also appear to be abnormally low, the same process shall be applied, with the same possible outcomes described above.

Reporting and review. The decisions and outcomes of the ALB process must be detailed within or annexed to the evaluation report, including all documentation and information upon which the decision was made and the methodology used to identify the ALB. The application of and subsequent decisions regarding the ALB process will only be subject to IFAD's prior review and no objection for procurements that fall above the established prior review threshold, unless otherwise required in the Letter to the Borrower/Recipient. ALBs for procurements below the threshold will be reviewed as part of IFAD's post-review/supervision process.

Reports for bid evaluations that have applied the ALB process should include the following information:

- The bidder's unit rates or costs of items that are determined to be abnormally or unrealistically low;
- The borrower/recipient's own cost estimates, together with the assumptions on which they are based;
- The total value of the gap between the two elements above;
- Details of the clarifications and explanations sought and provided by the bidder;
- Details of any price analyses requested and evaluated; (vi) The recommended decision;
- Copies of all exchanges between the bidder and the borrower/recipient during the clarification process.

As with all other processes designed and required to uphold the procurement principles in IFAD's Project Procurement Guidelines, IFAD may, during the post-review, declare misprocurement or ineligible expenditures for procurements that reveal a lack of due diligence in the ALB process, or misuse/abuse of the process to influence the outcome of the evaluation.

Unbalanced or front-loaded bids

During the process of identifying ALBs, unbalanced or front-loaded bids may be uncovered in which some items may be priced at an artificially low rate (and thus detected as potential ALBs) to offset artificially high pricing on others:

• Unbalanced bids. A bidder places a high unit price on some items and offsets them with a low unit price on other items. A bidder may unbalance its prices for a number of reasons, including:

- to conceal its pricing strategy from competitors;
- to benefit from inaccurate quantity estimates (where the bidder knows or anticipates that it will be necessary to increase the quantity of goods/works required); or
- to quote significantly lower prices on items that the bidder knows or anticipates will not be called for after contract award.

Front-loaded bids. This consists of deliberately submitting bids with artificially high prices or unit rates for early stages of works/services, offset by artificially low prices for later stages, in the hope of receiving large sums at the beginning of a contract and/or to improve the contractor's cash flow.

Although these types of bids are not ALBs, the process for dealing with ALBs described above may be used, with the exception that if a front-loaded bid is uncovered, it will not be rejected, but the bidder will be requested to increase the performance security to protect the interests of the borrower/ recipient and IFAD. In these cases, failure to comply with the increase in performance security will lead to rejection of the bid, while the bid security will not be forfeited.

As performance security is not part of a contract for consulting services, a bank guarantee must be requested for the advance payment at the beginning of the contract.

ALBs in the procurement of lots

In cases where (an) ALB(s) is/are identified in a bidding procedure for multiple lots, the process will apply only to that/those lot(s) and the process will not be delayed for the award of other lots with no ALB. This ensures that each potential case is reviewed on its own merits.

Procurement with community participation

Sometimes, it is highly desirable for communities affected by projects to participate in their design and implementation. Under PROSPER, there will be the need for community participation in procurement. This involves providing voluntary labour or NGO assistance in initial capacity-building to playing a more direct and active role that can range from determining the nature of subprojects to acting as the implementing agency.

Note that procurement with community participation is not a distinct procurement method per se but rather, the simplification and adoption of normally accepted procurement methods (primarily national competitive bidding, national shopping and direct contracting) and their implementation through participation by the project's beneficiary community or community institutions, either as procurement agents, implementing agencies, or contractors and suppliers of goods, works and related services.

Under the community participation approach, the role of the PCU or other project parties will be to review, supervise and guide the procurement, disbursement and physical implementation of the relevant activities carried out by the community, thereby ensuring that the principles and standards stipulated in the IFAD Project Procurement Guidelines are upheld.

Procurement with community participation is not to be included in a project at the expense of competitive bidding methods, particularly national competitive bidding. The basic principles of competition, transparency and fairness need to be balanced with the advantages of community participation.

Like any other procurement method used in IFAD funded projects, procurement with community participation is to be spelled out in the project documents and provided for in the respective financing agreement between IFAD and the Project.

Benefits of community participation

Consistent with IFAD's mandate of achieving economy, efficiency and social equity in the relatively poor rural communities served by IFAD-funded projects, the following benefits have been noted in projects that include community participation in procurement:

- greater relevance of project assistance in the beneficiary community and demand-driven project activities;
- enhanced community ownership and empowerment, leading to the sustainability of the project;
- enhanced contribution to poverty reduction;
- greater economy and efficiency in procurement through lower transport costs and timely availability of materials at the point of use;
- enhanced capacity and skills within the community;
- generation of employment and economic opportunities in the community;
- reduction in the burden of project implementation on the central project coordination unit (PCU) through decentralization and delegation;
- greater chance of meeting the desired project goals and objectives.

The Project must consider the following when using this procurement method:

The project environment and collective institutional capacity of the targeted community are elements critical to involving the community in procurement. Given the fact that both the economic and the sociocultural contexts surrounding communities have a significant bearing on project success, community leaders, institutions, grass-roots organizations and, when available, local NGOs operating in the area, should be consulted during project appraisal. The Project will consider the following issues to determine *prima facie* whether and how the community will play a constructive and beneficial role in procurement under the project:

Ghana's regulatory framework. As part of the assessment of the national procurement system, the legal, governmental and other regulatory frameworks in which development projects operate must be assessed, with special attention to the extent of decentralization permitted and prevailing in the country for community groups, grass-roots organizations and NGOs to operate effectively at the project level.

Organizational capacity. Using the results of the procurement assessment, it is necessary to ascertain:

- (a) the existence or lack of formal or informal community organizations;
- (b) whether these organizations are representative of the community's interests;
- (c) the institutional capacity of community organizations to shoulder resource management responsibilities;
- (d) homogeneity in the beneficiary community group and the possibility of smooth interaction within the group and with the PCU;
- (e) the existence of mechanisms for ensuring accountability in the community, or – if such mechanisms are lacking, the possibility of designing and introducing them.

Capacity and technical skills. Examine the prevailing:

- (a) primary occupation(s) of community members and the crops or other outputs they produce vis-à-vis the proposed project activities, with an eye to opportunities for integration;
- (b) means and methods used to procure goods and works for the community's needs;
- (c) availability and timing of surplus labour within the community.

Administrative and accounting skills. Assess the community's ability to receive, secure, use and account for group funds in a reliable manner, and identify training and capacity-building needs, if any.

Intermediaries. Ascertain the presence and function of intermediaries (such as community centres, cooperatives, NGOs, branches of rural development banks, etc.) operating in the community.

Cost-benefit analysis. Work out the incremental costs of involving the community, including training costs, quantifiable risks and benefits, such as increased sustainability of project activities, more effective operation and maintenance of project facilities and cost-sharing.

Beneficiary community's contribution Determine the possibility of a contribution from the community and identify the physical and financial parts of that contribution for appropriate inclusion in cost and financing tables during project design.

Procurement arrangements

Once the preliminary determination has been made that including community groups in project procurement is both feasible and desirable, the next step is to identify the following as clearly as possible for the project component in which community participation is desired:

- the goods, works and related services to be procured;
- the procurement schedule, based on implementation timing and targets;
- the role to be played by the community and/or its representatives.

This information will help to determine the most suitable procurement methods and the community's role and responsibility in the procurement process. In determining procurement needs, it is normal to separate goods, works and services. The nature, quantity and source for each procurement category should then be identified.

The community procurement plan may be part of a microplan prepared by the community to implement the project locally. In such cases, the procurement plan would be reviewed and approved by the PCU along with the community microplans and this will be included in the Project procurement plan.

Quantity and value of procurement

Estimating the quantities of goods and the nature and amount of works and services required under the project's community component is critical for procurement planning and preparation. If procurement contracts are expected to be large, it may be neither economical, efficient nor possible to meet the general consideration of broader and open competition, as required under the IFAD Project Procurement Guidelines. Community participation will be planned only when contract values are appropriate, depending on the assessed administrative and financial capacity of the targeted project community.

Source of procurement.

Identifying the source of procurement is an important step. Communities can be involved in procurement as suppliers or contractors only when the goods, works or services are of the type commonly produced or provided by the communities. Similarly, communities can be procurement agents only when the goods are of a type readily available in local markets, works are of a type provided by contractors in the project areas or the services are of a type provided by persons or groups within their reach.

Community groups as implementing agencies

The Project envisages that some community groups will act as implementing agencies that will undertake procurement, their institutional capacity needs to be examined and evaluated. The following questions should be addressed during project design, or by project start-up at the latest, to assess the capacity-building investment required by the community groups:

- Organizational capacity of the group. Can it obtain formal recognition as a legal entity? If so, are there regulatory procedures to do so?
- Rules of operation. Does the group have membership rules, by-laws for its operation and transparent information for its members?

- Accountability of group leaders. Are they elected? To whom do they report? Do officers have the skills to administer procedures and account for funds?
- Ability to receive public funds. Are there any borrower/recipient regulations that impede the receipt of funds? What are the audit arrangements, if any? Is there a commercial banking facility and, if so, what are the procedures for the group to access funds?
- Ability to contract. Does the group have the legal status to enter into contracts? If not, can the project provide or build this capacity?
- Dispute resolution. What are the existing formal dispute resolution processes? How will disputes be resolved within the group, with outsiders and with the PCU? Are there any faster, simpler local dispute resolution methods that the community would respect and accept?
- Financial status of the community. What is the community's capacity to contribute, either in cash or in kind? How will an equitable contribution from members be ensured? Does the community have the capacity to provide collateral or security for any advances received from the project?

Intermediaries as implementing agents

If the project beneficiary community does not have adequate institutional capacity to receive and account for funds or administer procurement reliably, it may be necessary to introduce intermediaries to act on the community's behalf. Such intermediaries could be civil society organizations (CSOs), cooperative societies, private entities or other groups. Project management will ensure that such intermediaries have the necessary capacity to perform such duties. When CSOs or other entities are included as executing agencies for weak community groups, the following aspects should be addressed during the PROSPER design:

Legal status of the intermediary. Regulations governing registration (with the government or local authority), operation in specific sectors, the authority to receive and account for public funds and the ability to participate in the project.

Role of the intermediary (contractor or consultant). If acting purely in a training or supervisory capacity vis-à-vis the community groups, the intermediary may be hired as a consultant under the consultant guidelines. If the intermediary needs to act as the implementing agent, actively assisting in building infrastructure using community labour, it may be more appropriate to hire them as a contractor, either through a transparent competition (if more than one intermediary is available) under IFAD's Project Procurement Guidelines, or via sole-source direct contracting (if only one functioning intermediary exists in the project area).

Financial viability and administrative capacity. The intermediary's primary source of funding, staffing, management, administrative capacity and accountability via independent audits, etc. should be examined to ensure safety and security for handling public funds on behalf of project management and the community.

Procedures and documentation

PROSPER shall ensure that the project includes simple, yet reliable, arrangements to implement the various stages of the procurement procedures, such as transparent bid advertising, open competition (even within the community), public bid opening, award of contract to the bidder with the lowest tender, etc. to preserve the integrity of the process insofar as possible. Bidding documents, contracts, etc. may have to be simplified and/or standardized to facilitate easy understanding and use by community participants. Appropriate procedures should be in place for regular monitoring and audits of community procurement activities and the relevant records by project management.

Annex 1: Terms of reference of key staff [Appendix to Chapter 4]

TORs Project Coordinator

Position Title: Project Coordinator

Reports to: Chief Director of the Ministry of Food and Agriculture (MOFA)

The Project Coordinator coordinates all activities and ensures that PROSPER is implemented according to the conditions of the loan financing agreement, the Programme Design Report (PDR) and the Programme Implementation Manual (PIM).

A. Duties and Responsibilities shall include:

- Overseeing the effective and efficient implementation of the programme at the national and zonal offices.
- Directing and supervising the day-to-day operations of the programme, guided by the PDR, PIM and the AWPB, providing any necessary amendments to ensure smooth performance
- Identifying and engaging relevant Implementation and Technical Partners.
- Overseeing the preparation of AWPBs of the Programme with the participation and inputs of all key stakeholders.
- Supervising the design and implementation of a participatory results-based Monitoring and Evaluation framework.
- Ensuring that all contractual obligations are adhered to.
- Regularly appraising staff and providing feedback and support to enable them perform their respective duties.
- Establishing and maintaining good working relationships with all programme participants and stakeholders – including MoFA and other Government agencies, development partners, the private sector and NGOs
- Promoting collaboration among Development Partners (DPs) and the private sector on value chain development.
- Take full responsibility for procurement of goods and services and approve contracts for all transactions after obtaining the necessary “no objections”.
- Ensuring timely preparation and submission of mandatory reports e.g. M&E data and reports and their wide access and distribution.
- Promoting knowledge sharing and learning within the programme and with other partners.
- Support external missions to foster joint learning process that improves programme implementation to achieve impact.
- Undertake any other responsibility that will ensure smooth and effective implementation of the Programme.
- Follow up progress on meeting the triggers for the expansion phase and take necessary actions that they are met on time without any delay.
- Ensure adequate follow up and recording of Government, Beneficiary and private sector contributions.
- Ensure the compliance with the IGREENFIN Operational Manual regarding green investments for Business Plans supported by the grants and loans from the Matching Grant Facility and BFF.
- Ensure nutritional activities are implemented and results achieved.

B: Qualifications and Experience

Essential

- At least a Masters' degree in Business Administration, Agriculture, Project Management, Agricultural Economics or other related academic field of study;
- At least 15 years of relevant work experience in agricultural research and development issues including policy, design and implementation of agricultural value chain programmes (at least 5 of which should have been in a senior management position).
- Experience in working for International Financial Institutions or development partner-funded programmes or similar market-oriented rural development interventions;
- Knowledge of Government of Ghana and IFAD or development partner-funded policies and procedures on gender, environment and general programme finance and administration management.

Desirable

- Ability to inspire confidence and develop good working relationships with project implementation partners;
- Staff management experience including recruitment, appraisals and managing performance;
- Demonstrated ability to train and build capacity of others;
- Experience working with the private sector;
- Experienced in electronic data processing and analysis;
- Strong analytical and market-oriented skills.

TORs Procurement Manager

The Procurement Manager reports to the Project Coordinator and is responsible for managing procurement processes and contract administration aspects. As head of the procurement unit, the incumbent will be tasked to:

- Ensure compliance with Government of Ghana Public Procurement Regulations and ensure due diligence to comply with IFAD Procurement Guidelines and handbook.
- Installation of appropriate procurement systems and procedures for effective planning and monitoring of procurements under the project;
- Oversee preparation and consolidation of inputs to the Annual Procurement Plan;
- Finalize, within three months after start of duty, a draft manual on procurement;
- Continuously coordinate and train (on the job if necessary) PCU staff or consultants in the preparation of terms of reference, specifications and proactive follow-up of these inputs in the bidding processes;
- Prepare bidding documents based on acceptable bidding standards;
- Ensure all prior review requirements such as obtaining of the No Objections from IFAD are complied with in a timely manner;
- Ensure that all the due bidding processes are adhered to: sufficient publications, strict adherence to deadlines, transparency in communications with bidders, publication of bid results, etc.;
- Ensure acceptable record keeping in procurement with at least a complete procurement file for each procurement from start to contract finalization. Maintain all procurement records in a form appropriate for regular auditing and spot checks by supervision missions;
- Communicate to all implementing entities and service provider their responsibilities and requirements with respect to procurement in keeping with prevailing government practices which are acceptable to IFAD;
- Oversee the contracting process, including ensuring that Evaluation Committees have people with appropriate expertise;
- Monitor implementation of contracts: report status and challenges to the Project Coordinator on a monthly basis; and intervene to address problem upon request by the Coordinator;
- Ensure that goods, works and services financed have been procured in accordance with the loan agreement and the Government of Ghana procurement regulations;
- Work with the Finance Manager to ensure that tax exemptions for the procurement of goods, works and services for the project are secured at the appropriate time;
- Prepare quarterly reports of progress with implementation of the Procurement Plan, and regularly inform the Project Coordinator of challenges and make proposals to overcome bottlenecks;
- Carry out any other activities that are assigned by the Project Coordinator.

Minimum Qualifications

The candidate should have a Bachelor's degree in procurement and supply and must be a member of the Chartered Institute of Procurement and Supply or equivalent.

Skills and Experience

- At least seven years of relevant work experience, preferably including experience in procurement in government/donor projects or large institutions;
- Appreciation of the evolution of the public sector procurement reforms in Ghana;
- Ability to work well in teams and to interact with a wide range of private sector partners and government representatives;
- Knowledge and experience of matching grant schemes and processes;
- Knowledge of work planning and reporting;

- Excellent quantitative and analytical skills;
- Computer-literate and well-versed in the use of Microsoft Office Suite.

TORs Procurement Assistant

Reporting to the Procurement Manager:

The Procurement Assistant will handle a variety of tasks that include: assisting in procurement, preparation of procurement plans, market surveys and research in accordance with laid down regulations and procedures; and preparation of periodic and annual Procurement Management Reports and any other related duties as may be assigned from time to time.

Academic and Professional Qualifications

The Project Procurement Assistant MUST:

- Possess a minimum of a Higher National Diploma (HND) Certificate in Business, Accounting, Mathematics or its equivalent qualification from a recognized institution;
- Have a Diploma in Purchasing and Supply Management from the Chartered Institute of Procurement & Supply or its approved equivalent from a recognized institution;
- Have a Valid Membership to the Ghana Chapter of the Chartered Institute of Procurement and Supply (CIPS) or its approved equivalent from a recognized Institution;
- A bachelor's degree in any of the following field: Procurement, Logistics, Finance, Business Administration, Economics, Project Planning and Management, Commerce or any other relevant discipline will be an advantage;
- Have a minimum of five (5) years of experience in public procurement of Goods, Works and Services, three (3) of which must be in a donor-funded project;
- Be Computer literate with practical working knowledge of e-procurement (Microsoft Dynamics ERP, SAP, etc).

TORs KM/M&E Manager

Position:	KM/M&E Manager
Reports to:	Project Coordinator
Supervises:	All M&E and KM activities
Organisation:	PCU within MOFA
Duty station:	TBC, Ghana
Background:	MOFA has established a Project Coordination Unit (PCU) to coordinate the management and implementation of IFAD-funded Programmes in Ghana. The PCU is currently managing the IFAD-funded GASIP project and will be responsible for implementing PROSPER. The Programmes M&E and KM Unit The Knowledge Management and Monitoring & Evaluation Manager has the overall responsibility for guiding and leading the overall M&E and KM strategy. The Knowledge Management and Monitoring & Evaluation Manager will lead the enhancement and operations of the existing PCU's M&E system, building up and maintaining the database necessary for the PCU to do its work efficiently and effectively and providing timely and relevant information to programmes stakeholders. S/he will also work closely with the two MKS in the field as well as working closely with other PCU and management and technical staff.
Job Description	<p>M&E and GIS</p> <ul style="list-style-type: none"> • Build up an enhanced system of monitoring and reporting with adequate indicators to allow the programmes staff to effectively monitor the progress, performance and impact of programmes components. • Develop/strengthen the overall framework for programmes M&E and KM - annual programmes reviews, participatory impact assessments, process monitoring, operations monitoring, annual data collection, lessons-learned workshops, and Knowledge products generation. • Ensure that programmes M&E and KM is carried out in accordance with the programmes' guidelines and procedures. • Help revise the programmes Log frame matrix, particularly indicators and monitoring mechanisms. • Oversee the development of, and manage the M&E system (database and e-library repository). • With the MKS, develop an M&E service pack (reporting formats for data and narrative) for the regional and province staff supervising and managing implementation. Based on that assess and develop trainings in data collection tools as needed, to ensure that appropriate measures are established and implemented to provide sufficient basis for review of programmes progress and for monitoring changes seen on ground. • Support the field coordinators' targeting and mainstreaming activities in programmes implementation, including providing technical assistance on mainstreaming priorities issues and programmes targets with respect to inclusion of women and youth, environment and climate, nutrition, etc. and ensure adequate awareness and activities in this respect, including during reporting.

- Support the PCU and provinces prepare AWPBs, including arranging regional level and programmes stakeholder review workshops.
- Review the quality of existing social and economic data in the programmes area, the methods of collecting it and the degree to which it will provide good baseline statistics for impact evaluation.
- Set up a participatory system of data collection from all programmes' partnership to feed into the programmes M&E system.
- Liaise with the MKS in the field and other technical staff and set up a system of periodic monitoring reports to be submitted to PCU.
- Based on the AWPB and in particular the programmes budgets, design the framework for the physical and process monitoring of programmes activities.
- Monitor, record and report physical progress of the indicators against AWPBs.
- As per the Green Climate Fund investment in the project, support the National Designated Authorities (NDAs) and Great Green Wall (GGW) Focal Point with the implementation of the Regional Support Programme's activities.
- Overseeing the planning and coordination of GIS activities to meet the outlined goals.
- Overseeing data flow, management, and distribution activities that are aimed at supporting GIS.
- Developing and managing control quality standards for system application.
- Maintaining up-to-date and accurate geospatial documentation for reference purposes.
- Guide staff and implementing partners in preparing their progress reports. Together, analyse these reports in terms of problems and actions needed.

KM and COMMUNICATION

- Prepare consolidated progress reports for programmes management to submit to the Government, IFAD and other relevant bodies, in accordance with approved reporting formats and timing.
- Organize programmes annual review and planning workshops involving programmes stakeholders to gather programmes results as well as lessons learnt and successful cases. These should be reflected in programmes reports and widely disseminated.
- Define the need for specific M&E and impact studies, design them and supervise their execution.
- Undertake regular visits to the field to support implementation of M&E and to identify where adaptations might be needed.
- Document and collect information on lessons learned, including case studies and special research.
- Organize (and provide) refresher training in M&E for programmes and implementing partner staff, local organizations and primary stakeholders.

- Qualifications and Experience**
- Assist, as required, the IFAD supervision and other monitoring, review and evaluation missions of projects.
 - Undertake any other assignments relevant to the M&E system as assigned by the Programme coordinator.
 - Work proactively with programmes and Programmes teams to identify opportunities for capturing and sharing knowledge, and disseminating information about major progress and results.
 - Develop and maintain knowledge dissemination events calendar, ensuring that major events are identified early.
 - Support senior management and relevant programmes teams to develop and manage messages and information material to ensure the success of major events.
 - Advise the programmes on branding and publications policy and also assist in their dissemination.
 - Develop and maintain contacts with key print and electronic media (including radio, TV, news websites and blogs) to supply them with newsworthy material about the programmes work in the country.
 - Ensure that all outreach information material to be used by the media is written in a way that concepts and issues can be readily understood by the public.
 - Research and identify success stories, writes and edits media releases, and feature stories within tight timeframes which consistently meet agreed programmes standards.
 - Produce video documentaries for capturing programmes results.
 - Prepare Factsheet/Case Studies to promote national programmes results and activities.
 - Ensure that the programmes web pages are updated.
 - Follow up progress on meeting the triggers for the expansion phase and take necessary actions that they are met on time without any delay.
 - Ensure adequate follow up and recording of Government, Beneficiary and private sector contributions.
 - Follow up the compliance with the IGREENFIN Operational Manual regarding green investments for Business Plans supported by the grants and loans from the Matching Grant Facility and BFF.
 - Follow up the progress of achievement of the nutrition project targets.
 - At least eight years of work experience, including at least four working with knowledge management, planning, M&E and/or MIS in government/donor programmes or large institutions, with knowledge of logical framework programmes and participatory systems.
 - Ability to set up and follow through on a monitoring system in a complex environment, and capacity to design and carry out relevant field level verification with data validation tools.
 - Knowledge of participatory programme implementation methodologies
 - Proficiency with GIS desktop software and data management.
 - Detail-oriented and analytical thinker.
 - Ability to process and analyze data.

- Strong managerial skills and demonstrated capacity to manage people and interact with a range of private sector partners, public sector representatives, and development partners.
- Self-motivated, with demonstrated ability to take initiatives and work under a minimum of supervision, but also to work effectively as a member of a team.
- Experience with performance based contract monitoring and output based work planning, budgeting and reporting.
- A clear understanding of aspects of technical writing to different categories of audiences.
- Experience working with the media and different stakeholders, as well as events management.
- Knowledge of work planning, budgeting and reporting.
- Fluent written and spoken English.
- Excellent quantitative and analytical skills.
- Excellent IT skills in particular Excel and knowledge of other M&E applications/statistical software packages (MS Access, SPSS or STATA) would be an asset.
- Proven communication and organization skills.
- Knowledge of gender and youth, environment and climate, nutrition, etc. issues, targeting of interventions.
- Expected to have a creative and pragmatic approach to problem-solving and the ability to think in terms of socio-economic and administrative systems.
- Excellent analytical, report writing, and presentation skills.

TORs KM/M&E Officer

Position:	KM/M&E Officer
Reports to:	KM/M&E Manager
Supervises:	Assigned M&E and KM activities by the KM/M&E Manager
Organisation:	PCU within MOFA
Duty station:	TBC, Ghana
Background:	MOFA has established a Project Coordination Unit (PCU) to coordinate the management and implementation of IFAD-funded Programmes in Ghana. The PCU is currently managing the IFAD-funded GASIP project and will be responsible for implementing PROSPER. The Programmes M&E and KM Unit The KM/M&E Officer has the overall responsibility for implementing the overall M&E and KM strategy. The KM/M&E Officer will co-lead the enhancement and operations of the existing PCU's M&E system, building up and maintaining the database necessary for the PCU to do its work efficiently and effectively and providing timely and relevant information to programmes stakeholders. S/he will also work under the KM/M&E Officer in the field as well as working closely with other PCU and technical staff.
Job Description	<p>M&E and GIS</p> <ul style="list-style-type: none"> • Ensure that programmes M&E and KM activities are carried out in accordance with the programmes' guidelines and procedures. • Document and collect information on lessons learned, including case studies and special research. • Conduct M&E trainings for extension services staff and facilitation of M&E activities • Participate in the preparation of the AWPB. • Provide guidance and inputs to organizing and managing programmes information and experience sharing events so that the events are viewed as learning experiences, not gatherings for the sake of it. • With the MKM, design and, after they are constructed supervise implementation of: (i) a database of all community facilitators and training providers to monitor their activities and outputs and (ii) a database of all participating villages (clusters) and the activities of the common interest groups and grants provided to each village. • As per the Green Climate Fund investment in the project, support the National Designated Authorities (NDAs) and Great Green Wall (GGW) Focal Point with the implementation of the Regional Support Programme's activities. • Build, update and maintain databases and GIS software and hardware. • Assist with data collection with GPS and field collection with ArcGIS Collector. • Digitize, create, maintain, display and update GIS databases, coverages, and linkages to various GIS databases. • Performing data capture and analysis for GIS product.

- Supporting and participating in the designing and development of the geospatial database.
- Produce accurate maps and other representations of data for public use and field work activity.

KM and COMMUNICATION

- Help organize stakeholder workshops for feedback to and input from all stakeholders.
- Systematically compile lessons learned from programme implementation into formats suitable for dissemination, as well as take lead in branding and production of programme communications materials.
- Assess field reports to identify possible implications for implementation and agree on corrective action to be taken with the decision makers.
- Work proactively with other IFAD's PCUs to identify opportunities for capturing and sharing knowledge, and disseminating information about major progress and results.
- Research and identify success stories, writes and edits media releases, and feature stories within tight timeframes which consistently meet agreed programmes standards.
- Actively seek to understand problems and unexpected positive/negative impacts, discussing these with primary stakeholders and senior management.
- Prepare Factsheet/Case Studies to promote national programmes results and activities.
- Ensure that the programmes web pages are updated.
- Regularly report to the MKM on programmes operations including activities, processes, and outputs on monthly basis. Work proactively with programmes teams to identify opportunities for capturing and sharing knowledge, and disseminating information about major progress and results.
- Follow up progress on meeting the triggers for the expansion phase and take necessary actions that they are met on time without any delay.
- Ensure adequate follow up and recording of Government, Beneficiary and private sector contributions.
- Follow up the compliance with the IGREENFIN Operational Manual regarding green investments for Business Plans supported by the grants and loans from the Matching Grant Facility and BFF.
- Follow up the achievement of the project nutrition targets.
- Minimum 3 years working experience in M&E preferably with rural development programmes and/ or funded by international organizations.
- Knowledge of participatory programme implementation methodologies.
- Proficiency in Computer Skills including experience of using Internet based applications, Network Monitoring applications, MS Word, MS Excel and MS Power Point etc.
- Proficiency with GIS desktop software and data management.
- Detail-oriented and analytical thinker.

Qualifications and Experience

- Ability to process and analyze data.
- Ability to organize and train staff.
- Good contextual knowledge of local issues, community priorities, organizational relationships, social and cultural constraints and realities, and environmental conditions.
- Strong oral and written communication skills in English.
- Strong social skills and open-minded.
- Ability to work independently and with limited supervision.

TORs M&E/MIS assistant

Position:	M&E/MIS assistant
Reports to:	KM/M&E Manager
Supervises:	Assigned KM and ICT activities by the KM/M&E Manager
Organisation:	PCU within MOFA
Duty station:	TBC, Ghana
Background:	MOFA has established a Project Coordination Unit (PCU) to coordinate the management and implementation of IFAD-funded Programmes in Ghana. The PCU is currently managing the IFAD-funded GASIP project and will be responsible for implementing PROSPER. The Programmes M&E and KM Unit The M&E/MIS assistant has the overall responsibility for implementing the overall KM and MIS strategy. The KIS will co-lead the enhancement and operations of the existing PCU's KM and MIS systems, building up and maintaining the database necessary for the PCU to do its work efficiently and effectively and providing timely and relevant information to programmes stakeholders. S/he will also work under KM/M&E Manager in the field as well as working closely with other PCUs management and technical staff.
Job Description	<ul style="list-style-type: none"> • Develop a detailed ICT and MIS needs-assessment and requirements for PCU and all programmes. • Spearhead the development of the PCU MIS strategy. • Develop detailed Technical Specifications to procure goods and develop ToRs for services/ consultancies related to procurement of ICT/MIS equipment and connectivity (e.g. M&E software and ArcGIS); assist the procurement unit of the PCU in vendor/contractor/consultant selection process and manage and monitor the performance of the selected agencies/consultants responsible for detailed design and implementation of all infrastructure leveraging and strengthening activities. • In consultation with other Lead Specialists hired by PCU, the M&E/MIS assistant will provide overall support in MIS assessment, planning, budgeting and technical evaluation of bids during IT procurement. • Work closely with all the members of the PCU team, concerned GoG departments, other partners, consultants, service providers and provide support for smooth implementation of the programmes objectives. • Lead design and implementation of related capacity building activities. • Manage and direct contractual vendors/consulting resources. • Monitor progress of infrastructure related activities through well-defined indicators embedded in the monitoring framework under the overall principle of results based management. • Help organize stakeholder workshops for feedback to and input from all stakeholders. • Systematically compile lessons learned from programme implementation into formats suitable for dissemination, as well as take lead in branding and production of programme communications materials.

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| <p>Qualifications and Experience</p> | <ul style="list-style-type: none">• Assess field reports to identify possible implications for implementation and agree on corrective action to be taken with the decision makers.• Work proactively with programmes and Programmes teams to identify opportunities for capturing and sharing knowledge, and disseminating information about major progress and results.• Research and identify success stories, writes and edits media releases, and feature stories within tight timeframes which consistently meet agreed programmes standards.• Actively seek to understand problems and unexpected positive/negative impacts, discussing these with primary stakeholders and senior management.• Prepare governorate and national Factsheet/Case Studies to promote national programmes results and activities• Ensure that the programmes web pages are updated• Regularly report to the KM/M&E Manager on programmes operations including activities, processes, and outputs on monthly basis. Work proactively with programmes teams to identify opportunities for capturing and sharing knowledge, and disseminating information about major progress and results.• Degree in Electronics/Computer Science/IT/Information Systems/ICT Infrastructure or any related field.• At least 2 years of experience in managing ICT infrastructure in public/reputed private sector agency (ies).• Demonstrable knowledge and experience in managing and overhauling ICT Infrastructure and MISs.• Proficiency in Computer Skills including experience of using Internet based applications, Network Monitoring applications, MS Word, MS Excel and MS Power Point etc.• Ability to organize and train staff.• Good contextual knowledge of local issues, community priorities, organizational relationships, social and cultural constraints and realities, and environmental conditions.• Strong oral and written communication skills in English.• Strong social skills and open-minded.• Ability to work independently and with limited supervision. |
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TORs Gender, Vulnerability & Social Inclusion Specialist

Roles and responsibilities

Under the general supervision of the PCU Project Coordinator, the Gender, Vulnerability & Social Inclusion Specialist will organize and supervise activities in the following areas (themes): a) targeting; b) promoting gender equality and women's empowerment; d) empowering youth; and e) promoting the inclusion of PWD.

Project implementation

- Based on a gender and youth analysis, develop gender and youth action plans.
- Assist in the preparation and organization of community mobilization and sensitization, including the conduct of various analyses (situational analysis, sociological and institutional mapping).
- Supervise the project's beneficiary selection activities (definition of precise criteria for the selection of communities and beneficiaries, supervision of participatory identification exercises, evaluation of pre-selected household profiles, etc.).
- Support the KM/M&E Officer in: verifying the effectiveness of the targeting of youth, women heads of households and PWD; monitoring and evaluating the effects and impact of the project on the economic integration of youth and women and on the economic empowerment of beneficiaries.
- Review basic project implementation processes to provide feedback and suggestions on how to achieve the best possible project outcomes with respect to targeting, gender equality, women's and youth empowerment, and social inclusion.
- Strengthen gender and age equality by using the Household Methodology (here: GALS) approach
- Ensure that adequate attention is paid to youth and gender dimensions of the project in the AWP/B, annual progress reports and other M&E requirements.
- Ensure adequate data collection and reporting on gender, youth, and social inclusion indicators (sex and age disaggregated).
- Build and develop capacities in gender, youth, and social inclusion aspects.
- With the support of the KM/M&E Manager, organize or supervise regular qualitative and quantitative studies to assess the project's impact on women's and youth economic empowerment.
- Maintain working relationships with government ministries/departments and programmes in charge of agriculture, nutrition, health, gender/women, youth, social inclusion, and community development.
- Ensure the compliance with the IGREENFIN Operational Manual regarding green investments for Business Plans supported by the grants and loans from the Matching Grant Facility and BFF.

Communication

- Develop a communication strategy on gender, youth and social inclusion and collaborate with the TA staff dedicated to the implementation of nutrition activities and Climate and Safeguard Specialists on this.
- Develop adequate messages on gender, youth, and social inclusion as part of the nutrition focused SBCC strategy.
- Liaise with PCU, IFAD country office and the IFAD gender and youth teams in headquarters on questions regarding gender and youth in implementation, knowledge-sharing and other aspects.
- Serve as a channel of communication between the Region and Federal level and others working on gender and youth issues in government, implementing agencies, other development projects, IFAD and other International Finance Institutions.
- Assist colleagues working on the project at regional level in accessing information they may need on gender and youth issues and share good practices.

Advocacy

- Be familiar with the gender, youth, and social inclusion policies of IFAD and institutions linked to the project, including national policies and policies of ministries, implementing institutions and financing agencies, etc.
- Sensitize project staff and partners to the necessity of ensuring that project outcomes should be achieved in line with the objectives of IFAD's policy to promote gender equality and women's and youth empowerment, social inclusion and targeting policy and updated guidelines.

Minimum qualifications and experience required

- Advanced University degree in social sciences, rural development, or related fields.
- At least 7 years of demonstrated work experience and understanding of gender, youth, and social inclusion aspects in the context of rural development projects. Contextual experience and country knowledge is preferred.
- Experience in poverty reduction, gender equality issues and youth targeting within rural development programs.
- Experience in training and capacity building required. Knowledge of the synergies between gender, youth, nutrition, and climate change is highly desirable. Experience with multi-sectoral programming.
- Knowledge of Gender Action and Learning System approaches.
- Experience interacting with diverse internal and external stakeholders is desirable.
- Strong project management and coordination skills and basic M&E knowledge is desirable.
- Strong analytical skills.
- Proven ability to work in a team environment.
- Good computer skills.
- Good interpersonal and social skills; open-minded individual.
- Self-motivated and creative thinker.
- Ability to work independently with limited supervision and work effectively under pressure.

TORs Nutrition TA

Main responsibility

- Under the general supervision of the PCU Project Coordinator and in close cooperation with the PCU Gender, Vulnerability & Social Inclusion Specialist, (and the Climate and Safeguard Specialist if relevant), the nutrition TA will coordinate and facilitate the implementation of the project's nutrition-sensitive interventions.
- TA will ensure the operationalization of nutrition mainstreaming in the project investments and integrate social inclusion and IFAD's mainstreaming priority areas (gender, youth, indigenous peoples, and climate change).

Specific duties

- Develop the project's nutrition strategy that includes a detailed action plan with associated costs in line with the National Nutrition strategy and Plan of Action and IFAD's mainstreaming approach.
- Conduct basic nutrition causal and food gap analysis in the targeted communities. Develop a nutrition communication strategy (SBCC), including development of campaign messages, training events/forum, materials.
- Ensure nutrition gardens demonstrate what is needed for a healthy diet throughout the year.
- Develop TORs for the KAP survey and facilitate the execution of the survey
- Develop a communication plan for nutrition-related campaigns
- Ensure that IGAs are accompanied by healthy diet campaigns
- Develop nutrition relevant content of Financial Literacy Classes especially household economy and household budget allocation for healthy diets
- Develop and coordinate capacity building and training sessions on nutrition-sensitive interventions for project staff, extension workers, and service providers.
- Promote better understanding of the nexus nutrition-gender-youth-climate in training activities
- In close liaison with other PCU staff, particularly the gender and social inclusion specialist, ensure nutrition is adequately integrated in project documents, in the M&E system, in the AWP/Bs and Progress reports.
- In collaboration with the project KM/M&E officer, ensure adequate data collection on nutrition-sensitive indicators and entry in the Project's M&E database (this may include developing the terms of reference for baseline/end-line studies, design additional studies including food and nutrition survey or food Knowledge Attitudes and Practice surveys); ensure that nutrition-sensitive indicators are tracked and reported on a regular basis (along with other project reporting schedules).
- Track and document substantive data and information on food security and nutrition-sensitive indicators and maintain regular progress reporting especially at supervision, midterm reviews and completion; ensure implementation of the supervision missions' recommendations related to nutrition.
- Establish local partnerships on nutrition (e.g. with development partner organizations, UN agencies, the private sector, civil society organizations, etc.) to support implementation and the provision of technical assistance. Assess ongoing initiatives, explore synergies and complementarities with other partners (e.g. USAID).
- Support the documentation of best practices and lessons learned for in-country and global dissemination.

Minimum qualifications and experience required

- Advanced University Degree (Master or equivalent) in human nutrition and/or food security.
- A minimum of 7 years of progressively responsible experience at international level in nutrition programming especially programming of nutrition-sensitive interventions.
- Experience in nutrition causal analysis, nutrition/nutrient gap analysis, behaviour change communication in nutrition.
- Experience in developing a SBCCstrategy.
- Experience in training and capacity building required. Knowledge of the synergies between nutrition, youth, gender equality and climate change is highly desirable.
- Field experience in multi-sectoral programming for food security and nutrition.
- Experience in poverty reduction, gender equality issues and youth targeting within rural development programs.
- Strong project management and coordination skills and basic M&E knowledge is desirable.

TORs Value Chain Manager

Title: Value Chain Manager

Reports to: Project Coordinator

Role: The Value Chain Manager will serve as the key technical lead for the programme. He/she will supervise technical and field-based activities including value chain development, market linkages, private sector engagement and local partner capacity building support.

Duties and Responsibilities shall include:

- Develop support programmes to strengthen chosen value chains and oversee the execution of support to value chains from technical service providers;
- Provide technical guidance in the process for selecting value chain cluster drivers, evaluation of business proposals and finalization of cluster formation agreements among cluster actors;
- Facilitate the promotion of commercially viable linkages among smallholder farmers, larger businesses, service providers, private financiers and development partners through contracted service providers;
- Liaise with other development partners and projects to create leverage for PROSPER and a coordinated approach;
- Identify technical assistance needs for the development of market and value chain tools, training materials and facilitating the conduct of pro-poor market and value chain studies;
- Promote access to credit by value chain operators and ensure that public and private infrastructure facilities provided under the programme is appropriately integrated to support value chain development;
- Provide oversight and direction for the work of the Value Chain Officers. Responsibilities include technical supervision of annual work planning process and development of programme activities;
- Supervise value chain assessments and oversee the value chain selection process. This includes developing scopes of work for any consultants who may be required to help carry out these assessments. Provide leadership and mentoring to the local technical team on analysing data from the assessments;
- Design activities to increase smallholder agricultural production and market linkages that lead to increased profitability of on-farm enterprises. This includes the development and implementation of upgrading plans in targeted value chains with a focus on improving smallholder productivity and net revenues;
- Provide specific Technical inputs in reviewing business proposals submitted to PROSPER and make recommendations that will enhance the quality and sustainability of the PROSPER funded businesses, both existing and new.

Qualifications and Skills

Essential

- At least a Masters' degree in Agriculture, Agribusiness or any other related academic field;
- At least 10 years of relevant work experience in dealing with issues related to agribusiness and with smallholder farmers in a rural setting.
- Experience in marketing and value chain research and/promotion in agricultural commodities in Ghana;
- Considerable experience and involvement in development partner funded-projects that provide support to smallholder farmer groups;

Demonstrated ability to develop contractual arrangements between and among value chain actors.

Desirable

- Experience in research or other activities aimed at influencing policy to support agribusiness development
- Demonstrable knowledge in pro-poor value chain development and participatory methods.
- Ability to achieve pro-poor, gender sensitive and socially inclusive working results
- Demonstrated ability to train and build capacity of others.

TORs Value Chain Officer

Position Title: Value Chain Officer

Line Management: Reports to the Value Chain Manager

Role: The Value Chain Officer will assist the Value Chain Manager and will have the responsibility to develop support programmes and strengthen chosen value chains and to oversee the execution of support to value chains from technical service providers. Furthermore, s/he will assist in coordinating and supervising consultants engaged within the Programme to support PROSPER partners.

A. Duties and Responsibilities

- Work closely with the Value Chain Manager in identifying candidate value chains, refining value chain development concepts, developing support programmes to strengthen chosen value chains, and oversee the execution of support to value chains from technical service providers.
- Conduct analyses and surveys that may include experiences and success stories, projects and documents on VC promotion as well as the identification and listing of local key actors with the objective of systematizing local experience and support the establishment of a knowledge information network.
- Facilitate viable linkages among smallholder farmers, larger businesses, service providers, private financiers and implementing partners aiming at achieving a networking attitude towards the harmonisation of approaches, tools and methodology of VC development.
- Proactively contribute to the identification of candidate value chains and the preparation and launching of call for Expressions of Interest, which represent the core of PROSPER business at the zonal level.
- Support the development of Terms of Reference and Tender Specifications for technical consultants for studies on VC impact potentials.
- Coordinate and oversee the implementation of ordered studies, ensuring that sound financial analyses are developed and other PROSPER tools and strategies are effectively applied into proposed activities (eg FBO development, contracts, financial plans, matching grants, high potential technologies, appropriate infrastructures etc) and are compliant with PROSPER's broader principles (gender, climate change, youth development, etc.).
- Contribute to the preparation of programme reports, Annual Work Plan and Budgets (AWPBs) as planned by the PCU.
- Undertake any other responsibility that will ensure smooth and effective implementation of the programme.

B. Qualifications and Experience**Essential**

- At least a Masters' degree in Agribusiness, Agriculture, Agricultural Economics, Business Administration or other academic field relevant to the tasks to be carried out.
- At least 7 years practical experience in developing and analysing value chain related business plans, and work experience in value chain management, preferably within the agriculture sector in Ghana.
- Familiarity with funding related issues facing the development of the agricultural sector in Ghana;

- Strong value chain analysis and risk management skills.
- Experience in working for donor-funded programmes or similar market-oriented rural development interventions.
- Experience in developing and fostering partnerships among agriculture commodity chains actors including experience as a trainer.

Desirable

- Practical experience in facilitating value chain development in the agricultural sector.
- Work experience in agricultural development issues and implementation of agricultural value chain programmes.
- Demonstrated ability to train and build capacity of others.
- Strong analytical and market-oriented skills.

TORs Financial Controller

Line Management: Project Coordinator,

The Financial Manager shall be:

- i. Responsible for managing the accounting/reporting systems to ensure that the Programme Management is informed of on-going financial transactions / activities, as well as the Implementation Partners have a clear view of their financial responsibilities, the funds available and the requirements of reporting and record keeping in accordance with prevailing Government of Ghana practices which are acceptable to IFAD and/or Cooperating Institutions (CIs).
- ii. Overseeing the setting up the chart of accounts and customization of the financial reports in collaboration of the GIMFIS Secretariat of the Controller and Accountant Generals' Department (CAGD).
- iii. Preparing and submitting withdrawal applications direct payments and quarterly IFRs to IFAD in accordance with the established procedures and within the agreed deadlines, and follow up to ensure that the Programme does not encounter liquidity challenges.
- iv. Preparing financial statements using acceptable accounting principles, concepts and conventions with due consideration to International Financial Reporting Standards (IFRS), IFAD Financial Administration requirements, and the Public Financial Management Act 2016 (Act 921).
- v. Preparing quarterly, half-yearly and annual statements of Programme accounts as an integral part of the Management Information system for submission to the Project Steering Committee, MoF, IFAD, and other Cooperating Institutions.
- vi. Supporting IFAD and GoG supervision missions and ensuring the implementation of all recommendations stemming from these missions
- vii. Maintaining all accounting records in an appropriate form, and facilitating the external audit missions for the yearly submission of the audited financial statements of AAFFORD and for the bi-annual submission of the audited IFRs, taking into consideration the required submission dates for the Programme to meet IFAD's deadlines.
- viii. Ensuring the effectiveness of PROSPER internal control system and procedures.
- ix. Facilitating the fast and effective flow of funds between IFAD and PROSPER and between PROSPER and its suppliers and implementing partners within GIMFIS and Project procedures.
- x. A counter-signatory to programme fund releases as required for Programme financial transactions and also sign as witness to all contracts as much as possible;
- xi. Ensuring that the overall project accounts are updated and accurate at any point in time.
- xii. Supporting the Project Coordinator and technical staff in conceiving and enforcing the financial and fiduciary aspects of all MoUs and agreements signed with implementing partners.
- xiii. Providing support and training to implementing partners in financial management procedures, reporting and justification of expenditures.
- xiv. Preparing monthly Statement of Expenditure and quarterly reports regarding aspects of Programme Financial Monitoring bringing out variances and advising component heads as to the limits of expenditure.
- xv. Preparing annually: (i) balance sheets, which should disclose bank and cash balances (that should agree with the statement of sources and application of funds), fixed assets and liabilities; (ii) yearly and cumulative Statement of Expenditures (SOEs) by withdrawal application and category of expenditures; and (iii) reconciliation of the Designated Accounts.
- xvi. Supervising the preparation of monthly reports that include Bank Reconciliation Statements, Summary of cash balances, Cash budget, Statement of Expenditure, Petty Cash Reconciliation, etc.

- xvii. Maintaining an asset register for all assets purchased by the Programme and prepare monthly report on equipment.
- xviii. Ensuring that fixed assets are well accounted for and annual verification is done indicating conditions of assets and their location appropriately.
- xix. Ensuring that Designated Accounts and Operational Accounts have been maintained in accordance with the provisions of the loan agreement.
- xx. Ensuring that funds for programme (including counterpart funds) have been provided for implementation and are used in accordance with the conditions of the loan agreement, with due attention to economy, efficiency, and effectiveness, and solely for the purpose for which the funds were provided (eligibility of project expenditures), with verifiable and acceptable quality of all supporting documentation.
- xxi. Ensuring that funds for programme implementation are disbursed in a timely manner to enable programme interventions be carried out on time; and follow up on all Programme funds released to implementing entities and technical partners for timely retirement and proper utilization.
- xxii. Ensuring that all necessary supporting documents, records and accounts have been kept in respect of all programme activities with clear linkages existing between the books of account, the financial statements, procurement, disbursement and physical completion levels.
- xxiii. Compiling the initial consolidated AWPB, incorporating the inputs of other PCU officers and uploading same to the GIFMIS platform.
- xxiv. Responsibly following-up on issues arising from the AWP/B process, documentation and disbursements from IFAD, GoG and other Cooperating Institutions to ensure that releases are not unduly delayed.
- xxv. Monitoring expenditure on a monthly basis against the approved AWPB and reviewing expenditure projections to ensure that expenditure stays within budget. Significant actual or anticipated expenditure variances against the budget should be included in the monthly report to line management together with any recommendations for changes to the budget.
- xxvi. Ensuring that goods and services have been procured in accordance with the loan agreement and in accordance with the IFAD and GoG rules and procedures.
- xxvii. Ensuring that SOEs expenditures are carefully compared for eligibility with relevant financial agreements, and the disbursement letter, and with reference to the Programme Design Report for guidance when necessary.
- xxviii. Overseeing tax matters of the Programme, by ensuring that tax exemptions for the procurement of goods for the Programme are secured at the appropriate time.
- xxix. Follow up progress on meeting the triggers for the expansion phase and take necessary actions that they are met on time without any delay.
- xxx. Ensure adequate follow up and recording of Government, Beneficiary and private sector contributions.
- xxxi. Assisting the PC with the general management of the Programme finances and all other assignments as and when required.
- xxxii. Undertaking any other responsibility that will ensure smooth and effective implementation of the Programme.

B. Qualifications and Experience

- Qualified Accountant with ACCA, CIMA, CA (Ghana), CA (England and Wales), CPA or related financial management qualification (essential).
- Advance degree in finance, accounting, or related subject (essential).
- Experienced in setting up and maintaining a computerized accounting system (essential).
- Experienced in using the GIFMIS software with user rights now (essential).
- Significant financial management experience at senior level (essential).

- Significant post-qualification experience of at least seven years duration (essential).
- Staff management experience including recruitment, selection, objective setting, appraisals and managing performance (essential).
- Presentation of highly complex financial and non-financial information
- Inspiring confidence and developing highly working relationships with finance and non-finance colleagues within Programme, Cooperating Institutions and implementing partners.
- Practical working experience with Government of Ghana, International Financial Institutions such as IFAD and World Bank funded projects, and auditing experience (essential).

C. **Competencies:** The post holder will require an excellent level of competency in the following:

- **Information, Communication and Technology:** - Proficient in Microsoft Word, Excel and Outlook (essential), and computerised accounting, e.g. SUN Systems, iScala, ACCPAC, etc. (essential); and **GIFMIS (essential)**.
- **People Skills:** - Ability to work independently and as a team player who demonstrates leadership and is able to support and mentor staff and is able to work with rural communities in a sensitive and participatory manner;
- **Teamwork:** - Ability and inclination to work co-operatively with others and recognition of the value of sharing ideas, knowledge and information while taking personal responsibility for doing so.
- **Drive for results:** Competence demonstrated by the level of responsibility and accountability demonstrated by the individual in meeting or beating commitments and objectives, whatever the organisational level of the role. Illustrated by evidence of seeking better ways of doing things, looking to improve on status quo and willingness to deal with difficult situations that effect output of their role.
- **Self-motivation:** Competence demonstrated by the level of timeliness and accuracy the individual displays in carrying out their role, by their personal energy and enthusiasm and by their willingness to learn to exceed expectations in their role.
- **Attention to detail:** ability to pay attention to details.

TORs Project Accountant

Line Management: Under the direct supervision of the Financial Controller,

Under the direct supervision of the Financial Manager; specific duties include:

- Assist the Financial Manager in the implementation of a sound financial management system.
- Ensuring the accuracy of the accounting entries in GIFMIS for the expenditures engaged locally
- Preparing the monthly budget forecast for the Sunyani Office and all the relevant supporting documentation needed to submit the replenishment request for the Operational Account
- Preparing quarterly, half-yearly and annual consolidated statements of Programme accounts as an integral part of the Management Information System for submission to the Financial Manager;
- Preparing monthly bank reconciliations of all Bank accounts;
- Assisting the Financial Manager in the preparation of withdrawal applications;
- Supporting the Project Coordinator in all the tasks related to financial management at the level of the project Office
- Archiving all supporting documentation linked to project expenditures and proceed to the regular scan of all documentation to be sent in soft copy to the Projects Accounting Unit of MoF
- Preparing and submitting SOEs to the Financial Manager and follow up to ensure that the Programme does not encounter liquidity challenges at the level of the project office;
- Monitoring financial returns from Implementing Partners, including periodic visits to their offices;
- Supporting the conduct of internal audit missions by the MoF Internal Audit unit on the basis of agreed Annual Work Plan and Budget;
- Maintaining all accounting records in an appropriate form;
- Providing assistance to the external auditors as required;
- Supporting in the smooth implementation of the annual external audit and bi-annual audit IFRs;
- Supporting IFAD and GoG supervision missions and ensuring the implementation of all recommendations stemming from these missions
- Preparing monthly reports that include Bank Reconciliation Statements, Summary of cash balances, Cash budget, Statement of Expenditure, Petty Cash Reconciliation, etc.
- Maintaining an asset register for all assets purchased by the Programme and preparing monthly report on equipment.
- Ensuring that fixed assets are well accounted for and annual verification is done indicating conditions of assets and their location appropriately.
- Ensuring that funds for programme are used in accordance with the conditions of the loan agreement, with due attention to economy, efficiency and effectiveness.
- Ensuring the eligibility of project expenditures, and the quality of all supporting documentation.
- Undertake any other duties that shall be assigned by the Financial controller to ensure smooth and effective implementation of the Programme.

D. Qualifications and Experience

Essential

- Strong computer skills especially in Microsoft office application software and use of computerized accounting systems, in particular, GIFMIS, with current user rights.
- A recognized degree in accounting or in a related field and pursuing a professional accounting qualification (part Qualified);
- Experience in setting up and maintaining a computerized accounting system;

- At least 5 years of practical working experience in financial management and accounting of development partner funded projects;
- Practical working experience with Government of Ghana, IFAD-financed projects or development partner-funded projects, and auditing experience;
- Fluency in written and oral English.

Desirable

- Advanced degree in finance, accounting or a related field;
- Committed to meeting deadlines, and willingness to work extra hours and sometimes on weekends as and when required;
- Experience in interpreting financial management reports, analyzing variations to plans and determining remedial actions required;
- Excellent technical and conceptual knowledge about financial management and grasp of financial principles and practices;
- Strong computer skills especially in Microsoft office application software and use of computerized accounting systems, such as Sun system, Pastel or SCALA software would constitute added advantage;
- Report writing and presentation skills;
- Confidence and good working relationships with finance and non-finance colleagues within Programme and implementing partners.

E. **Competencies:** The post holder will require a very good level of competency in the following:

- **Information, Communication and Technology:** - Proficient in Microsoft Word, Excel and Outlook (essential), and computerised accounting, e.g. SUN Systems, iScala, ACCPAC, etc. (essential); and **GIFMIS (essential)**.
- **Highly-Organized:** - Ability to keep the booking records updated and ensuring easy access to financial records whenever needed.
- **Teamwork:** - Ability and inclination to work co-operatively with others and recognition of the value of sharing ideas, knowledge and information while taking personal responsibility for doing so.
- **Communication:** Ability to communicate effectively to customers and very good at explaining the terms, conditions, procedures and processes of project accounting.
- **Self-motivation:** Competence demonstrated by the level of timeliness and accuracy the individual displays in carrying out their role, by their personal energy and enthusiasm and by their willingness to learn to exceed expectations in their role.
- **Attention to detail:** ability to pay attention to details.

TORs Accountant Assistant

Line Management: Under the direct supervision of the Financial Controller.

Specific duties include:

- Master IFAD key documents such as, the disbursement handbook, procurement guidelines and handbook, IFAD guidelines for project audits, the Financing Agreement (FA) and the Letter to the Borrower (LTB).
- Assist the Financial Controller in the implementation of a sound financial management system as described in the Financial Management Manual.
- Prepare transaction vouchers, input all transactions into the PCU accounting system before submission to the Financial Controller for approval and make sure all necessary supporting documentation is made available and filed in a systematic way;
- Process all payments, ensuring that PCU procedures are strictly adhered to;
- Process monthly payroll, payment of salaries to staff and project contributions;
- Manage and report on the use of Petty Cash in accordance with the approved procedures;
- Assist the Financial Manager in the preparation of withdrawal applications;
- Prepare cash flow forecasts as required;
- Monitor financial returns from Implementing Partners, including periodic visits to their offices;
- Assist in the preparation and monitoring of annual operational budgets;
- Prepare quarterly and annual financial reports in agreed format including: i) sources and uses of funds statement, including incurred expenditures by component, expenditure category and financier, ii) variance report (actual vs budgeted expenditures), iii) designated account reconciliation statement, iv) Withdrawal application-statement of expenditure, v) fixed asset register, vi) contract register for submission to the Programme steering committee, Lead Project Agency and IFAD;
- Maintenance of a well-organized and up-to-date filing system for accounting and financial records as well as a fixed asset tagging system;
- Perform physical inventory of project assets each year;
- Assist the Financial Manager in the preparation of the accounting manual of the PCU;
- Provide assistance to the external auditors as required;
- Undertake any other activities assigned by PCU management.
- Make sure all expenditure items: i) meet the eligibility criteria as defined in the IFAD financing agreement, ii) are supported by adequate documentation (invoice, contracts, evidence of payments etc.);
- Ensure all project records are properly filed all project records in a systematic way and maintain proper back up;
- Ensure the timely preparation of quarterly and annual financial reports in agreed format including: i) sources and uses of funds statement, including incurred expenditures by component, expenditure category and financier, ii) variance report (actual vs budgeted expenditures), iii) designated account reconciliation statement, iv) Withdrawal 24 application-statement of expenditure, v) fixed asset register, vi) contract register for submission to the Programme steering committee, Lead Project Agency and IFAD;
- Prepare monthly bank account reconciliations are prepared in a timely manner and reconciliation items are promptly followed up on;
- Assist in the annual audit process and facilitate that the project auditors have access to all necessary files;
- Liaise with the implementing partners including i) justification of advances, reporting of expenditures, financial reporting, audit process and audit findings;
- Undertake any other activities assigned by the Programme Coordinator and the Financial Controller.

TORs Rural Finance Specialist

Duties and Responsibilities

- Lead and manage all efforts and activities under Component 2, with the aim of meeting all Programme targets relating to this component. These responsibilities include:
- Working closely with the Value Chain Manager in designing, overseeing the roll-out and evaluating the impact of financial institution incentive grants to buy down transaction costs and risks associated with agricultural finance;
- Facilitating and/or designing training and technical assistance activities for financial institutions to improve their ability to expand lending to agribusiness, including overseeing the work of financial sector training subcontractors;
- Working with the Value Chain Manager to design financial models to increase access to finance for agribusinesses;
- Facilitating, together with the Value Chain Manager the activities of selected agricultural finance consultants to provide financial services to agribusinesses to finance their operations;
- Working with PFIs to access cheaper funds to support agricultural enterprises;
- Assessing the performance of PFIs in the value chains of PROSPER;
- Managing and monitoring the project investment cycle to ensure appropriate performance by investees, and provide continuing strategic input and technical support;
- Supporting linkages with similar Government of Ghana and development partner projects to leverage these for additional impact;
- Build and maintain strategic linkages with a wide range of stakeholders including: government ministries, departments and agencies; banks, microfinance and other private sector financial service providers; businesses providing services to these; and NGOs and other organisations contributing to agricultural and rural financial sector development;
- Ensuring that appropriate monitoring, evaluation and communication activities are being conducted on all aspects of the rural finance services work plan.
- Collaborate with the rest of the team to ensure the compliance with the IGREENFIN Operational Manual regarding green investments for Business Plans supported by the grants and loans from the Matching Grant Facility and BFF.

Qualifications and Skills

Essential

- Master's degree in either business administration, international finance, international development, agricultural economics, or related field;
- At least eight years of progressively responsible work experience in finance, preferably within the agricultural sector in Ghana;
- Familiarity with funding related issues facing the development of the agricultural sector in Ghana;
- Have a good understanding of financing rural enterprises under donor funded projects;
- Strong financial analysis and risk management skills;

Desirable

- Capacity to operate effectively with Farmer-Based organisations;
- Familiarity with the similar projects in Ghana with “matching grant” components;

- Familiarity with local Business Advisory Groups.

Annex 2. Logical framework

Results Hierarchy	Indicators				Means of Verification			Assumptions		
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility			
Outreach Total number of persons receiving services promoted or supported by PROSPER	1.b Estimated corresponding total number of households members				Project reports	Semi-annual	PROSPER PCU	Effective stakeholder identification, needs assessment and gender/youth targeting is carried out at the community level		
	Household members - Number of people	0	210000	420000						
	1.a Corresponding number of households reached					Semi-annual	PROSPER PCU			
	Households - Households	0	35000	70000						
	1 Persons receiving services promoted or supported by the project				Project reports	Semi-annual	PROSPER PCU			
	Males - Males	0	30000	60000						
	Females - Females	0	20000	40000						
	Young - Young people	0	15000	30000						
	Total number of persons receiving services - Number of people	0	50000	100000						
	PWD receiving services promoted or supported by the project				Ghana Statistical Services/ PROSPER surveys	Mid-term Review and completion	PROSPER PCU			
	Females - Number	0	1000	2000						
	Males - Number	0	1500	3000						
	Young - Number	0	750	1500						
	Total number of Pwd receiving services - Number of people	0	2500	5000						
Project Goal Contribute to reduced poverty, improved natural	HH living below the poverty line in the districts targeted				Ghana Statistical Services/	Baseline, Mid-term Review and completion	PROSPER PCU	Political stability. Macroeconomic conditions remain		
	Households - Percentage (%)	0		8						

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
resources management and healthy, sustainable and climate resilient rural livelihoods.					PROSPER surveys	survey using COI methodology		stable or improve. No major political shocks in the region
	Households reporting reduction in production losses due to adverse climate events				Ghana Statistical Services/ PROSPER surveys using COI methodology	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU	
Development Objective Strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority VCs in the Northern and Middle Ecological Belts taking advantage of the increased demand created by the national agro-processing strategy.	Households - Percentage (%)	0		70				
	Percentage of target households in the project supported communities reporting an increase in income contributed to by the services provided by the Project				Baseline survey, Project reports	Baseline, Mid-term Review and completion	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.
	Targeted households - Percentage (%)	0		60				
	2.2.1 Persons with new jobs/employment opportunities							
	Males - Males	0	3338	6675				
	Females - Females	0	2225	4450				PROSPER PCU
	Young - Young people	0	5000	10000				
	Total number of persons with new jobs/employment opportunities - Number of people	0	5563	11125				
	SF.2.2 Households reporting they can influence decision-making of local authorities and project-supported service providers							
	Household members - Number of people	0		315000				
	Households (%) - Percentage (%)	0		75				
	Households (number) - Households	0		52500				

Results Hierarchy	Indicators				Means of Verification			Assumptions	
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility		
SF.2.1 Households satisfied with project-supported services	SF.2.1 Households satisfied with project-supported services				Baseline survey, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	Mid-term Review and completion	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.	
	Household members - Number of people	0		315000					
	Households (%) - Percentage (%)	0		75					
	Households (number) - Households	0		52500					
Outcome Outcome 1. Financially and environmentally sustainable livelihoods developed and nutrition security enhanced in project areas	Rural Institutions with improved capacity				Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.	
	Rural Institutions - Number	0	1687	3375					
	3.2.2 Households reporting adoption of environmentally sustainable and climate-resilient technologies and practices								
	Total number of household members - Number of people	0		252000	Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU		
	Households - Percentage (%)	0	30	60					
	Households - Number	0	21000	42000					
	3.2.1 Number of tons of greenhouse gas emissions (CO2) avoided and/or sequestered				Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU		
	Hectares of land - Area (ha)	0		39 217					
	tCO2e/20 years - Number	0		-1 945 462					
	tCO2e/ha - Number	0		-49.60					

Results Hierarchy	Indicators				Means of Verification			Assumptions				
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility					
tCO2e/ha/year - Number	0			-2.50								
1.2.9 Households with improved nutrition Knowledge Attitudes and Practices (KAP)												
Women-headed households - Households	0			672	Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU					
Households (number) - Households	0			8400								
Households (%) - Percentage (%)	0			70								
Household members - Number of people	0			50400								
Persons in rural areas accessing public socio-economic infrastructures to build environmental resilience												
Persons - Percentage (%)	0			40	Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey	PROSPER PCU					
2.2.6 Households reporting improved physical access to markets, processing and storage facilities												
Households reporting improved physical access to markets - Percentage (%)	0			10	Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU					
Rural Institutions and MSMEs trained												
Rural Institutions - Number	0	2250	4500									
MSMEs - Number	0	400	800									
Climate smart demonstrations installed												
Output Output 1.1 Strengthening of rural institutions and enterprises					M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.				

Results Hierarchy	Indicators				Means of Verification			Assumptions	
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility		
Output Output 1.2 Climate proofing smallholder production technologies	Demonstrations - Number	0	100	320	M&E Data/ Component reports			Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.	
	3.1.1 Groups supported to sustainably manage natural resources and climate-related risks				M&E Data/ Component reports	Annually	PROSPER PCU		
	Total size of groups - Number of people	0	50000	100000					
	Groups supported - Groups	0	2560	5300					
	Males - Males	0	30000	60000					
	Females - Females	0	20000	40000					
	Young - Young people	0	15000	30000					
	3.1.2 Persons provided with climate information services				M&E Data/ Component reports	Annually	PROSPER PCU		
	Males - Males	0	9000	18000					
	Females - Females	0	6000	12000					
	Young - Young people	0	4500	9000					
	Persons provided with climate information services - Number of people	0	15000	30000					
Output Output 1.3 Promotion of nutrition-sensitive farming and healthy-diets	1.1.8 Households provided with targeted support to improve their nutrition				M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.	
	Total persons participating - Number of people	0	15000	72000					
	Males - Males	0	7500	36000					
	Females - Females	0	7500	36000					
	Households - Households	0	2500	12000					

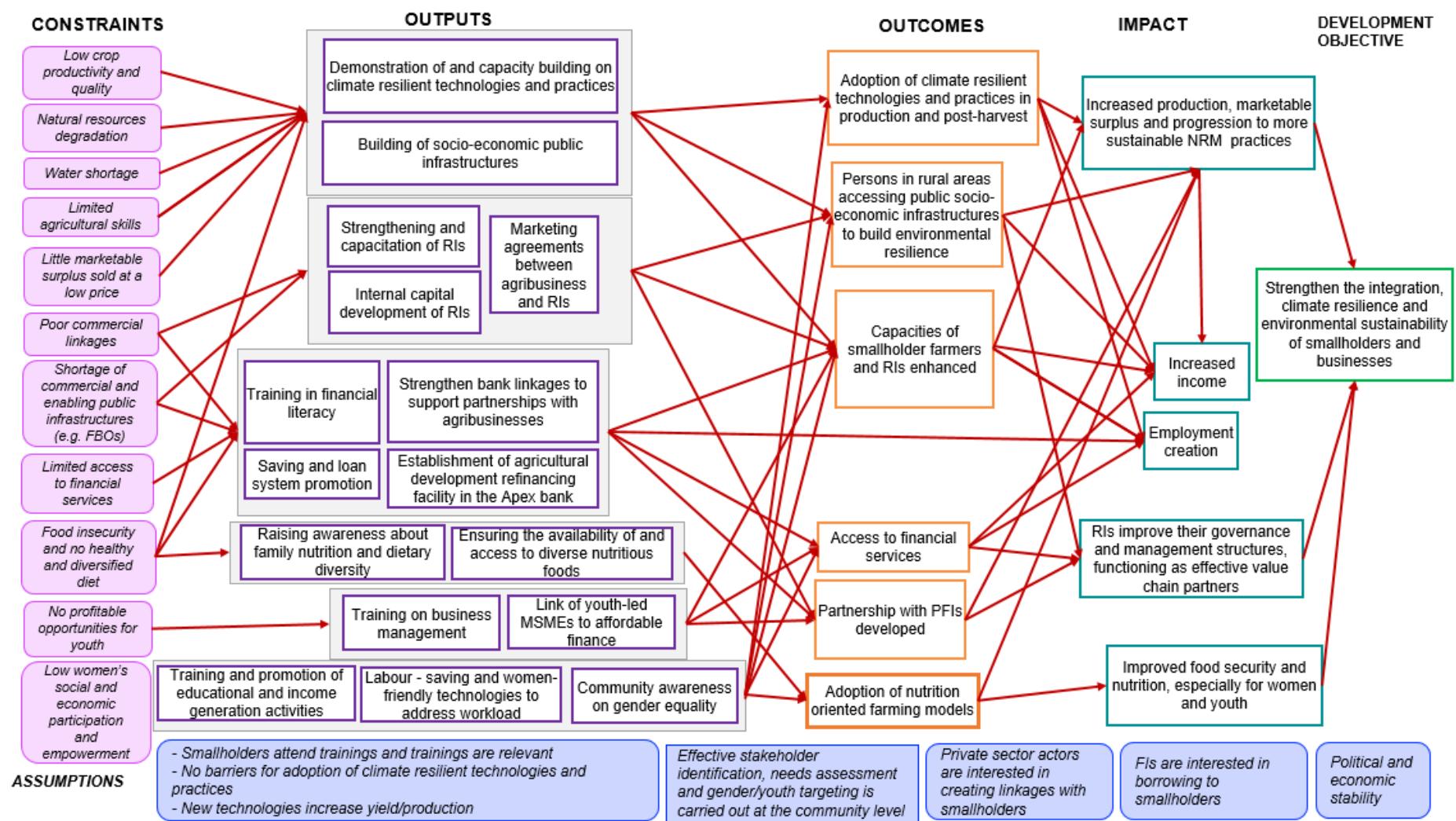
Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Young - Young people	0	7500	7500					
1.1.7 Persons in rural areas trained in financial literacy and/or use of financial products and services								
Males - Males	0	30000	60000		M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.
Females - Females	0	20000	40000					
Young - Young people	0	15000	30000					
Persons in rural areas trained in FL and/or use of FProd and Services (total) - Number of people	0	50000	100000					
Output Output 1.4 Development of socioeconomic infrastructures	Clusters benefitting from infrastructures for enhancing environmental management and climate resilience (off-farm/watershed and communal social infrastructures)				M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.
	Clusters - Number	0	60	320				
	2.1.5 Roads constructed, rehabilitated or upgraded				M&E Data/ Component reports	Annually	PROSPER PCU	
Outcome Outcome 2. Smallholders and small businesses are empowered to take advantage of the increasing market demand for agricultural produce	Length of roads - Km	0	90	90				
	2.2.3 Rural producers' organizations engaged in formal partnerships/agreements or contracts with public or private entities				Baseline survey using COI methodology, Project reports	Baseline survey using COI methodology, Project reports	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.
	Number of POs - Organizations	0	1013	2025				
	1.2.4 Households reporting an increase in production				Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.
	Total number of household members - Number of people	0	175000	350000				
	Households - Percentage (%)	0	25	50				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	Households - Households	0	25000	50000				
	1.2.5 Households reporting using rural financial services				Baseline survey using COI methodology, Project reports	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.
	Total number of household members - Number of people	0	175000	350000				
	Households - Percentage (%)	0	25	50				
	Households - Households	0	25000	50000				
Output Output 2.1 Creation of sustainable marketing linkages and business development	2.1.3 Rural producers' organizations supported				M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.
	Total size of POs - Organizations	0	45000	90000				
	Rural POs supported - Organizations	0	2250	4500				
	Males - Males	0	27000	54000				
	Females - Females	0	18000	36000				
	Young - Young people	0	13500	27000				
Output Output 2.2 Access to rural financial services	1.1.5 Persons in rural areas accessing financial services				M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.
	Women in rural areas accessing financial services - savings - Females	0	12000	12000				
	Young people in rural areas accessing financial services - savings - Young people	0	9000	9000				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	Men in rural areas accessing financial services - savings - Males	0	18000	18000				
	Men in rural areas accessing financial services - credit - Males	0	7200	14400				
	Women in rural areas accessing financial services - credit - Females	0	4800	9600				
	Young people in rural areas accessing financial services - credit - Young people	0	3600	7200				
	Total persons accessing financial services - savings - Number of people	0	30000	30000				
	Total persons accessing financial services - credit - Number of people	0	12000	24000				
Outcome Outcome 3. Development of an enabling policy environment that will help	Policy 3 Number of existing/new laws, regulations, policies or strategies proposed to policy makers for approval, ratification or amendment				Baseline survey using COI methodology,	Baseline, Mid-term Review and completion survey using COI methodology	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve.

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	Number	0	0	2	Project reports			No major political shocks in the region.
Output Output 3.1 Financial policies to enhance smallholders' access to financial services and formalize MSMEs	Policy 1 Number of policy-relevant knowledge products completed				M&E Data/ Component reports	Annually	PROSPER PCU	Political stability. Macroeconomic conditions remain stable or improve. No major political shocks in the region.
	Knowledge Products - Number	0	5	10				

Annex 3. Theory of Change Diagram



Annex 4a: First Annual Work Plan and Budget (AWPB)

Component 1

Component 1														
Subcomponent 1.1. Capacity Building of Rural Institutions Enterprises [1.1]														
Detailed Costs									Cumulative expenditure (000' USD)			Financier rule (2022 and half 2023, USD)		
(US\$)			Unit	Quantity 2022	Quantity 2023 (half)	Total (2022 + half 2023)	Plan (18 months)	TOT IFAD	GCF Grant	GOG	PFIs	Beneficiaries	Private Sector	
									TOT GCF	TOT GOG	TOT PFIs	TOT Ben	TOT PS	
I. Investment Costs														
A. CapaCity Building of Rural Institutions, Enterprises and Households														
1. Community mobilisation, cluster identification and planning														
a. Community mobilisation														
Workshop/consultation with stakeholders at regional level			workshop	2	1	3	31 787	30 198	0	1 589	0	0	0	0
Workshop/consultation with stakeholders at district level			workshop	10	10	20	42 559	40 431	0	2 128	0	0	0	0
b. Cluster identification														
Meetings at community level for identification of clusters			meetings	50	50	100	21 279	20 215	0	1 064	0	0	0	0
Training of trainers for extension staff /a			training	20	10	30	47 681	45 297	0	2 384	0	0	0	0
c. Cluster planning														
Cluster consultation and synthesisation meetings			cluster	80	75	155	82 424	78 303	0	4 121	0	0	0	0
d. Support by RDAs/DDAs to Field Activities														
Regional/national depts of MoFA and other line ministries			days	300	250	550	29 226	27 765	0	1 461	0	0	0	0
DDA support for community mobilization and cluster planning			days	1200	900	2100	22 304	18 958	0	3 346	0	0	0	0
Subtotal						0	0	51 530	46 723	0	4 807	0	0	0
2. Community nutrition and healthy diet campaign														
a. Nutrition														
Participatory Needs Assessment			LS	3	0	3	15 762	13 398	0	2 364	0	0	0	0
Nutrition Knowledge, attitude, and practice study (KAP)			LS	0	0.5	0.5	4 039	3 433	0	606	0	0	0	0
Training on HH nutrition and household methodology			HH	0	25	25	5 386	5 116	0	269	0	0	0	0
Nutrition education for communities /b			HH	0	25	25	2 693	2 558	0	135	0	0	0	0
Training on Financial literacy - HH economics			cluster	0	25	25	2 693	2 558	0	135	0	0	0	0
Climate smart HH nutrition gardens; demos and training /c			HH	0	25	25	6 732	6 395	0	337	0	0	0	0
Dedicated training on post-harvest management			cluster	0	25	25	6 732	6 395	0	337	0	0	0	0
DDA Extension Field Support /d			days	200	100	300	3 179	3 020	0	159	0	0	0	0
Regional / National of MoFA and Other Line Ministries for nutrition			days	100	50	150	7 947	7 549	0	397	0	0	0	0
b. capacitation of rural institutions														
Awareness raising for Youth Farmership Development			Workshop	10	5	15	9 536	9 059	0	477	0	0	0	0
Training on organisational capacity			group	30	30	60	51 070	48 517	0	2 554	0	0	0	0
Training on NRM Sustainability training			Training	30	45	75	63 996	60 796	0	3 200	0	0	0	0
Training on Sustainable Use of Pesticides and Fertilizers (ESMP)			Training	15	22.5	37.5	31 998	30 398	0	1 600	0	0	0	0
Climate adaptation and mitigation demonstrations (ESMP) /e			demo	15	22.5	37.5	79 995	75 995	0	4 000	0	0	0	0
Training on farming as a business including climate/NRM			cluster	15	22.5	37.5	59 996	56 996	0	3 000	0	0	0	0
Training on enterprise Devt including climate/NRM aspects			cluster	15	22.5	37.5	31 998	30 398	0	1 600	0	0	0	0
Training of trainers for extension staff including climate/NRM			district	10	5	15	47 681	45 297	0	2 384	0	0	0	0
Training of trainers for extension staff on IFAD SECAP and EPA Procedures			district	0.2	0	0.2	21 016	19 965	0	1 051	0	0	0	0
DDA Extension Field Support for nutrition			days	1200	600	1800	19 072	16 212	0	2 861	0	0	0	0
Support by Regional/national depts of MoFA and other line ministries /f			days	120	60	180	9 536	9 059	0	477	0	0	0	0
3. TA (national)			months	8	7.5	15.5	57 697	49 043	0	8 655	0	0	0	0
4. Gender, Vulnerability & Social Inclusion Specialist			person/year	0.5	0.5	1	43 282	0	36 790	6 492	0	0	0	0
5. Climate and Safeguard Specialist /g			person/year	0.5	0.5	1	53 624	0	45 580	8 044	0	0	0	0
6. Institutional support to Extension Services														
motorcycles for AEAs at district level			motorcycle	50	0	50	110 334	93 784	0	16 550	0	0	0	0
Laptops			unit	50	0	50	27 584	23 446	0	4 138	0	0	0	0
Assessment, categorization and creation of database of FBOs (including performance)			unit	1	0	1	105 080	89 318	0	15 762	0	0	0	0
Protective gear			lumpsum	0.2	0.05	0.25	27 722	23 564	0	4 158	0	0	0	0
7. Mini-Weather Stations (ESMP) /i			lumpsum	0	0.15	0.15	67 859	57 680	0	10 179	0	0	0	0
II. Recurrent Costs														
A. GoG staff pro rata time on PROSPER activities														
1. Chief Director			person/year	1	0.5	1.5	954	0	0	954	0	0	0	0
2. Director Project Planning, M&E			person/year	1	0.5	1.5	922	0	0	922	0	0	0	0
3. Director of MOFA Extension Services			person/year	1	0.5	1.5	1 526	0	0	1 526	0	0	0	0
4. Regional Director of Agriculture			person/year	3	1.5	4.5	4 577	0	0	4 577	0	0	0	0
5. Senior Agric Officer (Regional Rep for PROSPER)			person/year	3	1.5	4.5	1 287	0	0	1 287	0	0	0	0
6. District Director of Agriculture			person/year	8	12	20	16 426	0	0	16 426	0	0	0	0
7. District Planning Officer			person/year	8	12	20	7 253	0	0	7 253	0	0	0	0
8. District Works Engineer			person/year	8	12	20	14 612	0	0	14 612	0	0	0	0
9. Management Information Officers (MISOs)			person/year	8	12	20	7 253	0	0	7 253	0	0	0	0
10. Accountants			person/year	8	12	20	4 480	0	0	4 480	0	0	0	0
11. Crop Officers			person/year	8	12	20	18 132	0	0	18 132	0	0	0	0
12. WIAW Officers			person/year	8	12	20	18 132	0	0	18 132	0	0	0	0
13. Agriculture Extension Officers			person/year	24	36	60	69 116	0	0	69 116	0	0	0	0
Total						0	1 416 169	1 051 119	82 370	282 680	0	0	0	0

Subcomponent 1.2. Development of Socioeconomic Infrastructure [1.2]										
I. Investment Costs										
A. Development of socio-economic infrastructure										
1. Off-farm/watershed works	cluster	0	10	10	277 091	235 527	0	41 564	0	0
2. Feeder roads and farm tracks	km	0	10	10	554 181	471 054	0	83 127	0	0
3. Communal social infrastructure	cluster	0	10	10	254 471	216 300	0	38 171	0	0
4. Site Monitoring of Environmental, Climate and Social Conditions (ESMP)	lumpsum	0	0.5	0.5	47 124	40 056	0	7 069	0	0
5. Infrastructure Engineer	person/year	0.5	0.5	1	53 624	45 580	0	8 044	0	0
6. District Staff Field Support	days	0	60	60	646	614	0	32	0	0
Total					1 187 138	1 009 132	0	178 006	0	0
Total Component 1					2 603 306	2 060 250	82 370	460 686	0	0

Component 2

Detailed Costs								Cumulative expenditure (000' USD)		Financier rule (2022 and half 2023, USD)				
(US\$)				Unit	Quantity 2022	Quantity 2023 (half)	Total (2022 + half 2023)	Plan (18 months)	TOT IFAD	GCF Grant	GOG	PFIs	Beneficiaries	Private Sector
										TOT GCF	TOT GOG	TOT PFIs	TOT Ben	TOT PS
Component 2														
Subcomponent 2.1 Sustainable marketing linkages and business development														
I. Investment Costs														
A. Sustainable marketing linkages and business development.														
1. Value chain analysis														
a. Value chain studies and integration of climate risks /a	lumpsum	0.3	0.35	0.65	88 260	88 260	0	15 575	0	0	0			
b. Scoping and mapping of operational VC actors in target areas /b	lumpsum	0.3	0	0.3	95 962	80 387	0	14 186	0	0	0			
Subtotal					0	0	182 832	168 647	0	29 761	0	0	0	0
2. Establish and maintain value chain bodies	Lumpsum	1	0.5	1.5	63 535	33 774	0	5 960	0	0	0			
3. Promotion of linkages between producers and VC actors														
a. Engagement with VC actors														
Support by DDAs to collect information /c	field days	200	100	300	3 020	3 020	0	159	0	0	0			
District-level meetings	meeting	10	7.5	17.5	44 302	44 143	0	2 323	0	0	0			
Discussions with interested VC actors	lumpsum	0.1	0.1	0.2	32 646	30 323	0	1 596	0	0	0			
Subtotal					0	0	79 082	77 486	0	4 078	0	0	0	0
b. Creation of and support for partnerships														
DDA support for the trainings and demonstrations /d	field days	500	375	875	2 649	2 649	55 030	465	0	0	0			
Training of RIs and MSMEs on climate risks and integration into BPs /e	cluster	40	25	65	79 079	23 584	100 889	4 138	0	0	0			
Training of RIs and MSMEs on VC linkages and green bankable BPs	cluster	40	25	65	148 265	43 238	82 545	7 586	0	0	0			
Demonstrations on climate risks and green BPs	cluster	40	25	65	125 508	35 377	68 788	6 206	0	0	0			
BRCs/BACs support for Partnerships creation between RIs, MSMEs and VC actors	cluster	40	25	65	104 475	29 481	68 788	5 172	0	0	0			
Demonstrations dedicated for women and youth on climate risks/green BPs	cluster	40	25	65	103 440	29 481	0	5 172	0	0	0			
Partnerships creation between RIs, MSMEs and VC actors/g	cluster	40	25	65	201 709	196 537	382 221	10 344	0	0	0			
Subtotal					0	0	752 910	360 346	382 221	39 082	0	0	0	0
Subtotal					0	0	859 134	437 831	0	43 161	0	0	0	0
4. Development of Business Plans.														
a. Preparation of business plans for RIs & MSMEs - MG window														
Call for preparation BPs at cluster level	cluster	40	25	65	3 276	3 276	0	172	0	0	0			
BRCs/BACs for Preparation of BPs under Matching Grant Window	cluster	40	25	65	65 685	65 512	0	3 448	0	0	0			
DDAs Support for BPs Preparation	days	300	200	500	8 489	5 041	0	265	0	0	0			
MoFA regional and central departments	days	80	60	140	7 328	7 063	0	372	0	0	0			
Subtotal					0	0	81 264	80 892	0	4 257	0	0	0	0
b. Evaluation of business plans at RIs/MSMEs level - MG window	LS	0.1	0.1	0.2	13 301	9 044	0	1 596	0	0	0			
c. Preparation of business plans for RIs linked to VC Actors (BFF) /h														
Call for preparation of ABPs for RIs	cluster	0	15	15	767	767	0	40	0	0	0			
BRCs/BACs for Preparation of ABPs for RIs (BFF)	cluster	0	15	15	30 738	30 698	0	1 616	0	0	0			
Subtotal					0	0	33 081	31 466	0	1 656	0	0	0	0
d. Preparation of business plans for SMEs (standalone) - (BFF)														
Call for preparation of ABPs for MSMEs	cluster	0	15	15	767	767	0	40	0	0	0			
BRCs/BACs for Preparation of ABPs for MSMEs (BFF)	cluster	0	15	15	15 389	15 349	0	808	0	0	0			
Subtotal					0	0	16 924	16 116	0	848	0	0	0	0
Subtotal					0	0	138 366	137 518	0	8 358	0	0	0	0

(US\$)			Unit	Quantity 2022	Quantity 2023 (half)	Total (2022 + half 2023)	Plan (18 months)	TOT IFAD	GCF Grant	GOG	PFI	Beneficiaries	Private Sector								
									TOT GCF	TOT GOG	TOT PFI	TOT Ben	TOT PS								
Component 2																					
Subcomponent 2.1 Sustainable marketing linkages and business development																					
	5. Technical Assistance to Support the BRCs/ BACs			0	0	8 358	0	0	0	0	0	0	0								
	Design of assessment process	Nat consultant month	0 24	0.5 18	0.5 42	22 889 136 747	22 889 132 708	0 0	4 039 23 419	0 0	0 0	0 0	0 0								
	Subtotal			0	0	179 015	155 596	0	27 458	0	0	0	0								
	6. Value Chain Specialists			0	0	27 458	0	0	0	0	0	0	0								
	a. Senior Value Chain Development Specialist	person/year	0	0.5	0.5	23 072	23 072	0	4 072	0	0	0	0								
	b. Value Chain Development Specialist	person/year	0	1	1	41 316	37 245	0	6 573	0	0	0	0								
	Subtotal			0	0	66 890	60 317	0	10 644	0	0	0	0								
	7. Institutional support to Value Chains																				
	Support to veterinary services in MoFA and at districts	Lumpsum	0.1	0.05	0.15	21 278	21 278	0	3 755	0	0	0	0								
	Support for the cocoa board for shea tree domestication program	Lumpsum	0.1	0.05	0.15	25 033	21 278	0	3 755	0	0	0	0								
	Subtotal			0	0	46 310	42 555	382 221	7 510	0	0	0	0								
	Total Investment Costs			0	0	1 425 969	1 036 238	0	132 852	0	0	0	0								
II. Recurrent Costs																					
	A. GoG staff pro rata time on PROSPER activities																				
	1. District Director of Agriculture	person/year	10	15	25	0	0	0	10 281	0	0	0	0								
	2. District Planning Officer	person/year	10	15	25	10 281	0	0	22 836	0	0	0	0								
	3. Crop Officers	person/year	10	15	25	22 836	0	0	45 672	0	0	0	0								
	4. WIAD Officers	person/year	10	15	25	45 672	0	0	45 672	0	0	0	0								
	5. Agriculture Extension Officers	person/year	30	45	75	45 672	0	0	43 301	0	0	0	0								
	Total Recurrent Costs				0	43 301	0	382 221	167 761	0	0	0	0								
Total					0	1 586 220	1 036 238	0	300 613	0	0	0	0								

Detailed Costs								Cumulative expenditure ('000' USD)		Financier rule (2022 and half 2023, USD)				
(US\$)				Unit	Quantity 2022	Quantity 2023	Total (2022 + half 2023)	Plan (18 months)	TOT IFAD	GCF Grant	GOG	PFIs	Beneficiaries	Private Sector
										TOT GCF	TOT GOG	TOT PFIs	TOT Ben	TOT PS
Component 2														
Subcomponent 2.2. Access to Financial Services														
I. Investment Costs														
A. Access to Rural Financial Services.														
1. Savings mobilisation														
a. Promotion of Savings and Credit Group Methodology														
Training of trainers and mentors /a	Training Groups	2	0.5	2.5	3 168	3010	0	158	0	0	0	0	0	0
VSLA training and mentoring /b	Groups	850	425	1275	337 741	320 853	0	16 887	0	0	0	0	0	0
RCB training on VSLA and savings promotion /c	RCB	0	1.5	1.5	1 616	1 535	0	81	0	0	0	0	0	0
Subtotal					0	0	342 524	325 398	0	17 126	0	0	0	0
2. Activities Supported by Matching Grants														
a. Business Plans with Matching Grants for Groups of RIs														
BP with Matching grants for poorer groups of RIs - Rice	Group	0	3	3	149 700	149 700	0	0	0	0	149 700	0	0	0
BP with Matching grants for poorer groups of RIs - Maize	Group	0	3	3	117 000	117 000	0	0	0	0	117 000	0	0	0
BP with Matching grants for poorer groups of RIs - Soy	Group	0	3	3	28 875	28 875	0	0	0	0	28 875	0	0	0
BP with Matching grants for poorer groups of RIs - Cashew	Group	0	0.25	0.25	24 063	24 063	0	0	0	0	24 063	0	0	0
BP with Matching grants for poorer groups of RIs - shea	Group	0	3	3	81 675	81 675	0	0	0	0	9 075	0	0	0
BP with Matching grants for poorer groups of RIs - Poultry	Group	0	3	3	63 885	63 885	0	0	0	0	11 274	0	0	0
Subtotal					0	0	465 198	465 198	0	0	0	0	339 986	0
b. BP with Matching Grants with MSME (Standalone)														
BP with matching grant support for MSMEs (9 employees and fewer) - Rice	Group	0	2	2	40 390	40 390	0	0	0	0	10 098	0	0	0
BP with matching grant support for MSMEs (9 employees and fewer) - Maize	Group	0	2	2	29 725	29 725	0	0	0	0	7 431	0	0	0
BP with matching grant support for MSMEs (9 employees and fewer) - Soy	Group	0	2	2	35 160	35 160	0	0	0	0	8 790	0	0	0
BP with matching grant support for MSMEs (9 employees and fewer) - Cashew	Group	0	2	2	34 987	34 987	0	0	0	0	8 747	0	0	0
BP with matching grant support for MSMEs (9 employees and fewer) - Shea	Group	0	2	2	23 600	23 600	0	0	0	0	5 900	0	0	0
BP with matching grant support for MSMEs (9 employees and fewer) - Poultry	Group	0	2	2	34 400	34 400	0	0	0	0	8 600	0	0	0
Subtotal					0	0	198 262	198 262	0	0	0	0	49 566	0
c. Investment with Matching Grants for Nutrition and Other Poverty Initiatives					0	0	0	0	0	0	0	0	0	0
Investment with matching grants support for off-season vegetable production	group	0	5	5	22 500	22 500	0	0	0	0	2 500	0	0	0
Investment with matching grants support for post-harvest management (preservati	group	0	0	0	0	0	0	0	0	0	0	0	0	0
Investment with matching grants support for small ruminants (goats)	group	0	2.5	2.5	27 000	27 000	0	0	0	0	3 000	0	0	0
Investment with matching grants support for poultry - egg production	group	0	2.5	2.5	11 250	11 250	0	0	0	0	1 250	0	0	0
Investment with matching grants support for MSME along the food system	group	0	2.5	2.5	11 250	11 250	0	0	0	0	1 250	0	0	0
Subtotal					0	0	72 000	72 000	0	0	0	0	8 000	0
d. Agricultural risk guarantee - GIRSAL (50% of Premium Cost) /d					lumpsum	0	0.05	0.05	6 250	6 250	0	0	0	0
e. Agricultural Insurance /e					lumpsum	0	0.05	0.05	17 500	17 500	0	0	0	0
f. Site specific monitoring of the environmental, climate and social conditions (ESMP					lumpsum	0	0.5	0.5	8 078	6 867	0	1 212	0	0
Subtotal						0	0	767 288	766 077	0	1 212	0	397 552	0
3. Blended Finance Facility														
a. Development of the BFF														
TA to APEX Bank to develop the BFF	lumpsum	0.5	0	0.5	52 540	0	44 659	7 881	0	0	0	0	0	0
Selection of the PFIs: TA to APEX Bank	lumpsum	0.2	0.1	0.3	71 522	0	60 793	10 728	0	0	0	0	0	0
Subtotal						0	0	124 062	0	105 452	18 609	0	0	0
b. PFI Capacity Building														
Awareness raising and training on climate agriculture	lumpsum	0.17	0.085	0.255	20 264	0	19 251	1 013	0	0	0	0	0	0
TA for PFIs to develop financial products (Green Lending) /f	lumpsum	0.2	0.05	0.25	31 187	8 416	16 831	5 940	8 416	0	0	0	0	0
Tools and instruments to assess BPs (safeguards, mitigation, adaptation)	lumpsum	0.15	0.05	0.2	21 148	0	17 976	3 172	0	0	0	0	0	0
TA to enhance governance and management of loan products	lumpsum	0.2	0.1	0.3	31 787	0	27 019	4 768	0	0	0	0	0	0
Subtotal						0	0	104 386	8 416	81 077	14 894	8 416	0	0

Republic of Ghana											
PROSPER											
Detailed Costs					Cumulative expenditure (000' USD)			Financier rule (2022 and half 2023, USD)			
(US\$)								GCF Grant	GOG	PFIs	
			Unit	Quantity 2022	Quantity 2023 (half)	Total (2022 + half 2023)	Plan (18 months)	TOT IFAD	TOT GCF	Beneficiaries	Private Sector
Component 2											
Subcomponent 2.2. Access to Financial Services											
c. Management of the BFF at the APEX Bank											
	BFF manager	per annum	0.5	0.5	1	53 624	45 580	0	8 044	0	0
	Two officers for north and middle belts	per annum	0.25	0.5	0.75	32 595	27 706	0	4 889	0	0
	Adaptation and Climate Coordinator	per annum	0	0.5	0.5	21 909	0	18 622	3 286	0	0
	Environment and Safeguard Specialist	per annum	0	0.5	0.5	21 909	0	18 622	3 286	0	0
	Vehicle pickup	Number	0	0.5	0.5	16 965	14 420	0	2 545	0	0
	Subtotal				0	147 001	87 706	37 245	22 050	0	0
d. BP with BFF loans to RIs (Groups) with Value Chain Actors											
	BP from groups of RIs financed by BFF loans - Rice	Number	0	1	1	333 298	93 765	160 740	78 794	17 860	138 415
	BP from groups of RIs financed by BFF loans - Maize	Number	0	1	1	279 189	78 542	134 644	66 002	14 960	115 944
	BP from groups of RIs financed by BFF loans - Soy	Number	0	1	1	108 120	30 417	52 143	25 560	5 794	44 901
	BP from groups of RIs financed by BFF loans - Cashew	Number	0	1	1	1 326 602	485 442	596 400	244 761	83 219	221 916
	BP from groups of RIs financed by BFF loans - shea	Number	0	1	1	223 021	76 352	104 984	41 685	9 544	35 790
	BP from groups of RIs financed by BFF loans - Poultry	Number	0	1	1	340 671	101 818	166 981	71 872	16 291	73 309
	Subtotal				0	2 610 901	866 336	1 215 892	528 673	147 668	630 274
e. BP with BFF Loans for standalone MSMEs BPs (up to 20 employees)											
	BP supported by BFF Loans (standalone MSMEs) - Rice	Number	0	1	1	90 011	26 902	44 119	18 990	4 304	32 282
	BP supported by BFF Loans (standalone MSMEs) - Maize	Number	0	1	1	104 230	31 152	51 089	21 990	4 984	37 382
	BP supported by BFF Loans (standalone MSMEs) - Soy	Number	0	1	1	104 230	31 152	51 089	21 990	4 984	37 382
	BP supported by BFF Loans (standalone MSMEs) - Cashew	Number	0	1	1	30 685	11 162	13 023	6 500	1 488	11 162
	BP supported by BFF Loans (standalone MSMEs) - Shea	Number	0	1	1	42 121	15 107	18 128	8 886	2 014	15 107
	BP supported by BFF Loans (standalone MSMEs)- Poultry	Number	0	1	1	145 326	42 832	71 957	30 537	6 853	51 398
	Subtotal				0	516 604	158 306	249 405	108 892	24 629	184 714
f. GIRSAL Guarantee (50% of the premium cost) / g					Lumpsum	0	0.025	0.025	9 425	8 011	0
	g. Agricultural Insurance	Lumpsum	0	0.025	0.025	13 464	11 444	0	2 020	0	0
	Subtotal				0	3 525 843	1 140 220	1 689 072	696 552	180 712	814 988
	4. Rural Financial Services Specialist	person/year	0.5	0.5	1	43 282	36 790	0	6 492	0	0
Total Investment Costs						0	4 678 938	2 268 484	1 689 072	721 382	180 712
II. Recurrent Costs						0	0	0	0	0	0
Total						0	4 678 938	2 268 484	1 689 072	721 382	180 712
Total Component 2						4 678 938	2 268 484	1 689 072	1 021 995	180 712	1 212 540
											135 645

Component 3

(US\$)			Unit	Quantity 2022	Quantity 2023 (half)	Total (2022 + half 2023)	Plan (18 months)	TOT IFAD	GCF Grant	GOG	PFIs	Beneficiaries	Private Sector
									TOT GCF	TOT GOG	TOT PFIs	TOT Ben	TOT PS
Component 3						0			0	696 552			
Subcomponent 3.1. Project Management						0			0	6 492			
I. Investment Costs						0			0	721 382			
A. Project Management						0			0	0			
1. Infrastructure, vehicles and equipment						0			0	721 382			
a. Office Building and Equipment						0			0	0			
Office building						0	124 126	105 507	0	18 619	0	0	0
Computer sets						0	5 517	0	0	5 517	0	0	0
Computer sets-2						0	0	0	0	0	0	0	0
Multifunction Laser Printer						0	11 033	0	0	11 033	0	0	0
Multifunction Laser Printer-2						0	0	0	0	0	0	0	0
Office furniture						0	4 413	3 751	0	662	0	0	0
Air Conditioners						0	22 067	18 757	0	3 310	0	0	0
Office equipment, various						0	41 375	0	0	41 375	0	0	0
Subtotal						0	208 532	128 016	0	80 517	0	0	0
b. Vehicles						0	0	0	0	0	0	0	0
4WD pickup						0	0	0	0	0	0	0	0
4WD pickup						0	397 204	0	0	397 204	0	0	0
4WD station wagon						0	0	0	0	0	0	0	0
4WD station wagon						0	99 301	0	0	99 301	0	0	0
Subtotal						0	496 505	0	0	496 505	0	0	0
Subtotal						0	705 037	128 016	0	577 021	0	0	0
2. Project management and coordination													
a. Support for IFAD Desks in MoFA and MoF													
Vehicle						0	66 201	56 271	0	9 930	0	0	0
Trainings for Desk Officers						0	7 947	7 549	0	397	0	0	0
Trainings for Desk Officers						0	7 947	7 549	0	397	0	0	0
Equipment for IFAD Desks in MoFA and MoF						0	11 033	9 378	0	1 655	0	0	0
Subtotal						0	93 128	80 748	0	12 380	0	0	0
b. Support for GIMFIS Implementation													
Equipment for Internet Connectivity						0	55 444	47 127	0	8 317	0	0	0
c. Project support													
Supervision missions						0	8 078	7 675	0	404	0	0	0
Implementation support missions						0	5 386	5 116	0	269	0	0	0
Unspecified studies and contract supervision						0	31 787	30 198	0	1 589	0	0	0
Subtotal						0	45 251	42 989	0	2 263	0	0	0
Subtotal						0	193 823	170 864	0	22 959	0	0	0
3. Audit													
a. Internal audit						0	2 693	2 558	0	135	0	0	0
b. External audit						0	8 078	7 675	0	404	0	0	0
c. Meetings and workshops													
Project steering committee meetings						0	15 894	15 099	0	795	0	0	0
Consultative stakeholder workshops						0	15 894	15 099	0	795	0	0	0
Consultative AWPB workshop						0	23 841	22 648	0	1 192	0	0	0
Subtotal						0	55 628	52 846	0	2 781	0	0	0
d. Staff development													
Training						0	14 383	13 664	0	719	0	0	0
Subtotal						0	80 782	76 743	0	4 039	0	0	0

(USS)								Plan (18 months)	TOT IFAD	GCF Grant	GOG	PFIs	Beneficiaries	Private Sector
			Unit	Quantity 2022	Quantity 2023 (half)	Total (2022 + half 2023)	TOT GCF	TOT GOG	TOT PFIs	TOT Ben	TOT PS			
Component 3					0		0		0	696 552				
Subcomponent 3.1. Project Management					0		0		0	6 492				
4. Knowledge management and learning					0	10 508	9 983	0	525	0	0	0	0	0
a. KM strategy formulation.					0	16 157	7 675	7 675	808	0	0	0	0	0
b. Studies and learning products including climate					0	16 157	7 675	7 675	808	0	0	0	0	0
c. Learning events and communications materials incl climate					0	15 894	0	15 099	795	0	0	0	0	0
d. Communications and publications					0	0	0	0	0	0	0	0	0	0
e. South-South and triangular cooperation - tours					0	0	0	0	0	0	0	0	0	0
f. Annual Sahel Award					0	0	0	0	0	0	0	0	0	0
g. Sahel Award replenishment					0	0	0	0	0	0	0	0	0	0
h. Develop Sahel Award protocols					0	0	0	0	0	0	0	0	0	0
i. Enrol women and Youth to compete for Sahel Award					0	0	0	0	0	0	0	0	0	0
Subtotal					0	58 715	25 332	30 448	2 936	0	0	0	0	0
5. M&E/MIS system					0	22 067	18 757	0	3 310	0	0	0	0	0
M&E software (PLAMES)					0	47 444	40 327	0	7 117	0	0	0	0	0
ArcGIS					0	0	0	0	0	0	0	0	0	0
ArcGIS licence					0	66 004	62 704	0	3 300	0	0	0	0	0
Specialist services					0	135 515	121 788	0	13 727	0	0	0	0	0
Subtotal					0									
6. M&E studies and reviews					0	157 621	149 740	0	7 881	0	0	0	0	0
a. Baseline Study					0	0	0	0	0	0	0	0	0	0
b. Mid-Term Review					0	0	0	0	0	0	0	0	0	0
c. Completion Study					0	0	0	0	0	0	0	0	0	0
d. Outcome and Impact thematic studies					0	0	0	0	0	0	0	0	0	0
e. Environmental, Climate and Social Monitoring (ESMP)					0	39 734	33 774	0	5 960	0	0	0	0	0
f. Conflict Resolution and Land Governance Dialogue (ESMP) /a					0	0	0	0	0	0	0	0	0	0
g. Other Social Monitoring (GBV, SEAH Vulnerability) - ESMP /b					0	19 867	16 887	0	2 980	0	0	0	0	0
h. Health Insurance and Outreach Monitoring [ESMP] /c					0	19 867	16 887	0	2 980	0	0	0	0	0
i. Environmental, Climate and Social Audit /d					0	26 928	25 582	0	1 346	0	0	0	0	0
Subtotal					0	264 017	242 869	0	21 148	0	0	0	0	0
Total Investment Costs					0	1 437 890	765 612	30 448	641 830	0	0	0	0	0
II. Recurrent Costs					0	0	0	0	0	0	0	0	0	0
A. Salaries					0									
1. Project Coordinator					0	82 752	82 752	0	0	0	0	0	0	0
2. KMM&E Manager					0	69 512	69 512	0	0	0	0	0	0	0
3. KMM&E Officer					0	56 106	0	56 106	0	0	0	0	0	0
4. M&E/MIS assistant					0	19 561	19 561	0	0	0	0	0	0	0
5. Financial Controller					0	69 512	69 512	0	0	0	0	0	0	0
6. Project Accountant					0	56 106	56 106	0	0	0	0	0	0	0
7. Project Accountant - GCF					0	56 106	0	56 106	0	0	0	0	0	0
8. Accountant Assistant					0	10 852	10 852	0	0	0	0	0	0	0
9. Procurement Manager					0	69 512	69 512	0	0	0	0	0	0	0
10. Procurement Assistant					0	10 852	10 852	0	0	0	0	0	0	0
11. Admin. Assistant					0	14 068	14 068	0	0	0	0	0	0	0
12. Office Assistant					0	13 808	13 808	0	0	0	0	0	0	0
13. Drivers					0	13 808	13 808	0	0	0	0	0	0	0
14. PROSPER Liaison Officer					0	56 134	56 134	0	0	0	0	0	0	0
15. LO Assistant					0	14 068	14 068	0	0	0	0	0	0	0
Subtotal					0	612 758	500 546	112 212	0	0	0	0	0	0
B. Operating costs (Proj Mgt + Policy)					0									
1. Staff Monitoring Activities					0	47 681	40 529	0	7 152	0	0	0	0	0
2. Stationary and Sanitary Supplies					0	19 867	16 887	0	2 980	0	0	0	0	0
3. Vehicle Running, Repairs, & Maintenance					0	135 096	114 832	0	20 264	0	0	0	0	0
4. Utilities					0	63 575	54 038	0	9 536	0	0	0	0	0
5. Computer & Equipment Maintenance, miscellaneous.					0	11 920	10 132	0	1 788	0	0	0	0	0
Subtotal					0	278 139	236 418	0	41 721	0	0	0	0	0
Total Recurrent Costs					0	890 897	736 964	112 212	41 721	0	0	0	0	0
Total									142 660	683 551	0	0	0	0

(US\$)			Unit	Quantity 2022	Quantity 2023 (half)	Total (2022 + half 2023)	Plan (18 months)	TOT IFAD	GCF Grant	GOG	PFI	Beneficiaries	Private Sector
									TOT GCF	TOT GOG	TOT PFI	TOT Ben	TOT PS
Component 3					0			0	696 552				
Subcomponent 3.2. Policy Engagement					0	2 328 787	1 502 576	142 660	683 551	0	0	0	0
I. Investment Costs													
A. Policy Engagement													
1. Sectoral policy support to GoG					0	3 973	3 377	0	596	0	0	0	0
Short Studies Related to ASWG					0	19 867	16 887	0	2 980	0	0	0	0
TA Support to Green Finance and Green Agriculture					0	5 386	5 116	0	269	0	0	0	0
Studies on Different Policy Topics					0	11 920	10 132	0	1 788	0	0	0	0
Dialogue and advocacy on policy Topics /a					0	18 850	0	16 022	2 827	0	0	0	0
Support to BoG on climate risk and green finance					0	59 996	35 513	16 022	8 461	0	0	0	0
Total Investment Costs					0	0	0	0	0	0	0	0	0
II. Recurrent Costs					0	59 996	35 513	16 022	8 461	0	0	0	0
Total					0	59 996	35 513	16 022	8 461	0	0	0	0
Total Component 3						59 996	35 513	158 683	692 011	0	0	0	0
Grand Total PROSPER						5 926 072	3 313 129	1 847 754	1 591 399	180 712	1 212 540	135 645	

Annex 4b. Exit strategy and sustainability

The design of PROSPER is driven by the imperative to achieve both environmental and financial sustainability in the smallholder agriculture sector in the context of rapid climate change. The project concentrates on investing in the skills, productive assets and institutional development needed to remediate the natural resource base, transition to more appropriate agricultural practices that reduce emissions, and engage in enduring business relationships within the major value chains.

The exit strategy designed for the project comes as a natural and sequential phasing out from supported activities. A high level of participation from the host agency, beneficiaries and partner institutions is planned from the onset of implementation, to ensure effectiveness and progressive leadership from local stakeholders who will be able to continue, scale-up and/or guide and monitor planned activities after project completion. The exit strategy as formulated is to sustain the impact of all activities after closure even if the scope of the project is curtailed in Year 3.

Important aspects designed to guarantee PROSPER's success and sustainability and the continuation of its benefits after completion, include institutional arrangements such as embedding the PCU in the host Government agency, to build capacity on project scope matters, favour collaborative problem-solving and contribute to project ownership throughout PROSPER's entire lifecycle.

The PROSPER design took a consultative and collaborative approach with a high level of participation from all relevant stakeholders, aiming for tailored planning of activities, flexibility and continued sustainability. Capacity building is a key aspect in all planned activities under the three PROSPER components, including project management and policy engagement.

First stages of implementation will rely on situation analysis, a strong targeting strategy and beneficiaries' differentiation according to their level of capitalization and professionalization. This gradual and differentiated approach to be adopted from the beginning of implementation gives strength to the design by providing PROSPER with the capacity to address the developmental challenges of diverse groups in the target areas. The project will cater for distinct levels of competence and ability and build interventions accordingly, thereby allowing beneficiaries classified in the lower tiers in terms of capital and professionalization to access more complex services and support tools as they progress.

Finally, PROSPER has the benefit of the experiences and important lessons from previous and ongoing IFAD-funded operations in Ghana, which encourages increased and faster maturity.

The table below presents PROSPER's Exit Strategy, indicating the activities that are expected to continue after closure by being taken over gradually by relevant organizations and stakeholders or through scaling-up. This information is organized by project component as a reference. Details on the expected timeline, mechanism for handover, national-level commitment, justifications and necessary evaluation processes are shown.

During project implementation, this Exit Strategy will be revisited regularly to test the underlying assumptions and continuing validity in the light of progress. If major restructuring is required, such as reduced size of the replication phase, changing implementation arrangements, reducing and/or increase of scope of components, cancellation, the Exit Strategy will be redesigned in line of the changing context.

Appendix 1. PROSPER Exit Strategy and Sustainability

Reference to PROSPER activity or outcome	Activity to continue post-project	IFAD Support end date	Who will take up the activity	Mechanisms for handover	Commitments from national actors to continue activity	Are further inputs required (funds, trainings, seeds, etc)? Who will provide them?	Can this activity reach greater scale? How?	Comments
Component 1: Development of rural institutions and socioeconomic infrastructure								
1.1 Strengthening of rural institutions and enterprises & Climate proofing smallholder production technologies.	RIs can increase their own capacity by training new members on agronomical practices and farming as a business on their own, including efforts to adopt climate-friendly practices and natural resource remediation. RIs take ownership to scale-up the capacity building experience to non-beneficiaries.	After MTR	Beneficiary RIs.	phasing over	MoFA, DAs, Cluster Committees.	Beneficiary RIs will count with the material and capacity received from PROSPER to continue the task when new members decide to join, and to share their experience with other groups. MoFA and DAs remain as links with IFAD for any necessary updates.	After MTR/towards project completion beneficiary RIs can organize knowledge and experience sharing events with other groups working on similar value chains in former project areas. This will be evaluated/ planned together with the PCU during PROSPER last years of implementation. Cluster-level surveys will serve as an asset to identify scaling-up potential. These knowledge sharing events will also include a specific module on promotion of nutrition-sensitive farming and vegetable cultivation.	Scaling-up. Requirements: Identification of "champions"/most successful cases - Resources to be provided by PROSPER, MoFA/DAs. These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.
	Beneficiary Economic interest groups and MSMEs can share their increased capacity learning curve on enterprise development (e.g. Value addition and support services), including efforts to adopt climate-friendly practices and natural resource remediation, with new members and non-beneficiary groups.	After MTR	Beneficiary Economic Interest Groups and MSMEs.	phasing over	MoFA, BRCs, BACs, DAs, Cluster Committees	Beneficiary economic groups will use the material and capacity received from PROSPER to continue the task when new members decide to join, and to share their experience with other non-beneficiary groups. MoFA and DAs remain as links with IFAD for any necessary updates and support.	After MTR/towards project completion beneficiary economic groups will be incentivized to share knowledge and experience gained through PROSPER with other groups working on similar value chains in former project areas. This will be evaluated and planned together with the PCU during PROSPER last years of implementation. Cluster-level surveys will serve as an asset to identify potential for scaling-up.	Scaling-up. Requirements: Identification of "champions"/most successful cases - Resources to be provided by PROSPER, MoFA/DAs. These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.

Reference to PROSPER activity or outcome	Activity to continue post-project	IFAD Support end date	Who will take up the activity	Mechanisms for handover	Commitments from national actors to continue activity	Are further inputs required (funds, trainings, seeds, etc)? Who will provide them?	Can this activity reach greater scale? How?	Comments
1.2 Development of socioeconomic infrastructure.	PROSPER's Natural Resources (NR) remediation infrastructures will be sustained by local authorities. These also will continue to identify the need for new infrastructure developments.	After Completion	DAs, MoFA	phasing over	MoFA, DAs/local communities	Each capital investment plan will include appropriate management, operation, maintenance and ongoing financing arrangements, with overall responsibility resting with the community. Agreements will be reached between the DAs and the cluster leadership for the post- construction management of infrastructure by various community gender-balanced committees. Resources for infrastructure maintenance and new developments might be needed. Possible sources include: GoG, local communities, development partners, and IFAD additional financing.	Towards project completion, local capacity to sustain the socioeconomic infrastructures will be assessed by the project, along with their capacity to identify the need for further infrastructure developments. In case support is needed in this area, specific sensitization activities will be organized by the PCU during PROSPER last 2 years of implementation.	Maintenance and scaling-up. NR remediation infrastructures may comprise soil and water conservation structures, as well as climate change mitigation measures in line with local conditions. The District Assembly will undertake all procedures to acquire/lease any land needed for construction. PROSPER envisages expanding and rehabilitating strategic road networks (feeder roads and farm tracks, culverts and small bridges), as well as shared domestic water supply structures (boreholes with hand or solar pumps), sanitation facilities and waste management systems, and alternative/green energy schemes (including resource and energy recovery from waste). These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.

Reference to PROSPER activity or outcome	Activity to continue post-project	IFAD Support end date	Who will take up the activity	Mechanisms for handover	Commitments from national actors to continue activity	Are further inputs required (funds, trainings, seeds, etc)? Who will provide them?	Can this activity reach greater scale? How?	Comments
Component 2: Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains.								
2.1 Creation of sustainable marketing linkages and business development	RIs remain engaged in formal partnerships and agreements with public/private entities after PROSPER's comprehensive financial, capacity and marketing support.	After Completion	Target communities /project beneficiaries	Phasing down	MOFA, DAs, Partner entities & institutions, Private Sector	The deep analysis to be commissioned by PROSPER of each VC at the beginning of implementation, together with the interventions on financial literacy, capacity and marketing support to target groups, and the follow up activities, are designed to ensure mutually beneficial and enduring partnerships.	To be evaluated after MTR and regular updates.	<p>The Promotion of linkages between producers and VC actors aims for lasting partnerships between producers engaged in climate-resilient farming and larger-scale agribusinesses. This will concentrate on those RIs and MSMEs that demonstrated interest and potential in the Component 1 capacity building interventions. PROSPER will not enter business relations with the parties at any stage. With the support of the Business Advisory Centres/Business Resource Centres and District Directorates of Agriculture, the project will engage with VC actors in each participating district with an information-gathering and analysis exercise.</p> <p>These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.</p>

Reference to PROSPER activity or outcome	Activity to continue post-project	IFAD Support end date	Who will take up the activity	Mechanisms for handover	Commitments from national actors to continue activity	Are further inputs required (funds, trainings, seeds, etc)? Who will provide them?	Can this activity reach greater scale? How?	Comments
	SMEs and Rural enterprises continue to access business development services. Marketing linkages remain active and profitable.	After Completion	Target communities /project beneficiaries	Phasing down & phasing out	MOFA, DAs, Partner Financial Institutions, Private Sector	Capital and capacity conditions are required to access each type of supported service, to cater to various levels of capacities and professionalization, ensuring each type of enterprise is catered for accordingly.	To be evaluated after MTR and regular updates.	<p>PROSPER design includes key elements that will contribute to the sustainability of project interventions: a sequencing approach, high level of involvement of partner institutions from the onset, a consultative and participatory process and a tailored targeting strategy, allowing a gradual and differentiated access to financial services depending on the capacity and maturity level of beneficiary groups. Development of Business Plans are also differentiated according to beneficiary maturity and capitalization.</p> <p>These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.</p>

Reference to PROSPER activity or outcome	Activity to continue post-project	IFAD Support end date	Who will take up the activity	Mechanisms for handover	Commitments from national actors to continue activity	Are further inputs required (funds, trainings, seeds, etc)? Who will provide them?	Can this activity reach greater scale? How?	Comments
2.2 Access to rural financial services.	Rural households continue using rural financial services (savings and credit facilities). After PROSPER's capacity and financial support, a portion of the MG beneficiaries will have graduated to be eligible for more complex instruments.	After Completion	Target communities /project beneficiaries	Phasing down & phasing out	MoFA, DAs, Partner Financial Institutions, Private Sector	PROSPER will support the creation and strengthening of savings and credit groups (based on the proven successful VSLA model). The revolving nature of the BFF guarantees sustainability in the access to its financial services after project completion.	PROSPER PCU can evaluate the possibility of scaling up during the last years of implementation, using success stories and knowledge sharing within the project areas.	An initial assessment of the maturity of the targeted groups will be conducted from inception: Groups will be evaluated against their level of capitalization, skills in financial management and ability to establish business agreements with VC actors such as traders and processors. They will be categorized into three tiers depending on their maturity level for proper targeting and sequencing to access the different financial services (being able to be re-assessed and graduated to be eligible for more demanding/complex financial tools). These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.

Reference to PROSPER activity or outcome	Activity to continue post-project	IFAD Support end date	Who will take up the activity	Mechanisms for handover	Commitments from national actors to continue activity	Are further inputs required (funds, trainings, seeds, etc)? Who will provide them?	Can this activity reach greater scale? How?	Comments
Component 3. Project management and Policy engagement								
3.2 Policy Engagement	A conducive policy environment to address the developmental challenges targeted by PROSPER will ideally be maintained after project completion, increasing project interventions' sustainability and allowing scaling up of certain activities.	After Completion	MoFA, leading agency, in permanent dialogue with IFAD and partner organizations.	Phasing down	MoFA, Partner Institutions, ICO	Financial partner institutions and the Government will provide necessary resources in case further developments in Green/Climate finance are deemed to be planned for after PROSPER ends.	There is potential for scaling-up through policy ramifications of the new financial sector product "climate/green finance" as a development instrument in Ghana in coping with climate change. PROSPER identifies from Design potential policy alternatives for public-private partnerships to invest in an ambitious Natural Resources recovery and reconstruction programme, which could provide employment for large numbers of people. Climate/ green finance could leverage massive public investment in adaptation and mitigation if a conducive policy framework were devised. This will start to be evaluated together with the PCU and MoFA from the beginning of implementation of Component 2.	<ul style="list-style-type: none"> - After project completion Ghana ICO will continue to participate in policy dialogue activities, as previewed in the COSOP, where contributions to and advocacy for the harmonisation of the sectoral policy will always be salient aspects of the agenda. - PROSPER implementation support structure embedded in the host Government agency aims for permanent involvement in sectoral policy issues identified during implementation, increased capacity to address project scope matters, ownership and solutions finding in collaboration with the PCU. <p>This is continuation of ICO activities.</p> <p>In any case, these arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.</p>

Annex 5. Institutional analysis

The Ministry of Food and Agriculture

The Ministry of Food and Agriculture will be the lead implementation Agency and will chair the steering Committee of the Project, providing leadership and strategic and policy direction. The Ministry is the lead agency for the responsible for the development of Agriculture in Ghana and provides the overall policy and strategic priorities of the sector for planning. Under the decentralized system of Government however, implementation of agriculture activities are ceded to the departments of agriculture which are the Metropolitan, Municipal and District Assemblies (MMDAs). The MMDAs work through the District coordination Councils (DCCs) through the Regional Coordinating Councils (RCCs) to the Ministry of Local Government and Rural Development in terms of political administration. In relation to technical services, the DCCs and RCCs work up to the Local Government Service.

The Ministry has seven technical Directorates, four line directorates and three Government Subvented Organizations (see organogram attached). The mandate of the National Directorates is limited to policy formulation, technical backstopping of the Regions and Districts and monitoring and evaluation. All the technical services of the Ministry are decentralized except two – the Veterinary services and Plant Protection and Regulatory Services.

Several directorates of MoFA will be involved in the implementation of the project. These include the Directorate of Agricultural Extension Services to provide oversight on dissemination of technology by Agricultural Extension Agents at the district levels; the Crops Services Directorate to provide support and oversight on natural resource management activities, the Animal Production Directorate, the Veterinary Services Directorate, the Women In Agricultural Development Directorate with oversight for gender and nutrition issues and the Policy Planning Monitoring and Evaluation Directorate overall monitoring of the project as an integral part of sector monitoring activities. Among all While many of these directorates will play supporting role, the Dbe collaborating with the project

Role of the Directorate of Agriculture Extension Services (DAES)

The Directorate of Agriculture Extension Services plays the following functions:

- Extension Policy Formulation, Planning and guidance
- Co-ordination of National Pluralistic Extension and Rural Advisory Services
- Technical backstopping of Extension Activities at the Regional and District levels
- Monitoring and Supervision of all Extension Service activities in the Regions and Districts

The Directorate of Extension Services will have a greater role to play in the implementation of PROSPER. This is because the key activities of project involve training of clients who are largely smallholder farmers in natural resource management and supporting them through farmer-based organizations to access good and services under the project. The mobilization and training of famer Based Organizations is done by Agricultural Extension Agents. PROSPER will support DAES to provide policy guidance and supervision for the delivery of extension services at the Regional and district levels. To ensure this is done effectively, the Project will establish a liaison office at the DAES to provide the constant link between the policy level operations and the project coordination office which will be located in the project area.

Role of Regional Department of Agriculture: The Regional Departments of Agriculture (RDAs), under the Regional Coordinating Councils are responsible for (i) supervision of extension activities in the Districts (ii) monitoring of extension activities in Districts and training of District staff. The RDAs report to the Council, the Local Government Service, the Ministry of Local Government and Rural

Development as well as the Minister for Food and Agriculture. Each region is staffed with Development officers in the technical areas of expertise that reflect national technical directorates in most cases. For example, there are Extension development officers, Crops development officer, Agriculture Engineering Development Officer, monitoring and Evaluation Officer, Animal Production officer and WIAD Officer. The Veterinary and Plant protection development officers are also part of the team at the regional offices even though they are not decentralized. PROSPER will support the Regional Departments of Agriculture to provide oversight and monitoring of activities of the District Departments of Agriculture,

Role of the District Department of Agriculture: Delivery of Extension Services is ceded to the District Assemblies and implemented by the District Departments of Agriculture. All decentralized departments are under the supervisory authority of the Local Government Service. The District Departments of Agriculture are staffed with Agricultural Extension Agents of varying degree of qualifications. The DDA are responsible for day-to-day implementation of field extension services, provision of market and rural advisory information to farmers, conduct of demonstrations and training of farmers and other producers.

PROSPER will use the Government Extension services to mobilise Farmer Based Organizations under the Project and provide them with training, agricultural services and conduct demonstrations as required to develop and transform the FBOs into profitable rural institutions.

Extension Services at the district level received a boost in the last four years in terms of the numbers of Agricultural Extension Agents (AEAs), which increased from 1586 officers in 2016 to 4,286 in 2020. This improved Extension officer to farmer ratio from 1:1,900 to 1:709. Under the support of the Modernising Agriculture of Ghana funded by Global Affairs Canada, over 3,367 motorcycles were supplied to AEAs to enhance their mobility and delivery of services. The MAG programme also retrained and reoriented AEAs on market-oriented agriculture to broaden their skills beyond agronomic and production techniques to include post production agricultural activities.

Under Prosper, AEAs will be further strengthened during the project to be effective in mobilization and development of farmer based organizations and training them to be able to access services of the project.

The Veterinary Services Directorate

The Veterinary Services would play a very critical role in the implementation of PROSPER by supporting the districts to provide disease control and prevention services to clients in the poultry value chain. The following services will be provided.

The Value Chain starts with Day Old Chicks and veterinary Services would carry out microbial load determination in all active hatcheries to enable quality day old production,

Procurement of Vaccines and biologicals and veterinary medicinal products to support and motivate poultry farmers (especially dewormers and disinfectants)

Stepwise Laboratory improvement pathway for veterinary laboratories in the project regions in Wa, Bolgatanga, Dormaa Ahenkro, Sunyani and the National Food Safety Laboratory in Accra which serves as Reference Laboratory. The procurement of reagents, consumables, and basic equipment (fridges, deep freezers other cold chain containers or vaccine carriers).

Antimicrobial stewardship to farmer base organizations

Training of farmers and MoFA staff on veterinary disease recognition and early reporting, the importance and benefits of vaccination against vaccine preventable diseases and biosecurity.

Strengthening of veterinary clinics to become adequately equipped and functional in the project regions and districts.

Provision of means of transport (motor bikes and vehicles) to the project areas to enable veterinary officers reach out to farms/farmers for monitoring and surveillance activities.

Business Advisory Centers (BACs)

The Business Advisory Centres (BACs) are institutional structures established by the Rural Enterprises Programme (REP). Since the inception of REP in 1995, three generations of BACs have been reshaping and upscaling the district support system for MSEs in Ghana:

1995 - 2002: REP-I: 13 district BACs established in the Ashanti and Brong Ahafo regions

2003 - 2011: REP-II: 53 additional district BACs established in all then 10 regions of Ghana bringing the accumulative total to 66 (incl. the 13 REP-I districts)

2012 - up to now: REP III: 95 more district BACs established nationwide (16 regions)

There are currently 180 BACs spread all over the country. The BACs have been established under a tripartite arrangement between REP, NBSSI (now GEA) and the participating District Assemblies. BACs play the role of district-based facilitators and delivery mechanisms of business development services (BDS).

Still supported by the Rural Enterprises Programme, main activities are of the BACs are:

- organising business orientation seminars;
- offering community-based skills training;
- offering small business management training;
- providing information and referral services and business counselling services;
- facilitating access to finance and technology;
- promoting the establishment and strengthening of local business associations (LBAs);
- leveraging resources from other stakeholders for SME support.

The BACs work closely with the Metropolitan, Municipal and district Assemblies. During district planning process the BACs identify the district needs and weekly activities in relation to the needs are planned. The plans are submitted to the Regional Secretariat for endorsement after which they are submitted to the GEA. The weekly plans help in monitoring by making the regional and headquarter know the activities the BACs are involved in at any point in time.

The BACs are staffed with by a Head and a driver provided by GEA and a Business development officer provided by the Assembly. The office is however able to leverage on expertise from other departments of the Assembly such as the Community Development, Department of Agriculture, NCCE and Social Welfare to support their work.

With anticipated increase in demand for services by the BACs under PROSPER, there will be need for more experts, especially in the area of identification and mobilization of FBOs and training to enable them access products and services. These capacity gaps will be mitigated by recruiting Technical Assistants to support where and when necessary. It is also recommended that GEA have standing arrangements with a pool of experts that can be called upon to support the BACs in carrying out their activities.

In terms of revenue mobilization, BACs are given regional and district quotas for Internal Revenue Generation. They also develop proposals and concepts notes and seek for funding for their trainings. Since the BACs plans are integrated into the Assemblies MTDPs and Annual plans, the Assemblies support the BACs activities

PROSPER will provide support to the BACs to carry out the training and business development services on a cost sharing basis. Where clients are unable to pay for certain services upfront, they will be factored into the Grants or loans they will be receiving.

Business Resource Centres (BRCs)

The Business Resource Centres (BRCs) are district-based one-stop-shop business support units established under the Rural Enterprises Programme to provide a wide range of Business Development Services (BDS) to potential and existing entrepreneurs and enterprises. It also operates as financial and investment facilitation hubs and business information repositories for Micro, Small and Medium Enterprises (MSMEs). There are currently 37 BRCs in operation out of estimated 67 planned for the country. A BRCs operates within a zone or catchment area that is supposed to cover at least 3 districts.

The BRCs are housed in specially designed office complexes and well equipped with human resources and facilities that will ensure effective delivery of quality BDS in the districts. The offices are currently managed by highly qualified consultants hired under the REP. The operations and management of the BRCs are in line with Government policy direction of providing a supportive and sustainable environment for businesses across the country. Accordingly, private sector participation in the management and operation of the BRCs is considered necessary for providing services of the level and quality that will be attractive and valued by the target market. The operations and management of the BRCs will therefore be under a public-private-partnership in the nature of a franchise arrangement under the supervision and regulation of the Ghana Enterprises Agency (GEA). Having piloted the operations for one year, a study is being conducted to inform franchising arrangements for the management Centers.

Each BRC is has eight (8) core staff made up of four (4) management members, 3 officers and a driver. They include: (i)General Manager (GM), (ii)Business Development and Marketing Manager (BDMM) (iii) Finance and Administration Manager (FAM), (iv)Information Communication and Knowledge Manager (ICKM), (v) Accounts Officer (A/O), (vi) Human Resource and Admin Officer (HR/ADMIN), (vii) Front Desk and Client Service Executive (FD/CSE) and (viii) Driver

Activities undertaken by BRCs include:

- Business opportunity identification
- Value chain development
- Business consultancy and technical assistance for Public and Private sector institutions, Projects and NGOs.
- Facilitation of access to finance/credit
- Facilitation of access to market
- Business health check (Business diagnostics)
- Business start-up protocols e.g. preparation of Standard Operating Procedures (SOPs) and other Manuals
- Training in Management and Entrepreneurship
- Productivity improvement
- Capacity building for Public and Private sector institutions.

Under Prosper the BRCs will identify qualified beneficiaries (priority will be given to existing FBOs and Enterprises) and after screening their needs, provide them with training and skill development to enable potential clients access the products of the project. Other activities will include financial education business planning, preparation of a basic business plan and supporting with business

development advisory services. This will be done in collaboration with the District Departments of Agriculture and the Business Advisory Centers.

Under PROSPER it is envisaged there will be increased demand of services by the BRCs. This was anticipated designing the BRCs. As a result, a roster of about 200 consultants and other professionals such as accountants, Business Development Specialists, Lawyers, Engineers and other experts from varied fields and background are available for the BRCs to rely on to handle assignments they might not have the capacity for.

In addition, the BRCs also mitigates its capacity gap through institutional partnerships with various departments at the district level depending on the type of expertise it wants to leverage on. For instance, the BRC has an institutional partnership with the District Agric Department and MOFA Offices to handle Agric related assignments and projects.

The BRCs collaborate strongly with business regulatory and financial institutions such as the Registrar Generals' Department (RGD), Ghana Standards Authority, Food and Drugs Board, Ghana Export Promotion Authority (GEPA) to serve as their representatives at the district level. PROSPER will partner with the BACs and the BRCs to provide skill training, business development services as well avail the services of other agencies under their umbrella to prospective clients.

The services provided by the BRCs and related costs are indicated in the table below Is the PROSPER going to pay for these services on behalf of the clients?

Training and BDS services and their related costs.

NO	BRC SERVICE SUITE	COST ESTAMATES (GHS)
1	Business Plan Preparation	500.00 – 2,500.00
2	Credit Facilitation	10 -25% of Interest Earned by PFI. 50.00 – 100.00 facilitation fee by client.
3	Business Health Check and Diagnosis	200.00 – 500.00
4	Consultancy and Advisory Services	200.00 – 5,000.00 (SMEs) 5,000.00 – 15,000.00 (Large Companies)
5	Regulatory Services Facilitation: RGD, GEPA, GIPC, GSA, FDA, EPA, PPRSD	Facilitation Fee of 100.00 – 250.00
6	Training Services: Entrepreneurship Training Skills Training Functional Management Training Customized In-Plant Training	100.00 – 200.00/participant 250.00 – 1,000.00/head 3,000 – 10,000/session 5,000 – 15,000/institution

Village Savings and Loan Schemes: Credit is one of the key constraints often cited by smallholder farmers to be a limiting factor in their agribusinesses be it for production, harvesting, marketing and processing. Lack of access to loans is often attributed to lack of information, high interest rate, lack of collateral and high cost of informal loans.

The Village Savings and Loan Schemes (VLSC) was introduced by CARE International in 1991. It is a model that uses the ancient practice of group savings. It only requires a lock box with three keys and basic financial training. The groups are established and trained to develop a savings culture in the community that allows them to save and also access small loans to invest in income generating activities. The groups thrive on mutual trust, accountability and transparency in all their transactions. The regular meetings of these groups for several years lead eventually to building trust and strong bonding among community members that can be used to their benefit. A study by Bill and

Belinda Gates of 331 groups in six countries show that 98% of the groups continued to actively meet after 18 months and 90% continued to operate after five years.

The regular meetings of these groups for savings and loans purposes could be leveraged for training and transfer of technologies on farming practices, post-harvest management and nutrition.

In Ghana, many projects and NGOs have used the Village Saving and Loan Groups to bring about financial inclusion of poor farmers and to help access formal loans as they develop. PROSPER will leverage on the lessons of the experience of these projects in the project districts to scale up the financial inclusion and access to the Blended Financial Facility. The Greater Rural Opportunities for Women (GROW) project is an example as narrated below.

Greater Rural Opportunities for Women (GROW) Project funded by the Global Affairs Canada and implemented by Mennonite Economic Development Associates (MEDA) in 8 districts in the Upper West Region used the VSLA model to empower women farmers to create opportunities through cultivation, utilization and sale of soybeans, accessing extension services and markets to increase their household's economic well-being.

Under the project, women were linked to appropriate financial services, including Village Savings and Loan Association (VSLA) groups, financial institutions and insurance providers.

In total, GROW helped to establish 1,016 Village Saving and Loan Groups (comprised of 21,000 women in total) reaching all corners of the region in which the project was operational. The Village Saving and Loan Groups in the GROW project were established by MEDA's key facilitating partners (KFPs) and are community-based and member-owned groups. MEDA KFPs, CAPECS, TUDRIDE, CARD, ProNet and PRUDA, provided regular support and guidance for female farmers to establish and run their Village Saving and Loan Groups throughout the life of the project. Village Saving and Loan Groups provided a venue for the female farmers to save and borrow for both their personal and business needs, and also enabled female farmers to create credit history if their groups save with FSPs.

GROW Village Saving and Loan Groups had between 15 and 30 female members. This number varied in the project depending on the size of the community where the VSLA was established, as well as the number of groups in each community. Each member made a required weekly deposit of between GHS 5-10, and the pooled funds served as loan capital for any members wanting to borrow. In addition to the compulsory savings, there was a weekly collection of GHS 1 per member for the VSLA's emergency fund. Members paid into an informal 'insurance' plan and could claim support from this fund for unexpected costs, including funerals or other unforeseen circumstances.

The governance of the GROW Village Saving and Loan Groups was consistent across the project region. The group elected a group management committee consisting of three members: a chairperson, a secretary, and a treasurer. The committee organized the operations of the VSLA which included facilitating group meetings, collecting regular savings, approving and issuing internal loans to the group members based on any requests and monitoring repayments.

MEDA KFPs facilitated the formation of Village Saving and Loan Groups in each of the GROW supported communities. KFPs provided the blueprint for group formation, election of the management committee, development of internal bylaws and other required initial support. KFPs then supported the groups through regular monitoring, and coaching on an as-needed basis.

Membership was voluntary and required committing to the group by-laws, which were explained and clarified by the chairperson. All groups were retained written constitutions, but rules were announced orally, as were all balances discussed at the meetings, to accommodate the low level of literacy and numeracy in Ghana's remote rural areas.

The VSLA loans were much cheaper than members could receive from external lenders, easy to access, and repayment terms were more flexible and determined collectively. For these reasons, a VSLA loan was preferable for women with lower incomes who were just beginning to grow their businesses. A loan from an external microfinance institution (MFI), for example, costs a minimum of

3% per month in the areas where GROW groups were established. A VSLA loan, on the other hand, cost only GHS 1 for each GHS 100 borrowed, which makes interest 1% per month, a third of the cost of a commercial loan.

GROW's VSLA members saved mainly for three purposes: to cover education costs, housing maintenance, and for agricultural investment. Loans were used in a similar way, depending on the farmer's income levels.

The loan size was determined based on the amount of individual savings a member had in the group: for most groups, the maximum amount of funds lent to an individual was three times the amount that that member had saved. A further benefit to the borrower in the VSLA is that the interest is paid into the pool of funds and equally divided amongst members at the end of each year or cycle. During the life of the GROW project, the Village Saving and Loan Groups completed 6 cycles.

Farmer Based Organizations (FBOs)

Farmer Based Organizations is a common name given to self-help organizations formed in communities for various purposes. The principal objectives for establishing FBOs is to make it possible and cost effective to reach many farmers and other agricultural actors with information and services without having to meet them individually. They are organized to enable them access information, inputs, markets, credit and to have a strong voice and representation to participate in policy advocacy.

FBOs are often organized by projects and used as entry points to provide project services to communities. They are also organized by the Government's Extension Services at the community level to enhance technology dissemination. Several NGOs, often funded by projects, are involved in community mobilization and formation of Groups.

Ghana has witnessed many governmental and nongovernmental projects seeking to promote FBO development. For example, between 2000 and 2007, the World Bank alone invested more than US\$9 million for the development of FBOs under the Agricultural Services Sub-sector Investment Project (AgSSIP). Similarly, the Millennium Challenge Corporation (MCC) also approved a five-year US\$547 million anti-poverty compact with the Government of Ghana and a significant proportion of this amount was used for the development of FBOs. More recently, under the Northern Rural Growth Programme (NRGP) (2008-2016), A total of 8,127 FBOs were reached compared to a target of 2,000 at mid-term. Over attainment owed to new implementing partners in 2015, bringing with them other FBOs with whom they already worked. This was made up a total of 201,746 members (41 per cent men to 59 per cent women), evident that the project succeeded in targeting women as was required. At completion 1,625 FBOs were functional, representing 20 per cent of the FBOs reached. The low numbers were attributed to the large number of FBOs brought by implementing partners

FBOs are involved in an increasingly diverse range of collective activities. There are production, processing, marketing and multipurpose FBOs. Some FBOs have also attracted interest as vehicles for providing an array of collective services including common property management, technology development and testing, design, financing and management of rural infrastructure, and marketing of key production inputs or farm outputs. The rationale for many projects supporting the development of FBOs is to facilitate access to credit, farm inputs, extension services and markets for their produce, given the smallholder nature of agriculture.

Farmers use FBOs to engage in collective action on a daily basis such as: a) planting and harvesting together on the farm land; b) pooling labor on fields; c) using a common facility for marketing their products; d) supporting each other financially through saving and credit schemes as well as to acquire credit from organizations; and e) procuring agricultural inputs.

The FBO landscape in Ghana is still not formalised. A study by IFPRI in 2012 reported that approximately 79% of the FBOs were registered with at least one of the following: the Department of Cooperative, the District Assembly, MoFA, Registrar Generals Department, and Farmer Union. About 85% of the FBOs in the Southern Ghana were registered, as compared with only 60% in the North. About 57% of the FBOs that were registered are smallholder-dominated.

FBOs are set up by government agencies, NGOs, and private organizations and individuals. In Ghana, agricultural extension agents (AEAs) play a very important role in the establishment of FBOs, especially when FBOs are set up through government projects. From the IFPRI study, a variety of people initiate FBOs including individual farmers, officials from government ministries and agencies (usually AEAs), NGOs, chiefs and opinion leaders. Opinion leaders include teachers, assembly men and women, members of parliament, retired public officers, and some elders of the communities.

The study showed that 42% of the FBOs were self-started and (58%) externally started. Farmers who initiate the establishment of FBOs often live within the community where the FBO is set up; however, in the majority of these cases, the initiators reported that they established the FBO because they observed that other FBOs were receiving benefits, usually from government and NGOs. We observed that farmers who led the formation of FBOs typically became leaders of the groups after they were established. More of the largeholder-dominated FBOs are externally started, as compared with smallholder-dominated FBOs. Although the initiators of FBOs often select the groups' members, in about one third of the cases, people are asked to join freely.

FBOs engage in more than one activity. The four most common collective activities among FBOs are mutual labor support, production, welfare services and input procurement. However, mutual labor support and welfare services are traditional collective activities that have been observed since pre-colonial times and are mainly geared towards food security and social welfare. While production and input procurement are recent initiatives in FBOs, they are done on very small scale. FBOs that engage in production tend to also engage in input procurement. FBOs that are self-started engage in more collective activities than externally started ones.

The most common form of support FBOs receive is technical training since they serve as platforms through which AEAs and other agencies transmit technical training. Whether FBOs are self-started or externally started, they seem guaranteed some technical training from AEAs. Regardless of the type of support, externally started FBOs receive more support than self-started ones.

Many of the FBOs that are externally started especially due to project benefits easily disintegrate at the end of the project.

Weak farmers organisations have resulted in the limited presence of collaborative and remunerative models for access to inputs and markets through Farmer-based Organisations (FBO)s. FBOs' presence in rural communities is variable from a few to many. Less than 50 per cent of them are considered active, and relatively larger farmers usually dominate the functional FBOs. Often FBOs with successful linkages to offtakers have limited outreach and typically exclude the smallholders. Gaps in access to market infrastructure have led to the inability of the smallholders to store their commodities and wait for prices to improve. Consequently, they are compelled to sell their produce to traders even when the offered prices are much lower than those in the previous seasons. Limited post-harvest assistance has created gaps in processing and value addition capabilities at the local level and sometimes high incidence of post-harvest losses.

In the implementation of PROSPER the Government Extension Agents should be guided by criteria to select existing groups that have out-lasted projects and continue to meet their objectives for forming the group. The FBOs to be involved should have also been registered with any of the recognized agencies at the district level. PROSPER should focus on building on existing FBOs to improve on their capacity to demonstrate good results for replication than trying to reach out to many FBOs as a project target.

Cooperatives: A cooperative is made up of people who are united with the purpose of mutual self-help and are organized for other economic and social objectives with the intent to be based on equality and equity. They must provide the people with necessary goods and services or make joint use of their available resources top increase their income.

There are many types of cooperatives in Ghana and include:

Agricultural cooperatives are engaged in food production, processing and marketing.

Industrial cooperatives are involved in rural cottage industries such as local alcohol distillation, handicrafts, Kente weaving, cloth dying and manufacturing, etc.

Financial cooperatives are engaged in savings mobilization in both rural and suburban areas. For example: micro-loan banks, credit unions and "susu" collectors.

Service cooperatives are involved in the service industry such as transport, consumer societies, etc. Some FBOs are registered as cooperatives if they meet all the requirements included registration with the Department of cooperatives.

In Ghana, cooperatives were first introduced in 1928 in an attempt to improve the quality of cocoa for export. They were so successful that, by 1960, the cooperatives were marketing almost 40% of the entire cocoa crop.

Cooperatives play a unique socio-economic role because of four distinctive features: they are organized for mutual self-help; they apply democratic practices to business; they are organized to solve social and economic problems; and respect human values and the rights of individuals.

Cooperatives in Ghana are brought together at the national level under the Ghana Cooperatives Council.

PROSPER will work with the Department of Cooperatives in the development of FBOs to a status that qualifies them for registration under the Cooperative Act...

The Ministry of Environment Science, Technology and Innovation (MESTI)

The Ministry of Environment Science, Technology and Innovation is one of the sector Ministries. It exists to promote sustainable environmental management and the adoption and application of science and technological innovations through the formulation of policies, monitoring and evaluation of the implementation of sector plans, Programmes, and projects for national development. The main objective of MESTI is to ensure accelerated socio-economic development of the nation through the formulation of sound policies and a regulatory framework to promote the use of appropriate environmentally and friendly, scientific and technological practices and techniques. It has no regional offices. MESTI will be a member of the Steering Committee of the Project, providing strategic insights.

It has six agencies. They are - the Council for Scientific and Industrial Research (CSIR) which has about 14 research institutions, seven of which are agriculture related; the Ghana Atomic Energy Commission, The Environmental Protection Agency (EPA); the Land Use and Spatial Planning Authority; the National Biosafety Authority and the Nuclear-Regulations Authority, Ghana. The CSIR and EPA will be involved directly or indirectly in the project implementation.

The CSIR will be involved through the Research Extension Linkage Committees (RELCs). The RELCs are multistakeholder structures established at the regional level and driven by researchers from the agricultural Institutes of CSIR and Agricultural Extension Officers to identify and discuss farmers' challenges with the view of bringing researchable solutions to stakeholders. Since Extension will be involved in the implementation of the project, the RELCs will be a useful platform for presenting challenges of farmers in production technologies and natural resource management issues.

Environmental Protection Agency (EPA)

The Environmental Protection Agency is the leading Government organization for protecting and improving the environment in Ghana. They are mandated to ensure that air, land and water are looked after by everyone in today's society, so that tomorrow's generations inherit a cleaner, healthier world. They have existed for more than 40 years and have offices across Ghana working on and carrying out Government policy, inspecting and regulating businesses and reacting when there is an emergency such as a pollution incident.

The EPA will be involved directly in the implementation of the project at the regional and district levels through the Stakeholder platform meetings and providing technical guidance in the implementation of the natural resources management activities.

The Ministry of Trade and Industry

The Ministry of Trade and Industry (MoTI) introduced its economic and industrial transformation agenda aimed at catalysing the Government's industrial policy initiatives. The Ministry has several agencies supporting trade promotion. They are the Ghana Export Promotion Authority, Ghana Standards Authority, the Ghana Enterprise Agency (a recent recreation of the National Board for Small Scale Industries to support the development micro, small and medium scale enterprises) and the GRATIS Foundation of Ghana which does fabrication and machine tools. The MoTI will be involved in the project at the strategic level on the Steering Committee and through the BACs and Business Resource Centres (BRCs) who are under the GEA.

The Ghana Commodity Exchange

The Ghana Commodity Exchange (GCX) is an electronic marketplace or a platform for buying and selling listed commodities. The commodities currently traded are maize, soyabean, sorghum, sesame and milled rice. They will later expand to include cashew, coffee and paddy rice. Starting with spot contracts for physical products, GCX will later trade in futures and options contracts for the listed commodities. PROSPER will collaborate with GCX for market access to FBOs and Value Chain Drivers. The Ghana Commodity Exchange (GCX) provides farmers with access to certified warehouse services. The strict quality requirements to avail the facility renders beyond the immediate capacity of most smallholders.

World Bank: The World Bank is funding the West Africa Food Systems Resilience Programme beginning in 2021. The project is aimed at strengthening regional food systems risk management, improve sustainability of productive based of targeted areas and develop regional agriculture markets. The project will focus on three areas at the national level (i) Strengthen creation and provision of digital advisory services for farmers (ii) strengthen food security through sustainable practices in targeted area and (iii) support to development of strategic value chains. PROSPER has many areas of collaboration with the World Bank project and during the design mission the Mission Team engaged with the World Bank Management to identify specific areas of collaboration during implementation and commitment from both sides to agree on a workable mechanism for the collaboration.

Partnership with other Development Partner Projects: During its implementation PROSPER will also explore partnerships with projects of other development partners such as the Ghana Financial Sector Development Programme of the World Bank about the development of Village Saving and Loans Associations (Village Saving and Loan Groups) and their linkage to formal financial services. It will also explore linkages to the KFW supported OVCF and the DANIDA supported Rural Development Fund (RDF) for developing value chain financing linkages in the project areas. The Project will identify the presence of other donor and government supported projects in the clusters, mainly the ones which are focused on strengthening extension services and capacity building of FBOs. PROSPER will partner with these initiatives to ensure synergies and complementarities in delivery of services to the target groups.

Green Climate Fund (GCF)

PROSPER is expected to be co-financed by the GCF through the IGREENFIN project. The GCF approved IFAD's IGREENFIN concept note and project preparation facility (PPF) request on 5 February, 2021. The PPF funds for the design of the full-funding proposal for IGREENFIN-1 (covering Burkina Faso, Ivory Coast, Ghana, Mali and Senegal) have reached IFAD. According to the GCF website, the relevant full-funding proposal is tentatively scheduled for the GCF Board presentation in November 2021 (together with the full-funding proposal of the Great Green Wall Umbrella Programme).

The GCF will support PROSPER to i) carry out climate risks analysis and to develop the capacity of CIs to respond to these risks ii) support the outreach of climate adapted credit products to the target households and iii) enhance the outreach of microinsurance services in the project areas. IFAD has developed a simplified accelerated process (SAP) on inclusive green finance. The first SAP proposal,

for Niger, has been approved by the GCF board. The business model of the SAP for Niger is going to be replicated in the region under a regional program in which Ghana will be included. With this proven model, the design process will be shorter than that of Niger which took seven months. The mechanism on how GCF will be disbursed, accessed and implemented will be drawn from the Niger model.

GIRSLA

The Bank of Ghana (BoG) and the AfDB have supported GIRSLA's credit guarantee services by contributing to the GIRSLA guarantee fund (US\$72 million). Investment income from this fund enables cross-subsidization of the cost charged for portfolio guarantees. GIRSLA guarantee fund will serve as 60-80 per cent collateral supporting BFF credit disbursement from PROSPER Participating Financial Institutions (PROSPER PFIs) to offtakers and FBOs. The implementation arrangements for GIRSLA credit guarantee support will involve partnership agreements between GIRSLA and the PROSPER PFIs. These agreements will define mainly the eligibility criteria of PROSPER PFIs, expected volume of guarantee required, terms and conditions for GIRSLA support, capacity building needs of the PROSPER partners to be effective partners, the implementation steps for obtaining GIRSLA guarantee and the settlement procedure in case of default faced by PFIs. PROSPER will participate in these agreements as a partnership facilitator by i) assisting the PFIs to meet the GIRSLA terms and conditions and ii) supporting the smooth and timely implementation of guarantee cover before BFF disbursement and settlement (where relevant) after disbursement. Based on these agreements, the GIRSLA investments (collateral guarantee) will be made directly at the product level connected to the volume of BFF funds disbursed by the PROSPER PFIs. The PROSPER PFIs and GIRSLA will report to PROSPER about the volume of credit guarantee funds used to support the disbursement of the BFF.

ARB Apex Bank: PROSPER, in coordination with the BoG will partner with the ARB Apex Bank in the development and management of the BFF. ARB APEX Bank has signed a commitment to contribute \$2,5 million of its own resources in providing funds to beneficiaries of the programme. PROSPER will also leverage on partnerships already developed by other IFAD projects such the REP, GASIP and AFFORD with the Rural Banks. ARB Apex Bank will provide oversight and supervision to the Rural and Community Banks (RCBs) participating in the Project, disbursing the Blended Finance facilities through the RCBs to the beneficiaries and ensuring recovery and reporting.

African Development Bank (AfDB)

IFAD and AfDB have long standing history of collaboration and partnerships through the cofinancing of IFAD funded projects, such as NRG, REP and AFFORD – the latter through the de-risking instrument Ghana Incentive Based Risk Sharing Agricultural Lending Scheme. AfDB is currently implementing the Savannah Agricultural Productivity Improvement Project (SAPIP) and the Savannah Investment Project (SIP) in the Savannah region. SAPIP began in 2018 to support the RFJ programme and aims to transform agricultural value chains for food and nutrition security, job and wealth creation. SIP began in 2019 to support the RFJ programme and aims at improving production, develop agribusiness and value chain and facilitate access to finance. PROSPER will leverage on SAPIP's work of strengthening linkages between value chain actors and productivity enhancing interventions using climate resilient technologies, as well as the introduction of nutrition sensitization activities into communities through cultivation of vegetables and dietary education. PROSPER will explore partnerships with SIP through the district stakeholder value chain meetings, to promote the development of maize, soya and poultry VCs, as well as learn from SIP's financing instruments developed during implementation. Opportunities for collaboration and co-financing with the AfDB pipeline project titled the Savana Agriculture Value Chain Development Project will be pursued. The project will focus on integrating maize, soya and poultry value chain and building on the strengths of SAPIP and SIP. The project timeline will be confirmed soon.

Annex 6: Institutional Aspects and Implementation Arrangements

Organization of PROSPER

Overall Responsibility and Orientation

The Ministry of Food and Agriculture (MOFA), in its capacity as Lead Project, will have overall oversight responsibility for the implementation of PROSPER. It will ensure linkages to other related Ministries, Departments and Agencies (MDAs).

The Lead Programme Agency will establish a National Programme Steering Committee (NPSC) that will steer Programme implementation strategy, oversee planning, review progress and impact, and ensure linkages with related projects, government services and relevant value chain stakeholders. The NPSC will be meet at least twice yearly and will be chaired by the Minister of MOFA and the National Programme Director will act as secretary.

Programme Coordination and Management

The Programme Coordination Unit (PCU) will be based in Tamale, in the Northern Region. The PCU will ensure (i) overall coordination of the Programme including the special arrangements of the management of IGREENFIN with Apex Bank; (ii) implementation of Subcomponent 3.1 (policy dialogue, knowledge management); (iii) support supervision and other missions, including evaluation missions, baseline and reference surveys and data collection and analysis; (iv) consolidation of the Annual Work Programme and Budget (AWPB); (v) consolidation of progress reports; (vi) fiduciary oversight, including consolidation of PROSPER accounts, preparation of annual financial statements, disbursements, organization of external audits in line with IFAD guidelines; (vii) promotion of transversal themes, including gender and youth; (viii) organize capacity building events of PCU & Project Implementation support staff at DAES and Regional Offices. (viii) elaboration and updating of implementation manuals.

The staff of the PCU shall comprise a National Programme Coordinator, a Senior Policy and M&E Manager and Assistant, a Financial Manager, a Procurement and Contract Manager, a Senior Climate Change Adaptation and Mitigation Specialist, two Manager, an Infrastructure Manager, One Senior Value Chain/Agri-Business Expert with two others, a Rural Financial Services specialist, a gender/vulnerability/social inclusion specialist, a Geographic Information System specialist, other professional and support staff identified in the design phase of the Programme required for the implementation of the Programme. The responsibilities of each position shall be detailed in the Programme Implementation Manual.

The PCU staff shall be hired by the Lead Programme Agency competitively and in accordance with criteria and procedures to be developed in agreement with the Fund. The appointment of such personnel shall have IFAD's prior no objection.

Roles of Regional and District Departments of Agriculture

The Decentralized Departments of Agriculture at the Regional and District levels will play a major role in the implementation of the Project. The Regional Departments of Agriculture will designate a senior officer, not below the rank of an Assistant Director as focal point for the Project, who shall coordinate the implementation of project activities in the selected districts in the Region. The PCU will work closely with the Regional focal point to oversee and backstop the activities of the districts. The Regional offices will work with other implementing partners at the regional level such as the Business Resource Centers and other departments to ensure effective implementation of the project. They will be responsible for preparing the Regional Workplan and Budget, backstopping the districts in training and monitoring and reporting on progress of Project to the PCU.

The District Director of Agriculture will be responsible for the implementation of the Project at the district level. With the guidance of experts from the PCU and other consultants, the AEAs will work closely with the Business Advisory Centers to identify and mobilize qualified Rural Institutions such as the Farmer Based Organizations, Cooperatives and faith-based organization and train them to enable them access project facilities. The AEAS will also provide extension services to the clients. The PCU and business development facilitators will assist the Department of Agriculture in their work.

The Business Resource Center will be responsible for providing business development advisory services to clients of the project that have graduated from matching grants to quality for Blended Finance Facility. They shall also identify and assist small and medium scale enterprises in the project areas who qualify for the BFF to prepare business plans with integration of climate change and adaptation and mitigation measures.

The Programme will sign MoUs with the RDAs, DDAs, BACs and BRCs that stipulate key responsibilities and deliverables by all parties in the district and the region. If required, performance-based contracts with specialized consultants, trainers and service providers will be signed.

B. Implementation of Components

Component 1: Development of rural institutions and socioeconomic infrastructure. The expected outcome is: Improved and sustainable livelihoods in target areas supported by strengthened rural institutions and improved socioeconomic infrastructures. This component is concentrated on investing in “public goods” within and for the benefit of the targeted 90,000 beneficiaries in the project areas.

Subcomponent 1.1 Capacity building of rural institutions, enterprises and households

The District Department of Agriculture with the support of a service provider will identify the rural institutions comprising farmer-based organizations, cooperatives and faith-based organizations that included the targeted clients such as women, youth and PWDs. The targeted vulnerable people could also be individuals identified who qualify for the project services.

Through regional and district level consultations facilitated by the PCU, project target districts will be selected starting with three regions in the first phase. This will be followed by identification of targeted groups and clusters taking into consideration the value chains promoted, food security status, climate risk related to land degradation and unsustainable farming practices, proximity of existing financial institutions.

Three types of groups will be identified in each district and cluster: (i) rural institutions including farmer-based organizations, cooperatives, village loans and savings Associations, faith-based organizations (the project will start with existing institutions (ii) Micro, Small and Medium Enterprises (MSMEs) of characterized by the number of people employed⁵⁷ (iii) Vulnerable groups comprising poor people and PWDs.

In each selected district, the project will identify and form beneficiary clusters through a screening of NRM and socioeconomic conditions and mobilisation meetings at village level. Where interest is strong and the community leadership decides to commit to PROSPER, a cluster committee will be established to manage implementation.

The Departments of Agriculture with the support of service providers will facilitate the interactive development of a community-driven Cluster Plan (CP). which will set out local priorities for communal socioeconomic investments and identify potential production and related business opportunities that may be realized by groups and enterprises under Component 2 and/or with community resources.

The CP will inform the agenda for PROSPER action in each location.

Training, skills development and related demonstrations will be delivered by district extension services backed up by MoFA technical departments and other line ministries as well as technical assistance. In preparation for the work, the project will refresh the technical skills of public service frontline field staff, reorientated to a modern business approach to farming.

Cluster-level surveys will identify groups, both pre-existing and potential, interested in and likely to benefit from the capacity building efforts. Group training on organisational capacity will be gender sensitive with a special focus on women, youth and PWD. Financial literacy, orderly record keeping and the basics of business conduct will be addressed to complement instruction on the technical aspects of agronomy.

⁵⁷ Micro (3 employees), Small (10employees), Medium (not exceed 20 employees)

The District Directorates of Agriculture will lead an extension campaign organised around climate-smart demonstrations and practical training sessions on topics such as conservation agriculture, agronomical practices and “farming as a business” tailored to the local agroecological conditions and main value chains in the cluster. Emphasis will be placed on the need for a marketing plan for every planting: ‘production with a purpose’. An estimated 4,000 RIs and enterprises will be trained over the life of PROSPER.

The District Departments of Agriculture together with other relevant decentralized departments at the district and regional levels will deliver an inclusive community-wide nutrition and healthy diet initiative to benefit all households, in sync with the promotion of nutrition-sensitive farming and vegetable cultivation. The action will start with a Participatory Needs Assessment in each target community and entail training on household (HH) methodologies and financial literacy for up to 2,400 HH. The Gender Action Learning System (GALS) will be introduced to enhance Gender Equality and Women’s Empowerment (GEWE) in PROSPER. At the centre of the activity will be a nutrition education programme at the HH level delivered through care groups by peers which will entail demonstration of backyard kitchen gardens for healthy diversified diets, dedicated training on post-harvest management, nutrition education and SBCC for communities.

Subcomponent 1.2 Development of socioeconomic infrastructure

Identification of potential investments will be part of the cluster plan and will be the responsibility of the Cluster level committee in collaboration with the District Assembly. The Committee will follow an eligibility criterion to identify the potential investments that will serve agribusiness interests. The selection proposed by the DA and validated by the Committee should be included in the DA Consolidated Plan and Budget.

The public goods identified through the cluster planning process shall comprise three types complementary types of climate-resilient socioeconomic infrastructure: Off-farm/watershed works and hazard mitigation measures; Feeder roads and farm tracks; and Communal social infrastructure. For off-farm/watershed works and hazard mitigation measures, the DA will apply eligibility criteria of PROSPER. Selection criteria must include but not limited to the following: (i) investments that are required to develop Programme intervention sites; (ii) environmental impacts that can be mitigated at an affordable cost. The Project will procure consultancy services for the design and supervision of works, and a contractor for works. The communal infrastructures may comprise soil and water conservation structures, such as contour bunds, reforestation and shelterbelts, bench terraces, tied ridges, water harvesting and storage ponds, as well as climate change mitigation measures. The District Assembly will undertake all procedures as appropriate to acquire/lease any land needed for construction.

The feeder roads and farm tracks will also be identified and included in the cluster plan. PROSPER envisages expanding and rehabilitating strategic road networks (feeder roads and farm tracks, culverts and small bridges).

The PCU will procure consultancy services for design and supervision of the water management schemes and a contractor for works. After recruitment, training of contractors will be ensured by PCU and its implementing partners (GIDA, etc.). The environmental management plan will be produced by the PCU, EPA and GHS.

Agreements will be reached between the District Assemblies and the cluster leadership for the management of infrastructure interventions by various community gender balanced committees, building on previous local norms and the organisation training in Subcomponent 1.1. The infrastructure for natural resources remediation and environmental management will be managed by Natural Resources Committees, to be established under the project. Water harvesting, water supply and waste systems will be managed by Water and Sanitation Management Teams, a statutorily recognised committee operating under the auspices of each District Assembly Works Department. The Department of Feeder Roads is the statutory body responsible for the maintenance of feeder roads and farm tracks.

Subcomponent 2.1 Sustainable marketing linkages and business development.

This subcomponent comprises three activities. *Value chain analysis*, *Promotion of linkages between producers and value chain actors* and the *development of business plans*.

The District Department of Agriculture supported by consultants recruited by the Project will conduct chains analysis within each cluster to assess the status and characteristics and map the VC actors close to the target communities,

It is estimated that 50% of the rural institutions who undergo the capacity building process in component 1 will graduate to component 2. These groups will be handed over to the Business Resource Centers who with the support of the Business Advisory Centers and the District Departments of Agriculture will engage with VC actors in each participating district with an information-gathering and analysis exercise to promote *linkages between producers and value chain actors*. is aimed at generating enduring partnerships between producers engaged in climate-resilient farming and larger-scale agribusinesses within locally appropriate forms of robust and equitable contract relationships in the private sector.

The marginalized poorer and most vulnerable rural institutions and MSMEs progressing from Component 1 will be exposed to training sessions backed up by demonstrations and events at the cluster level on climate risk mitigation, resilience and integration into business plans and on VC linkages and green bankable propositions, with particular attention to potential enterprises dedicated to women, youth and PWDs. Meetings will raise awareness, share information, bring together potential partners, and conclude RI and MSME agreements with VC actors. These beneficiaries will be assisted by the BACs in the preparation of Basic Business Plans to be considered for financing by the project's Matching Grant scheme.

The stronger and better-established RIs and MSMEs associated with local VC actors/potential partners will be offered a more advanced version of the trainings and demonstrations by the BRCs and District Departments of Agriculture, leading to the establishment of cluster-level business partnerships in each target district. At the same time, information will be shared with standalone MSMEs not seeking partners. These beneficiaries will be assisted by the BRCs in the preparation of Advanced Business Plans (ABPs) to be submitted to the Blended Finance Facility. *Development of business plans*, is the generation of a sound, achievable and fully costed plan appropriate to the resources and prospects of each concerned entity.

For the less developed emergent groups and enterprises, a realistic BBP will be prepared with the support of BRCs, BACs, DDAs and PFIs as available. Each BBP should include inputs, simple tools and equipment, and whatever other cost items required, set against a realistic estimate of returns. It should be green in design and address effectively climate and NRM degradation risks and impacts. BBPs could be developed by individual or multiple RIs with the prerequisites of the presence of formal market linkages (supported by the project or pre-existing) and an adequate level of savings. A special BBP window will be available for MSMEs, (up to nine employees). The BBPs will be evaluated by an independent agent/service provider and, if acceptable, used to support a request for a Matching Grant.

With each private enterprise and mature RI, the project will provide professional support through technical assistance and the BACs/BRCs in preparing and realising an ABP, including the facilitation of access to commercial finance through the Blended Finance Facility, (see Subcomponent 2.2). An ABP may include working capital as well as capital items such as inputs, mills, machinery, vehicles, tools, equipment and minor infrastructure. Groups of RIs in association with an agribusiness/VC actor as well as standalone RIs and MSMEs (up to 20 employees) are eligible for submission of an ABP. As for the BBPs, each ABP should be green in design and address effectively the climate change challenges and NRM degradation risks.

For PROSPER, the imperative is to promote and expand businesses operating an aggregator-primary producer model that is prepared to engage with the IFAD target producer groups and related enterprises to become their interface with the market. Such businesses are likely to comprise a

substantial VC actor led by an entrepreneur “driver” and multiple producer groups under contract, all active in the private sector. The project is also geared to preparing and facilitating the ABPs of larger standalone MSMEs.

Subcomponent 2.2 Access to rural financial services.

PROSPER financial services are structured around three instruments appropriate to the various situations prevailing in rural areas as regard capacities and professionalization: (1) Saving and Loan Groups (VSLA model) for sparking the saving habit within communities; (2) a Matching Grant (MG) fund for capitalizing RIs that engage in commercial agriculture; and (3) a Blended Finance Facility (BFF) operated as a refinancing facility (RF) by PFIs to ensure sustainable access to financial services. Access to the financial instruments under PROPER will be based on the financial and managerial capacities of the targeted clients. Based on an initial assessment of the maturity of the targeted groups at project inception, (Component 1.1), Groups will be evaluated against their level of capitalization, skills in financial management and ability to establish business agreements with VC actors such as traders and processors. The groups will be categorized into three tiers depending on their maturity level (tier 1 for the weakest to tier 3 for the most advanced). This evaluation will be instrumental in proper targeting and sequencing to access the different financial services.

Savings mobilization: The DDAs, supported by BACs and with TA services will support the creation and strengthening of Savings and Credit Groups, based on the VSLA model that different IFAD and other projects have been using with success.⁵⁸ Groups will be identified through the initial profiling process. PROSPER will favour groups with members carrying out the same activities, such as production, trading and processing.

VSLA members will be trained in financial literacy and banking activity management. Savings deposited will constitute an initial capital that will be leveraged as counterpart contribution in subsequent investment in equipment or credit with the support of the project. Participating PFIs will be trained in product development to incentivise groups to keep saving. PROSPER will help to create/strengthen 4,000 Village Saving and Loan Groups in the targeted regions. After the period of one year, groups will be assessed on their level of savings, member participation and commitment to developing business activities. The best rated groups will graduate to preparing a Basic Business Plan (BBP, under Subcomponent 2.1) and benefiting from the Matching Grant fund.

Matching Grants: The matching grant will be administered by the Project. Three MG windows are proposed: RIs; MSMEs; and Nutrition and other poverty initiatives. The level of grant/contribution required will vary according to the VC and the beneficiaries targeted. For women groups, youth groups and PWD targeted under the “Nutrition Window”, no BBP will be required for small income-generating schemes focused on promoting diversification towards nutrition and food security, (for example, kitchen gardens). The BACs and BRCs will support the RIs in preparing their BBPs which will be evaluated by independent agent or service providers and successful passed onto the project for disbursement into the Group members Accounts. RIs will be assessed against the realization of their BBPs and capacity to expand business with their offtaker partner. The best rated RIs will qualify to graduate with the project towards preparing an ABP (under Subcomponent 2.1) and access to an affordable loan from PFIs through the BFF. It is expected that 30% of the MG recipients will graduate to BFF financing during the project timeline.

Criteria for selecting Beneficiaries for matching grant (i) FBO has 20-25 members (ii) 50% should have one hectare (iii) 50% women (iv) 40% youth (v) 10% PWD (vi) poverty?

Individual MSMEs, as startups or existing ones also qualify for MG. These could be an aggregator/offtaker or any agricultural enterprise supporting vulnerable groups already trained in component 1 and having benefited from the MG.

⁵⁸ CARE has also had successful experience in developing the concept for women in Ghana.

Blended Finance Facility (BFF). The BFF will develop, test and rollout green financial products to finance ABPs by the tier 3 groups (RIs and MSMEs) that have the potential to develop further commercial agriculture with climate mitigation and adaptation. The BFF credit at a concessional rate financing will be directed only to qualified PROSPER RIs and MSMEs who present ABPs with climate mitigation and adaptation interventions. The BRCs with the involvement of the Participating Financial Institutions will be responsible for supporting the selected RIs and MSMEs within the same cluster and along the same VC to develop and finance an ABP, which could include support to the VC actor as needed. The first group of beneficiaries RIs will benefit from mitigation measures. A cash contribution of minimum 25% of the cost of the BP will be required from the RIs, including a contribution from the partner offtaker, the loan being limited to the remaining 75%. The 2nd group of beneficiaries will get concessional loan of 50%, 10% cash and 40% in kind. Targeting of project vulnerable groups will be less strict in this case.

The 3rd group of beneficiaries for BFF window will be for ABPs developed by small enterprises, (up to 20 employees). Lending to such enterprises must have evidence the job opportunities will be created for project targeted constituents i,e 40% women, 50% youth and 5% PWDs . The ABPs will be submitted to the Bank and will be evaluated based on the collateral of the value chain driver's credit. The BFF will operate as a refinancing facility (RF) that will continue beyond PROSPER closure to provide sustainable access to affordable finance for groups to maintain and develop their business activities with focus on climate mitigation and adaptation in the future.

The BFF will be developed and established at and managed by the ARB Apex Bank (The Investment Fund Manager) by an external expert sourced by PROSPER The Apex Bank will provide wholesale liquidity on concessional terms to its RBC members and other interested retail financial institutions operating with reasonable outreach in the PROSPER project area, for on-lending for smallholder agricultural production and MSMEs development. The Apex Bank rely on its due diligence processes to select its partner retail RCBs and other qualified FIs. This concessional financing arrangement will leverage existing derisking tools, including GIRSAL's partial credit guarantee, GAIP's smallholder insurance and GCX market access and warehouse receipt systems.

To contribute to mitigating the risk averseness of participating RCBs and other FIs, PROSPER will contribute 50% of the premium to be paid by these FIs to the GIRSAL partial credit guarantee fund for a coverage of up to 75% loss.⁵⁹ In addition, to encourage beneficiaries to take up high value but risky climate mitigation and adaptation interventions, PROSPER will contribute 50% of the insurance premium paid to GAIP.⁶⁰ Among the multiple uses of the TA associated with the BFF, part will be used to address key bottlenecks, including the risk averse nature of FIs in Ghana to finance smallholder agriculture, lack of affordable liquidity in the banks and unaffordable interest rates for smallholder producers.. At inception, BFF PROSPER will be linked with BFF AAFORD.

Partner RCBs and other interested retail FIs selected to channel BFF financing to beneficiaries will have to commit to offering an affordable single digit interest rate. This single digit rate will be determined and negotiated with the project, while ensuring a reasonable return and sustainability to the participating RCBs and other interested participating retail FIs. IGREENFIN technical assistance to RCB staff will be deployed by PROSPER towards climate change capacity building and financial product development.

Subcomponent 3.1 Project management. PROSPER will be facilitated by an implementation support structure embedded at the Directorate of Extension Services of the Ministry of Food and Agriculture providing liaison and oversight to the PCU located at the project implementation area.

The PCU will be responsible for the day-to-day implementation of the Project, providing financial project management, reporting and accounting, proactive knowledge management and learning

⁵⁹ The premium is current estimated at 1% of loan portfolio to PROSPER clients.

⁶⁰ Details of the premium determination will be worked out in time for the beneficiaries to access interest-bearing resources.

activities, and monitoring and evaluation functions. Details are set out in section K below and in the PIM.

Project Financing. PROSPER will have significant involvement of Government staff in the implementation, from national through the DAES, the regional level through the Regional Departments of Agriculture and the district level, through the District Departments of Agriculture. The BACs at the District Assemblies and other related decentralized MDAs will also be involved. PROSPER will also be co-financed by in-kind contribution by beneficiaries and their own contribution through the matching grants.

Subcomponent 3.2 Policy engagement. IFAD will participate in the Agriculture Sector Working Group (ASWG) and other working groups, Joint Sector Reviews and Government-led processes with Development Partners and the UN system to contribute to the harmonisation of the sectoral policy agenda. Salient sectoral policy issues identified during implementation will be brought to the attention of GoG. The project will provide policy advice to MoFA if and when requested and commission *ad hoc* studies on policy issues related to the IFAD Ghana COSOP and the scope of PROSPER.

Top of the agenda for policy engagement is likely to be the policy ramifications of the large-scale trial of the new financial sector product “climate/green finance” as a possible development instrument in Ghana in coping with climate change. There are potential policy alternatives for public-private partnerships to invest in an ambitious NR recovery and reconstruction programme of the natural resource base. Climate/ green finance could leverage massive public investment in adaptation and mitigation if a conducive policy framework were devised.

Relationship between the GCF/IGREENFIN and Apex Bank

GCF/IGREENFIN, the climate finance instrument being implemented under PROSPER is being implemented in 5 countries. Through selective processes, ARB Apex Bank has been selected as a Fund Manager to manage the pool resources under the BFF. ARB Apex is acceptable to IFAD because they have been involved in previous IFAD project.

Funds flow: The GCF/IGREENFIN funds will flow to IFAD and then to PROSPER PCU. From there, it will flow to the ARB APEX Bank as a wholesale bank which will then flow to PFIs to be disbursed to project beneficiaries including the smallholder farmers, cooperatives, Farmer Based Organizations and MSMEs.

The Project will however disburse directly the MG component of the GCF to RIs and the BFF component directly to MSMES.

Reporting: The RFIs will report to ARB Apex Bank, who will consolidate and report to PROPER PCU and the PCU will report to IFAD with copies to the GCF Regional Steering Committee and the Regional Coordinating Committee.

ARB Apex Bank will establish a PIU. The PIU shall comprise a Financial Controller to oversee funds flows, budgeting, internal control and reporting, an Accountant for Bookkeeping and preparing financial reports and one Financial Technical Expert (FTE) for consolidation of other accounting and financial management tasks performed elsewhere at the bank in service of IGREENFIN.*Depending on each Bank’s internal resources, these staff can be financed by the project in part or in full.

FM Duties and Responsibilities - Bank PIU

Staff: Capacity building of RFIs in credit management with special reference to credit appraisal, preparation of projected cashflow, loan scheduling and group loan management; annual performance evaluation of bank PIU staff.

Budget: Prepare bank PIU’s annual budget in line with the AWPB process cascaded by Baseline PIU;

Funds Flow: Mobilising funds from Baseline PCU through funds replenishment process. Disbursement, performance evaluation and reporting on IGREENFIN proceeds received;

Internal Control: Monitor operations of RFIs and beneficiaries to ensure prudent management of disbursed funds; Ensure compliance with the terms of the MOU between the Banks and Baseline PCUs and between the bank and its retailers.

Accounting Systems: Ensure that Bank PIU accounting software, processes and procedures are adequate to support the accounting and reporting disclosure requirements;
Reporting: Collection, review and consolidation of performance reports from beneficiaries and retailers; preparation of financial reports in line with the provisions on reporting in the IFAD FA;
External Audit: Ensure that a standalone external audit of the financial statements of the Bank PCU is carried out and a report submitted to the Baseline PCU.

Financial Management Duties and Responsibilities – PROSPER PCU

Staffing: Capacity building of Bank PIU staff in IFAD procedures, policies and ways of working;
Budgeting: Support Bank PIUs in the preparation of their annual budget, budget control; Submission of a consolidated annual work plan and budget that will be approved by IFAD and the National Steering Committee.
Funds Flow: Submission of request for replenishment of IGREENFIN proceeds via the WA process; review and approval of the bank PIU requests for funds and replenishment of IGREENFIN loan and grant proceeds to dedicated bank accounts at the Bank PIUs;
Internal Control: Monitoring and evaluation of the compliance, application and performance of the loan and grant proceeds;
Accounting Systems: Performance of routine end-to-end back office accounting and financial management activities for IGREENFIN;
Reporting: Review of Bank PIU financial reports for compliance with quality and disclosure requirements, ensuring timeliness in submission and completeness; Preparation of country financial reports for submission to the IFAD RCU and steering committee;
External Audit: Reviewing and support in the implementation of recommendations from various IGREENFIN assurance review recommendations agreed at the level of the bank and Baseline PCU;

Annex 7. Marketing and selected commodities value chains

SUB COMPONENT 2.1

SECTION 1: MAIZE VALUE CHAIN ANALYSIS

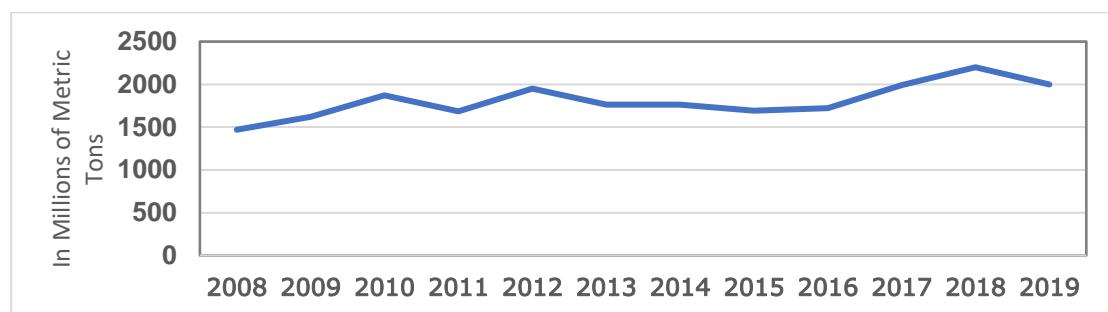
Introduction

Maize is regarded as the most important cereal crop on the domestic market in Ghana and it is one of the largest agricultural commodities in terms of production volume. It accounts for 3.3% of total agricultural production volume and about 65% of cereal output in Ghana, howbeit, with a reported post-harvest loss between 5% and 70%. Current yield rate stands at about 2.73 tons per hectare, an increase from 2.42 tons per hectare in 2019, and has been increasing for the last three years. In terms of its uses, maize is an important and major raw material in the production of poultry feed as well as a substitute for the brewing industry.

Status of the crop/produce

Maize production recorded a 4-year CAGR of about 8.05% from the year 2015 to 2018, the highest among the major crops cultivated in Ghana. Trend analysis of maize production in Ghana reveals a general upward trend, however the period between 2013 and 2017 saw a flattening of the curve, indicating little or no growth in maize production within this period. However, the period between 2015 and 2018 saw a clear increasing trend, perhaps due to the government flagship program of PFJ and RFJ, which basically subsidized critical imports for the cultivation of maize and other crops.

Interestingly, even the fall army worm (FAW) infestation could not curtail the growth of maize production within this period. From the trend, 2019 saw a decrease in maize production by about 9% compared to production level in 2018.



Crop systems and characterization of producers

In Ghana, maize is mainly cultivated under traditional production methods and rain-fed conditions. Average yield of maize for the year 2019 was about 2.42 MT/ha of a potential yield of 5.5 MT/ha, rising to about 2.73 MT/ha in 2020. Maize is grown throughout Ghana; however, the leading producing areas are mainly in the middle- (Bono East, Bono, Ahafo, Eastern, and Ashanti regions) where about 84% of maize is grown, with the remaining 16% being grown in the northern regions of Ghana (Northern, Northeast, Savannah, Upper East, and Upper West). While the middle belt does two cycles of maize per year, the northern belt does only one cycle in a year. Field report reveals that maize from the latter destination is normally free from aflatoxins because of extensive dry season to allow for natural sun drying. As a result, maize grains from these areas are desired for the breweries and food processing entities. Maize from the middle belt (especially in the major season), however, needs mechanical drying to be at the highest quality desired by both industrial and domestic users.

Production

Maize production is predominantly under rainfed cultivation with no irrigation.

Location: Upper East – Tumu

The agro-ecological zones for maize cultivation in Ghana can be grouped into four main zones with differing system of maize cultivation. However, the major zones for maize cultivation are those located in the middle belt, (forest zone, and transition zone) and the northern belt (Guinea Savannah).

- Coastal Savannah zone:

The coastal Savannah zone comprises a narrow belt of Savannah that runs along the coast and widens towards the east side of Ghana. Maize mostly intercropped with cassava are grown by farmers. This zone experiences bimodally distributed annual rainfall totaling around 800 mm, and maize planting normally begins at onset of the major rainy season (March or April). Low productivity has been reported due to the light soil texture and low fertility. Areas include, Central, Accra, Volta, Oti.

- Forest zone:

The forest zone lies down just inland the coastal Savannah. Most of Ghana's forest is semi-deciduous, with a small area of high rain forest in the South-Western part of the country close to the border with Côte d'Ivoire. The cultivated maize is mostly intercropped with cassava, plantain, and cocoyam. The annual rainfall averaging about 1,500 mm is observed, and maize is planted both in the major and minor rainy seasons (March and September respectively). Areas typically include, Bono, Ahafo, Eastern, and Volta.

- Transition zone:

The forest zone gradually gives way to the transition zone towards the Northern part of Ghana. This zone is an important area for commercial grain production, and is characterized by deep, friable soils, and the relatively sparse tree cover allowing for progressive cultivation. Annual rainfall averaging about 1,300 mm is bimodally distributed. Maize cultivation is done both in the major and minor rainy seasons mostly as a monocrop or intercrop. Areas under this zone include, North of Ashanti, Bono East, and Oti.

- Guinea Savannah zone:

Most of the lands in the Northern part of Ghana are in this zone. There is a single season of rain per year averaging 1,100 mm. Although sorghum and millet are the predominant cereals, maize is equally grown. Maize can be intercropped with legumes and other crops.

VC description and identification of main VC actors

Small holder farmers: The total maize production in Ghana is done by about 70% of small holder framers. These are made up of both peasant and commercial farmers who cultivate maize in small quantities. The difference here is that the peasants concentrate on cultivating maize mainly for personal and domestic uses, while commercial farmers cultivate for sale to other actors along the value chain. They are also cases where farmers cultivate maize for both reasons. They are commercial farmers because they farm with the objective of making profit at the end of the season and that informs the approach to farming. The approach to ensuring farmer welfare is the formation of Farmer Based Organizations (FBOs) to give small holder farmers one voice and strength in negotiations as well as accessing market and finance. However, there are very few properly registered and administered FBOs in the middle and northern belts. The MoFA websites has record of only ten maize (FBOs) in the middle and norther belts, excluding Eastern region, which has about twenty-seven (27) maize based FBOs.

Women are also landowners and do production as well. Women do more of the planting, harvesting, and threshing, sometimes pest control (spraying).

Nucleus farmers: these include large scale farmers who cultivate maize. Most of them may typically have small-holder farmers that they work with to help them meet grain orders.

Input Providers: Inputs form most of the cost component in maize cultivation. Inputs come in the form of seeds, fertilizers, agro-chemicals, among others. With respect to seed, farmers use both hybrid and OPV seeds. Hybrid seeds are provided through Government sources and some nucleus farmers, while different OPV seeds are obtained from local seed sources. The situation on the ground is that hybrid seeds are not regularly obtained since they are imported. Again, hybrid seeds sold in per acre packages; and are calibrated based on using planters. However, farmers use manual planting, hence are not able to achieve the recommended plant density. Some actors such as Agromite source for hybrid seed from outside Ghana with permission of the government while others make use of available seed companies in Ghana. Field report revealed that farmers, especially those in the middle belt worry of the incidence of armyworm against ineffective pest control chemicals. According to them, the preferred insecticide (Attack) is not readily available.

Mechanization Providers: Current demand of mechanization services by small holder farmers is primarily focused on land preparation services, especially plowing. The services are provided by two main groups, nucleus farmers and agriculture mechanization service businesses. Players such as Agromite Limited, provides other mechanization services such as harvesting, and post-harvest services to small holder farmers and some other nucleus farmers and recover their monies through in-kind produce at the end of harvest. Major constraint in this segment of the value chain is low operational scale due to machinery being idle for long periods within the year and being needed at specific times in the crop calendar within specific locations. This affects profitability of investment. With such a low operational scale, it is essential to consider various options for introducing low-cost, small tractors suited to the current farming scale in the country. Also, a used tractor model is one of the options available for industry players to consider. Tractor-hire services can play an important role in transforming smallholder maize production. Another solution is to move machinery between the northern and middle belt because of differing crop calendars of the two zones, howbeit, it may be only viable in large scale.

Other challenges include inadequate tractor services for land preparation (ploughing, harrowing) against a growing demand for tractors for land preparation services during peak times in the season. Again, high competition for tractors, especially, in the middle belt. For instance, tractors from the northern belt comes to augment what is in the middle belt, but they come late in the season, delaying planting.

Aggregation

Maize aggregators come in the form of small, medium, and large aggregators. Large and medium aggregators are usually private entities such as Onuado farms, who typically also engage in cultivation. The following situations typically exist with such aggregators.

Use own resources with limited bank loan or other financing facilities.

Have sub-aggregators at the community level who do the initial bulking from the farmers.

Provide inputs and land preparation services to small holder farmers who are associated with them. Sometimes also provide loans to small holder farmers for their livelihood needs, and recovered in-kind (maize produce)

Aggregator supplies maize to larger buyers in Kumasi, Accra, Sunyani

Operates warehouse for storage

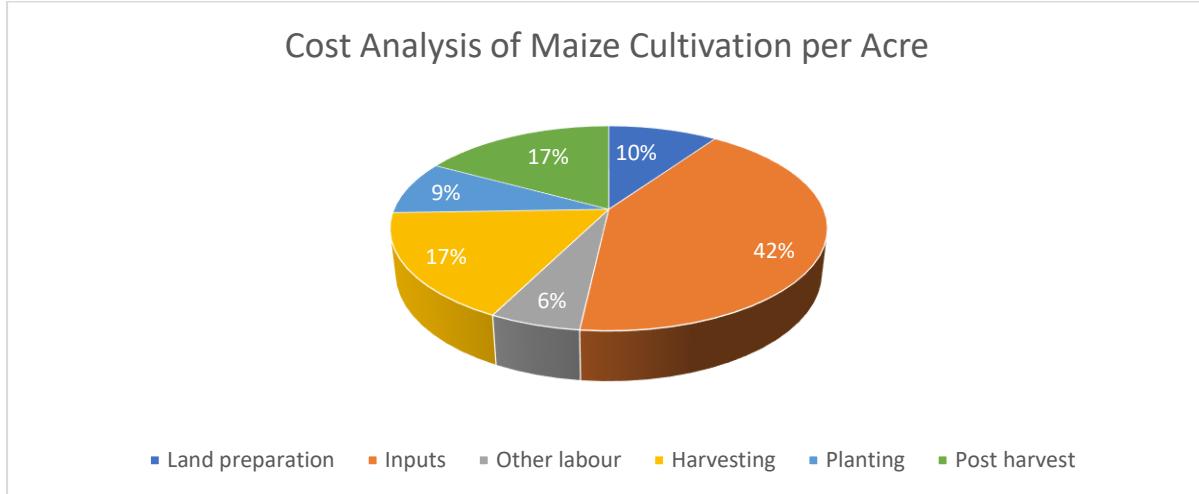
Require several equipment to be able to service farmers adequately. These include tractors and implements, planters, threshers, among others.

Market Opportunities

The maize value chain has strong market linkages right from the upstream to the downstream. At the upstream of the value chain, maize cultivation creates ready market for the input industry such as fertilizer producers and marketers, agro-chemicals, and seeds. Inputs alone form about 42% of maize

production. This is followed by harvesting activities, and post harvesting activities with forming about 17% each of the production of maize.

Figure 1: Production cost analysis of maize



Furthermore, there are series of opportunities created at the downstream segment of the maize value chain. These opportunities are in aggregation, animal feed processing, processing of maize grits for the brewery industry.

Main challenges of the maize value chain are inadequate mechanization to improve efficiency in cultivation, Low quality input such as fertilizer, inadequate storage space at appropriate areas and changing rainfall patterns

1. Aggregation- The maize market is made of the formal and informal markets. The formal markets include formal maize aggregating companies who source for maize, clean and dry for onward sales to the industrial process in the beverage, poultry, and other food industries. These aggregators often engage in production themselves while also organizing small holder farmers. The informal market includes the middlemen and women who source for maize in the major maize markets.

2. Processing and utilization of maize represents up to 20% to 25% of the total maize marketed in Ghana, as follows.

1. Breweries are important players in the Ghana maize market. Usually, sorghum is preferred to maize in brewing, but breweries substitute maize if attainable at a competitive price. The general rule of thumb is that maize grits price of US\$0.80/kg is the highest amount at which brewers consider substituting grits for sorghum.

2. The poultry industry is another important player in the maize market in Ghana. According to the latest records about 250,000 metric tons of maize is used for poultry feed annually in Ghana (FAO 2012). The poultry industry therefore provides a great opportunity for maize production in Ghana.

Potential for Value Creation

The post-harvest economy in the maize value chain is large and has a huge potential. There are opportunities for investment in warehousing infrastructure at relevant locations, drying facilities, cleaning facilities, haulage, haulage insurance, semi-processing of maize into maize grits, processing of maize into animal feed, and domestic use forming a core part of the cuisine of northern Ghana.

SMEs and Job Creation

Small and medium scale enterprises are into input provision, cultivation, the provision of IT services, aggregation, transportation, warehousing, insurance, semi-processing, and processing of maize. This

does create a good number of jobs for the youth and has the potential to further create a great number of both direct and indirect jobs for the youth.

Main constraints and challenge

1. Inadequate mechanization to improve efficiency in cultivation: For instance, Agromite Limited is one of the most resourceful Agro-SMEs in the Sisala East and West zones, however, it is only able to provide only 15% mechanization coverage for its 6000 acres production
2. Low quality input such as fertilizer: Farmers indicated that they received low quality fertilizers which led to bad yield for many of them. In the same vein, others testified that they bought quality fertilizer brands and saw about a 100% increase in their yield.
3. Inadequate storage space at appropriate areas.
4. Changing rainfall patterns
5. Farmers in the middle belt revealed that transportation of produce from farm to market is a challenge due to competing demands on KIA trucks and of the bad farm roads.

Women/youths/PWD

Potential for inclusion and job creation

Participation of women in maize cultivation is relatively lower compared to men, and women participation in other related crops such as soya. Field reports reveal about 20% women participation in maize cultivation in the northern belt. However, maize cultivation among women in the middle belt is slightly higher, about 25%, compared to the northern belt. One of the reasons boils down to land tenure system, which is more flexible in the middle belt as against the northern belt.

Aggregation especially within the informal markets serves as an opportunity for women to participate in and out of the zone under consideration. A typical example of such opportunity is the largely untapped potential of the maize traders at Ejura, who are predominantly women. Currently, the following situations persist for these women.

No benefit from any Government intervention and yet their working environment is in deplorable state.

No proper place of storage of grain at the market.

No credit for them to procure maize and store and expand their business. Sometimes when there is a glut, a lot of maize is wasted on the market due to lack of proper storage and inability to mob it and store.

Absence of weights and measures is affecting their activities because they are unable to communicate standard prices across the markets they trade with.

Consequently, what is needed is collaboration with these traders and others else where to have an arrangement where they are supported to handle grain trade in a more harmonized and coordinated manner including management of strategic stocks.

Institutional Analysis and VC Management

Farmers that work with Agromite are organized on community basis with leaders for each community level, who respond to field officers responsible for monitoring and supervising farmers.

Climate and Potential Impact of Climate Change on Production Capacities

Climate change has affected the rainfall pattern in Tumu and its surroundings. Farmers reported that the rains start later than the usual month of June and ends around the month of October. This has dire consequences on the yield and important post-harvest activities such as drying.

Farmers in the middle belt equally reported of having observed changes in weather conditions that affect their production activities (inadequate and erratic rainfall pattern, high incidence of armyworm)

Nutrition and Food Security

Maize remains an important part of Ghanaian cuisine, featuring in a range of delicacies by different groups of people in Ghana. Popular foods include porridge, banku, kenkey, among others. Increase in maize yield has positive impact on food security while decrease in maize yield could have dire consequence Quantitative Analysis on food security.

Figure shows a typical

Figure 2: Maize Crop Calendar in the Northern Belt of Ghana

	April	May	June	July	August	Sept	Oct	Nov
Northern belt (1st Cycle)								
Hiring of land								
Ploughing								
Planting								
Weed Control 1								
Fertilizer application								
Top dressing								
Weed control 2								
Harvesting								
Threshing								
Sales								

Table 2: Maize Crop Budget in the Northern Belt

	Crop Budget (Maize)			
	unit	qty per acre	Unit price	Amount
				GH ¢
Land Rent	acre	1	50	50
Land preparation:				
Harrowing	acre	1	120	120
Planting:				
Seeding and basal application	acre	1	150	150
Seed	1kg bag	10	30	300
Weed control 1:				
Broad spectrum Weedicide	lts	1	17	17
Selective weedicide	lts	1	30	30
Spraying of broad spectrum weedicide	acre	1	50	50
Spraying selective weedicide	acre	1	50	50
Fertilizer application:				
fertilizer (basal application)	50kg bag	2	130	260
Fertilizer top dressing	acre	1	135	135
Harvesting cost	acre	1	300	300
Threshing	acre	1	300	300
Total production cost				1,762
Revenue	100 kg bags	20	130	2,600
Gross margin				838
Gross margin percentage				32.23%

Gross ROI				47.56%
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SECTION 2: SOYA VALUE CHAIN ANALYSIS

Introduction

Soybean was first introduced to the Gold Coast in 1910, one hundred and ten years ago. Since its first foray into Ghana, soy has gone through several development phases. Soy as a crop has comparative advantage over other crops in Ghana due to the following.

Highly reliable and ready market for soybeans when compared with other crops

Soybeans has a higher market price value than other traditional farm crops

Due to its limited usage of fertilizer, its production cost is lower than other farm crops

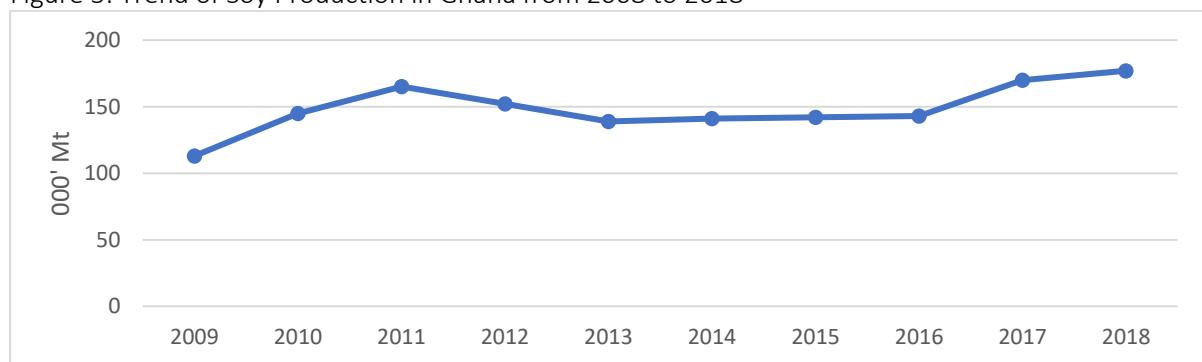
It is environmentally friendly due to its nitrogen fixing properties which replenishes the fertility of the soil

There is no waste product with soybeans in the sense that most of its bi products are used for several things such as poultry feed, animal feed, composting etc.

Status of the Crop/Produce

Soybean production is driven by Ghanaian poultry industry. The size of Ghanaian commercial poultry production is pivotal to accurately assessing the volumes of imported soybean meal (and feed concentrates). Currently, soy production is increasing with more assured markets in Ghana. As shown in Figure 4, soy production dipped from 2011 to 2013 after a peak within the period of 2009 to 2011. In the period between 2013 and 2016, the soy production curve flattened with little or no movement. However, the period between 2016 and 2018 recovered significant increase in soy production, hitting a 10 year high in the year 2018.

Figure 3: Trend of Soy Production in Ghana from 2008 to 2018



This has been partly spurred by the activities of importers from Turkey, India, Denmark, Cote D'Ivoire, Burkina Faso, who buy in large quantities for exports to Europe and for their local industries.

Aggregators in the soy value chain explain that this is due to the fact that very little chemicals and fertilizer are used in the cultivation of soy as such it makes Ghana's soy near organic when test against the various chemical contents. Local soybean production does have a slight advantage over imported beans, as smaller processors are practically unable to import beans to run through their facilities. The smaller quantities required by these processors must come as container trade, which comes at a higher logistical price than bulk shipments. Only Ghana Nuts, the largest processor, can utilize a larger bulk shipment.

Production

Location

The agro-ecological zones for soya cultivation in Ghana can be grouped into two main zones with differing system of maize cultivation, namely the transition zone and the northern belt (Guinea Savannah).

- Transition zone:

The forest zone gradually gives way to the transition zone towards the Northern part of Ghana. This zone is an important area for commercial grain production, and is characterized by deep, friable soils, and the relatively sparse tree cover allowing for progressive cultivation. Annual rainfall averaging about 1,300 mm is bimodally distributed. Maize cultivation is done both in the major and minor rainy seasons mostly as a monocrop or intercrop. Areas under this zone include, North of Ashanti, Bono East, and Oti.

- Guinea Savannah zone:

Most of the lands in the Northern part of Ghana are in this zone. There is a single season of rain per year averaging 1,100 mm. Although sorghum and millet are the predominant cereals, maize is equally grown. Maize can be intercropped with legumes and other crops.

Tumu and its environs in the Sisala East and West have a single maximus rainfall regime which starts from June and ends in October. This is normally followed by a dry spell from November to May. The Sisala East and West districts are in the Guinea Savannah vegetation zone where large portions of land are categorized as fairly and fairly to marginally suitable for the cultivation of crops including soya. The area present land highly suitable for extensive mechanized cultivation of export and food crops.

VC description and identification of main VC actors

Input Providers: There are currently two broad categories of input providers in the zone, namely, the providers under the government subsidy support and private input providers without government subsidy support. Some actors source for their seed from outside Ghana with permission of the government while others make use of available seed companies in Ghana. The most important inputs include fertilizers, herbicides, certified seeds, among others.

Mechanization Providers: These players such as Agromite Limited, provides land preparation, harvesting, and post-harvest services to mostly small holder farmers and some other nucleus farmers. Such players recover their monies through in-kind produce at the end of harvest.

Small holder farmers: these are commercial farmers who cultivate maize in small quantities. They are commercial farmers because they farm with the objective of making profit at the end of the season and that informs the approach to farming.

Nucleus farmers: these include large scale farmers who cultivate maize. Most of them may typically have small-holder farmers that they work with to help them meet grain orders.

Market opportunities

Description

The soya market is made of the formal and informal markets. The formal markets include formal soya aggregating companies who source for soya, clean and dry for onward sales to the industrial process in the poultry, and other food industries. These aggregators often engage in production themselves while also organizing small holder farmers. The informal market includes the middlemen and women who source for soya in the major maize markets.

Potential for Value Creation

The post-harvest economy in the soya value chain is large and has a huge potential. There are opportunities for investment in warehousing infrastructure at relevant locations, drying facilities, cleaning facilities, haulage, haulage insurance, processing of soya into animal feed.

SMEs and job creation

Small and medium scale enterprises are into input provision, cultivation, the provision of IT services, aggregation, transportation, warehousing, insurance, semi-processing, and processing of soya. This does create a good number of jobs for the youth and has the potential to further create a great number of both direct and indirect jobs for the youth.

Main Constraints and Challenge

1. Inadequate mechanization to improve efficiency in cultivation. For instance, Agromite Limited is one of the most resourceful Agro-SMEs in the Sisala East and West zones, however, it is only able to provide only 15% mechanization coverage for its 6000 acres production
2. Low quality input such as fertilizer. Farmers indicated that they received low quality fertilizers which led to bad yield for many of them. In the same vein, others testified that they bought quality fertilizer brands and saw about a 100% increase in their yield.
3. Inadequate storage space at appropriate areas.
4. Changing rainfall patterns

Women/youths/PWD

Women in the production areas, especially in the northern belt favor the cultivation of soya compared to maize as the latter is seen as a more masculine crop and the former a feminine crop. They explain that the agronomic practices in soya are seen to be less difficult compared to maize. In effect, at the small-holder level, as women dominate in soya cultivation, men dominate in maize cultivation.

Climate and Potential Impact of CC on Production Capacities

Farmers in the Tumu area report that the rainfall pattern has altered, shifting from the usual June to July ending, therefore affects planting times and by extension the yield and post-harvest activities.

Quantitative analysis

Figure 4: Soya Crop Calendar in the Northern Belt

Soy Crop Calendar	Crop Calendar (Soy)							
	April	May	June	July	August	Sept	Oct	
Northern belt (1st Cycle)	April	May	June	July	August	Sept	Oct	
Hiring of land								
ploughing								
Planting								
Pre-emergence weed control								
Fertilizer application								
Ammonia application								
Post - emergence weed control								
Harvesting								
Gathering								
Drying								
Bagging								
Sales								

Table 3: Soya Crop Budget

Activity description	Unit measure	Qty	Unit Price	Amount
			GH ¢	GH ¢
Land preparation:				
harrowing	acre	1	120	120.00
Certified Seed	kg	18	10	180.00

Seeding and basal application	acre	1	150	150.00
Broad spectrum Weedicide	lts	1	17	17.00
Selective weedicide	lts	1	30	30.00
Spraying of broad spectrum weedicide	acre	1	50	50.00
Spraying selective weedicide	acre	1	50	50.00
fertilizer (basal application)	50kg bag	2	130	260.00
Fertilizer top dressing	acre	1	135	135.00
Harvesting cost	acre	1	300	300.00
Threshing	acre	1	300	300.00
Production Cost				1,592.00
Crop Insurance	% of prd		5%	79.60
Total Production Cost				1,671.60
Revenue				
Yield	100 kg bag	15		
Price	100 kg bag	150		
Total Revenue	100 kg bag	15	180	2,700
Gross Margin				1,028
Gross Margin percent				38%
Proxy IRR				62%

SECTION 3: CASHEW VALUE CHAIN ANALYSIS

Introduction

The cashew nut industry offers tremendous developmental opportunity for Ghana as the industry is becoming a major avenue for job creation in the rural areas and a good source of foreign exchange for Ghana in general. Over the past decade, Ghana has seen increased interest in its cashew sector particularly by buyers from India, Vietnam, and Brazil. These companies buy in large quantities, export to their home countries for processing and onward export to the USA or EU and for their own home consumption. Currently the USA consumes about 55% of the world's cashew exports, with India also being a major consumer. With declining raw cashew nut production in India and Vietnam, increasing attention is turned to West Africa where current production does not meet the total requirement of the Asian market. The conducive business environment provided by Ghana has seen entities from these countries setting up purchasing outlets in the country.

The cashew value chain offers an important potential for employment and wealth creation, climate change mitigation through climate smart agriculture and the economic empowerment of women and youth, especially in vulnerable rural areas.

Status of Crop

Production of RCN has been on the rise in the last five years chiefly because of increase in cultivation and farm establishments. Cashew productivity in terms of kilogram per hectare has not seen same increase as production volume. Table 1 shows volumes of RCN and cashew productivity in Ghana from 2015 to 2020.

Table 4:Cashew Production and Productivity in Ghana

	2015	2016	2017	2018	2019
Production of RCN (MT)	70,000	75,000	75,000	110,000	85,962*
Productivity (kg/ha)	958	606	600	750	-

Source: Comcashew

Production

Cashew is grown as a smallholder crop in Ghana and the commercial plantation sector is small. It is estimated that about 88-90% of cashew farms are owned by smallholders, with farms ranging in size from a minimum of 0.8 ha to 3.0 ha. Large plantations account for 12% of cashew farms and are between 4 ha and 40 ha. Most of small producers rely on family labor or hired labor, especially for weeding and harvesting activities.

Farmers' interest in cashew production relates to the availability of ready market due to the high import demand for raw cashew nuts by Asian processors. Cashew production generally forms the main source of income of producers in top producer regions (Ahafo, Bono, Bono East). The ongoing climatic condition changes have reportedly worsened other sources of income such as cocoa and food crop sales.

The effective production acreage was estimated at 280,000 hectares in 2018, against 325,000 that are planted (86%). Some 125,000 producers would have been involved in cashew production in 2019.

Cashew is invariably established among short-term intercrops and intercropping is pursued if space and soil fertility allow. The most common intercrops in both the Forest-Savannah Transition and Interior Savannah zones are yam, groundnut, soybean, and maize. Pineapples, pepper, and maize are the most important intercrops for cashew farming in the Coastal Savannah agroecological zone. Remarkably cashew is harvested during the lean season for all major staples (e.g., maize, yam, plantain, and millet).

In Ghana, trees are relatively young. In 2018, national yield was recorded at 400 kg/hectare, down from 600 in 2016 and 2017 (yield was at 950 kg/hectare in 2015 according to GIZ). The regional yield ranges from 350 kg/ha to a top of 650kg/ha in the Forest-Savannah Transition zone.

Location:

The cashew tree grows with a minimum of attention and is easily cultivated. It is usually found up in regions where the annual rainfall is as low as 500 mm and as high as 3,750 mm. For maximum productivity, good soil and adequate moisture are essential. The tree has an extensive root system, which helps it to tolerate a wide range of moisture levels and soil types, but commercial production is only advisable in well-drained, sandy loam or red soils.

Cashew is grown as a cash crop in four agro-ecological zones, namely the Interior Savannah (Guinea and Sudan Savannahs), Forest-Savannah Transition and Coastal Savannah. All regions of Ghana except for the Western/Western North Regions would be suitable for cashew production. Among these agroecological zones, Forest-Savannah Transition is regarded as the most suitable for cashew cultivation, while Coastal Savannah is considered only marginally suitable.

Agro-ecological zones	Regions	Rainfall (mm)	Temperatures (°C)		Soil types
			Max	Min	
Forest-Savannah transition	North of Ashanti, Bono, Bono East, Ahafo, Eastern, Volta, Oti	Rainfall is characteristically bimodal and ranges from 1,200-1,400 mm per year. The major season starts at the end of March and the minor season at the	29/33	19/22	Soil types are suitable for cashew. These are highly deep soils and mostly of a medium texture. Soil moisture and

		beginning of September. 5 dry months.			nutrient retention is low to moderate.
Interior Guinea Savannah	Northern, Upper East	Rainfall ranges from 1,000-1,200 mm. This zone has unimodal rainfall which starts at the end of April and runs until end August/September. 6-7 dry months.	32/34	20/22	Soils of good physical characteristics, well to moderately well drained, and feature low levels of organic matter and nitrogen.
Interior Sudan Savannah	Upper East	Rainfall ranges from 1,000-1,200 mm. This zone has unimodal rainfall which starts at the end of April and runs until end August/September. 7-8 dry months.	32/34	20/22	Soils are heterogeneous, deep to moderately deep, and medium textured. Moisture and nutrient retention is low to moderate.
Coastal Savannah	Central, Accra, Volta, Oti	This zone features a bimodal rainfall pattern. Rainfall ranges from 750- 1,000 mm per year, and is very low along the coast but increases towards inland areas. The major season starts at the end of March. 4 dry months.	29/33	20/24	Organic matter levels are generally very low.

VC description and identification of main VC actors

The cashew production sub-segment in Ghana is largely a small-holder activity with majority of farmers having an average farm size of between 0.8 ha and 2.5 ha and over 60,000 small-holder farmers are engaged in the cultivation of the crop in Ghana. The production sub-segment also has players such as seedling producers, who may double up as commercial farmers, research institutions, donor agencies and projects in cashew production, among other players. Production entails farm establishment and annual maintenance.

Primary producers predominantly relate to aggregators and sub-aggregators who are close to their communities. Farmers typically receive financial and technical assistance from aggregators during off-season to increase productivity and sell to aggregators providing these forms of assistance. However, some farmers engage in side-selling leading to defaults after harvest. Farmers also seldom relate to the big exporting firms and processors.

Aggregation

Aggregators buy raw cashew nuts (RCN) from farmers and store them in their warehouses and in turn sell to exporters and processors at the appropriate time. In other words, they serve as the link between the primary producers (smallholder farmers and commercial farmers) and the processors and exporters. Some aggregators have sub-aggregators stationed in the producing communities, who would typically aggregate in much smaller quantities and transfer to the larger aggregators in due course. Aggregators deal with both smallholder farmers and commercial farmers. Again, they deal with bigger trading partners typically from India, and other cashew processing countries. Aggregators typically provide some assistance to farmers during the off-season in the form of inputs, extension services, pruning services, among others. In other cases, aggregators offer direct financial assistance to help with the maintenance to the fields. Aggregators also have relationships with other commercial farmers.

Processing

In the cashew processing sub-sector in Ghana, there is processing of cashew fruit and that of the raw cashew nut. Raw cashew nut processing has the primary processing and secondary processing. The primary processors process raw cashew nuts into kernels for exports and for domestic sales to the secondary processors, who are predominantly roasters. The secondary processors buy the kernels from the primary processors and roast them for sales domestically. There are currently 14 processors in Ghana with 6 active and 8 firms closed because of lack of sustainable supply of raw cashew nuts. Some processors in the value chain include, USIBRAS Ghana Limited (Prampram operates 15000 to 20,000 Mt out of installed capacity of 30,000 MT), Mim Cashews and Agricultural Products Ltd., Kona Agro processing Limited (Wenchi - shut down in 2015), Kabile Cashew Farmers' Cooperative Company, Nimdee Hyren Company Limited, Nafana Agro Processing Company, Agroking Limited, Gensap Ventures and Innov. Organic Limited.

The processing segment is in the middle of the value chain. It deals with producers and exporters of kernels. It also deals with primary and secondary processors. There are currently 3 companies operating in Ghana with the required food safety standards. Other processors have enrolled on the ACA seal, and they have had their initial audits. Firms under this segment work with producers and aggregators of raw cashew nuts (RCN) and work from primary processors (kernel).

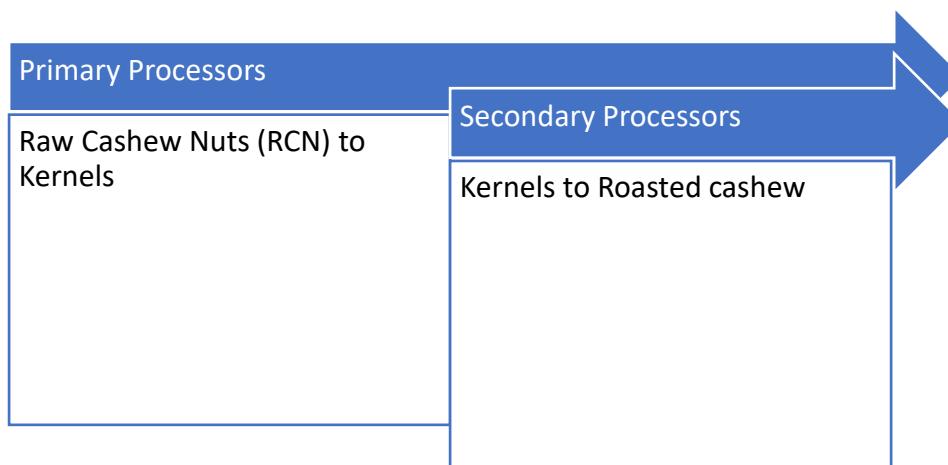


Figure 5:Raw Cashew Nut Processing in Ghana
(own construct)

Processors relate with the farmers/producers. Producers include both large farmers and smallholder farmer groups. Currently, processors relate more with smallholder farmers and aggregators. The relation is about 60-70% with aggregators, and 30% with famers directly.

The primary processors, who process raw cashew nuts to kernels sell to the secondary processors, the roasters in the domestic market. The roasters/secondary processors, sell to supermarkets and shops domestically. Currently, exportation of roasted cashew is limited, and this segment would need some capital injection to enable them produce more efficiently to export. In addition, roasters do not currently have the food safety standards required by international markets, hence they are feeding the local market.

Export and International Buyers

Specific Activity within the Cashew Value Chain

The exporters/international buyers, work with producer cooperatives. Currently, there is one processor with the required food standards/certification, that these exporters buy from. The main business partners include the following.

1. Farmers, farmer-based organizations, freight forwarders,
2. Customers in Vietnam and India.
3. Processors side, these firms work with processors, depending on the relationship in the past they can toll process, buying the RCN and giving it to the processor to process.

Market Opportunities

Global demand for cashew nuts has been growing at a rate of 7% per annum over the last decade, and demand for cashew kernels is expected to grow by 85% in the years ahead. Consumption rates are predicted to remain high due to the growing awareness of the health and nutritional benefits of cashew nuts.

Ghana would have 14 significant processors (2019), yet half was closed at that time for lack of raw material. They employ some 4,700 workers. Ghana processed some 10,000 MT of nuts locally in 2018 (8% of production) for an installed capacity of 50,000 (20% used), down from 65,000 in 2015. The average processing level over the last 5 years was 7,250 MT.

Around 90% of Ghana's cashew nuts are exported in their raw form to India and Vietnam. Here the nuts are processed and re-exported to the US, Europe, the Middle East, China and Australia. On the Vietnamese market, the price of the kernel is at minimum 4 times higher than the RCN. The competition between Vietnam and India for sourcing raw nuts in Africa is intensified by demand from local cashew processors, a process that drives the farm gate price of cashew nuts higher, thereby incentivizing farmers to shift from food production to cashew nuts in African countries. Producers usually capture between 60 and 70% of the FOB price of RCN. According to GIZ, job creation in the cashew VC is 75% in production, 20% in trade and 5% in processing.

Toll processing- in this, exporters finance acquisition of raw cashew nuts and then processor would charge a tolling fee for the processing, so that these buyers could ultimately have the kernels for export.

There has been a lot of focus by various organizations that have been instrumental in helping farmers with best practices. Ghana is very advanced in relation to other countries, although production is not as high.

Market availability - There is a big and ready market for kernels, but because of the operational and financial challenges of processing firms in Ghana, they are unable to supply the required volumes. Therefore, with the needed support, firms could be efficient and competitive enough to supply the market. There are now efforts to regulate all the value chain actors. Cashew production in Ghana continues to increase and farmers are showing greater interest in its cultivation. As a result of combined efforts of development agencies and other cashew stakeholders in Ghana, production is sure to increase in the foreseeable future.

Main Constraints and Challenge

Production-related Challenges

1. Inadequate sustainable form of financing to help in good agronomic practices.
2. Inadequate improved seedling and cashew variety leading to uncompetitive yields. Due to the poor planting materials used over the last 3 decades, yields are not as high as expected.
3. Access to quality inputs.
4. Farmer side selling making it difficult to partner with other players in the cashew value chains especially aggregators.

Aggregation-related Challenges

1. Side selling among farmers: Farmers typically side sell RCN to higher bidding entities and aggregators, after benefiting from aggregators who offer them with advances/financial assistance. You may advance money to other buyers, and they may not bring you the RCN, they may sell to others. We try to find producers/buyers that are trustworthy.
2. Most of the farmers seek assistance off season from multiple intermediaries, and at the time of collection, they are burdened with greater levels of debt.

Processing-related Challenges

Cashew processors in Ghana face several challenges, enumerated as follows

1. Access to appropriate finance. One of the foremost challenges is not just access to finance but access to appropriate ones that would guarantee profitability and long-term growth. These finance sources must come with suitable interest rates, tenures, collateral considerations, and moratorium. This is because margins associated with processed kernels are thin and simply may not jive with the current high interest rates. Lack of access to appropriate finance leads to the following challenges.
2. Accessing raw material – although raw cashew nuts are available, there is high competition from exporters. There are also other costs that processors incur in addition to procurement cost, such as inventory costs. These costs are secondary to the core processing cost and as such lengthens the cash conversion cycle, the period within which stock is converted to cash.
 - a. Cost of technology. Most factories of processors run on manual operations (about 70-80%) because of limited financial capacity to the required machinery to automate most of the processing activities to increase efficiency and reduce labor cost.

It is difficult to have the right skills/capacity for factories.

In Ghana, the cashew industry and purchases are not regulated and as such, unregistered companies are able to purchase RCN at the farm gate. This situation means most unregistered companies always flood the local market, creating unhealthy competition to push RCN price up to the disadvantage of processors.

Challenges related to Exporters and International Buyers

1. Loyalty of farmers is a challenge, firms in this space can have a relationship with farmers during the maintenance stage of the cashew crop calendar by supplying them with the needed inputs and services, but farmers show little or no commitment during harvest, and sell to other companies who offer more during harvest.
2. Typically, other international buyers, non-registered and non-tax paying show up during the harvest period and buy large quantities of the cashew nuts by bidding higher than the regulated firms.
3. Tremendous amount of high costs in the infrastructure.
4. A lot of processors not competitive with Asian competitors.

Proffered Solutions to Challenges

1. Industry regulation will help stabilize prices of raw cashew nuts and reduce farmer side selling to some extent
2. There are two ways to ameliorate the yield challenge.

a. First by replacing the top productive parts of the tree with a new improved variety through a process of grafting called top-working.

b. Secondly, by pruning of trees for regrowth and eliminating diseased branches. This encourages new shoots to form and hence better yield.

These two processes, top-working and pruning requires skilled manpower and use of tree cutting devices such as motorized saws. This equipment is expensive for the ordinary smallholder farmer. The arrangement under a potential cashew scheme is for the aggregator or processing (technical operator) to recruit a gang of skilled personnel with the requisite equipment and training to organize and deliver the service to farmers. This will then be transferred as non-cash credit to the farmer to be paid in-kind during harvest.

3. Development of formal and organized schemes for farmers with written and enforceable contracts between farmers and aggregators could limit the incidence of side-selling.

4. Toll processing- is a way to address some of the challenges already outlined. This can be beneficial to both secondary processors who need kernels by buying the raw cashew nuts for the primary processors to process for them and paying a tolling fee, and the primary processors who process raw cashew nuts to obtain raw cashew nuts to process and make money.

5. One of the issues is appropriate finance that is backed by collateral. It is difficult to provide collateral, given that the value of the factories and assets are most often lower than the loans required. One of the collateral considerations would be to allow the use of raw cashew nut as collateral to finance activities given the high value of raw cashew nuts.

6. Growing local artisans to strengthen the provision of support machines to support local processing. Processing machines can reduce the cost of processing by about 30% by reducing the cost of labor.

Institutional analysis and VC management

Competitive Cashew Initiative (ComCashew)/GIZ

Comcashew is a programme of GIZ set up to enhance competitiveness in the cashew value chains in Ghana and elsewhere on the African continent. Comcashew provides support in areas ranging from research, to production, processing, marketing, capacity development and policy advice. Ultimately, new opportunities for employment, especially for women, along the value chain have been created, specifically in rural areas, thereby ensuring an increase in and diversification of income.

Brazil Government

The Brazil government through The Brazilian Cooperation Agency (ABC) and Embrada has invested in training and capacity-building for experts and farmers on research to improve genetic materials and cashew fruit processing technologies in Ghana and continues to do so.

Adventist Development and Relief Agency (ADRA)

ADRA plays important role in the cashew value chain in Ghana. Some of its activities have centred on improving cashew yield and farmer income through training of extension officers and farmers.

Swiss State Secretariat for Economic Affairs (SECO)

SECO also plays an important role in the cashew production in Ghana. This predominantly comes through financing training programmes for major players in the cashew value chain to increase competitiveness. It also co-funds the Comcashew with the EU.

Private Sector

Private sector organizations also remain pivotal in the cashew value chain in Ghana. The organizations include the African Cashew Alliance (ACA), Ghana Cashew Industry Association, and the Association of Cashew Processors.

Women/youths/PWD

Women would account for 10-15% of the cashew producers. As a tree crop, cashew was regarded as an individual man's property to be passed on to his wife and children rather than to extended family members, which differed from the communal land tenure arrangements governing food crop cultivation. The tendency for land, cash crops and income to be controlled by men, despite women's and young people's significant labor contributions to family farms, and for women to rely on food crop production for their main source of income and for household food security, means that women and girls are more likely to lose out when cashew plantations are expanded to the detriment of land for food crops.

The physical strength and financial commitment needed for the cashew farming activity does not permit most women to be actively involved in the venture but to be helping hands to their husbands. Women's role in cashew production has been traditionally defined as overseeing harvesting, transporting, sorting, and drying the fruit. In some cashew producing communities, women make juice and alcohol from cashew apples, and are therefore highly involved in the processing of apples and nuts at the household level. Furthermore, many women participate in the selling of raw nuts at marketing centers. However, large traders/exporters and their agents generally tend to be men.

Policy and Regulation

Cashew production falls under the Ministry of Food and Agriculture (MoFA) while its export falls under the ministry of Trade and Industry. In direct relation to cashew, there is the National tree crops Board. In terms of policy and regulation, there is the 10-year cashew development policy which outlines government strategy to develop the cashew value chain. Cashew also falls under the government initiative of Planting for Export and Rural Development (PERD).

Climate and potential impact of CC on production capacities

Climate change has affected the rainfall distribution and extended dry spells while shortening the rainy season. This has led to increase fires that destroy a lot of farms within the transition zones. Fire belts are being constructed by a lot of farmers a coping mechanism.

Nutrition and food security

Research found that farmers in the area previously referred to as the Brong Ahafo region of Ghana, which produces about 30% of national food needs and leads in the production of local staples such as maize, yam and cassava, have come to dedicate increasing portions of their land to cashew nut production, with only a small portion of land set aside for household food cropping. The conversion of fertile land into cash crop production presents significant challenges for ensuring long-term food security in Ghana. To date, national agricultural planning and policy appears to prioritize production of export commodities and agricultural 'modernisation' above local food production. While GoG can continue to support the development of Ghana's export cashew industry, there is a vital need for programmes that increase support for local food crop farmers and domestic food provisioning.

Despite the possible economic benefits that might be realized via cashew production, many farmers expressed growing concerns about the impacts of expanding cashew production for local food provisioning. The majority of described being worried about the impacts of changes in land use, alongside the concentration of land amongst elites, including the possible impacts for meeting national food needs. Some farmers described a reduction in the production of food as driving the cost of food upwards at local markets.

Quantitative analysis

Figure 6: Cashew Crop Maintenance Calendar

MONTHS

ACTIVITY	JAN	FEB	MAR H	APRIL	MA Y	JUNE	JULY	AU G	SEP	OCT	NOV	DEC
1st Weeding												
Fire Belt												
2nd Weeding												
Pruning												
Fertilizer Application												
- Inorganic Fertilizers												
- Poultry Manure												
Pest & Disease Control												
- Fungicides												
- Insecticide												
Flowering												
Maturing of Fruits & Harvesting/Pickings												
Transport/Grading & Sales												
Staff Training												
Farmer Sensitisation & Training												

Table 5: Cashew Crop Budget of Cashew Maintenance Per Acre

			unit price	cost /acre
Cost Item	Unit Measure	Qty	GH ¢	GH ¢
1st Weeding	Acre	1	100	100
Fire Belt creation	Acre	1	100	100
2nd Weeding	Acre	1	100	100
Pruning	Acre	1	130	130
Fertilizer Application				
- Inorganic Fertilizers	50kgBag	1	128	128
Transportation of Fertilizer	50kgBag	1	10	10
Application of Inorg. Fert	Acre	1	20	20
Pest & Disease Control				
Fungicides	kg	1	135	135
Spraying of Fungicide	Manday	1	20	20
Insecticides	Lit	1	35	35
Spraying of Insecticides	Manday	1	20	20
Harvesting				
Picking and separation	Manday	2	15	30
Carting cost	TnT	1	20	20
Jute sacks	85kgBag	6	3	18
Total Cost of Cashew maintenance				866
Total annual cost of farm maintenance				866

Yield				
Cashew	85kgBag yr7 onwards	6		
Sales				
Cashew		6	434	2604
Total Revenue				2604
Gross margin				1,738
Gross margin %				66%

SECTION 4: RICE VALUE CHAIN

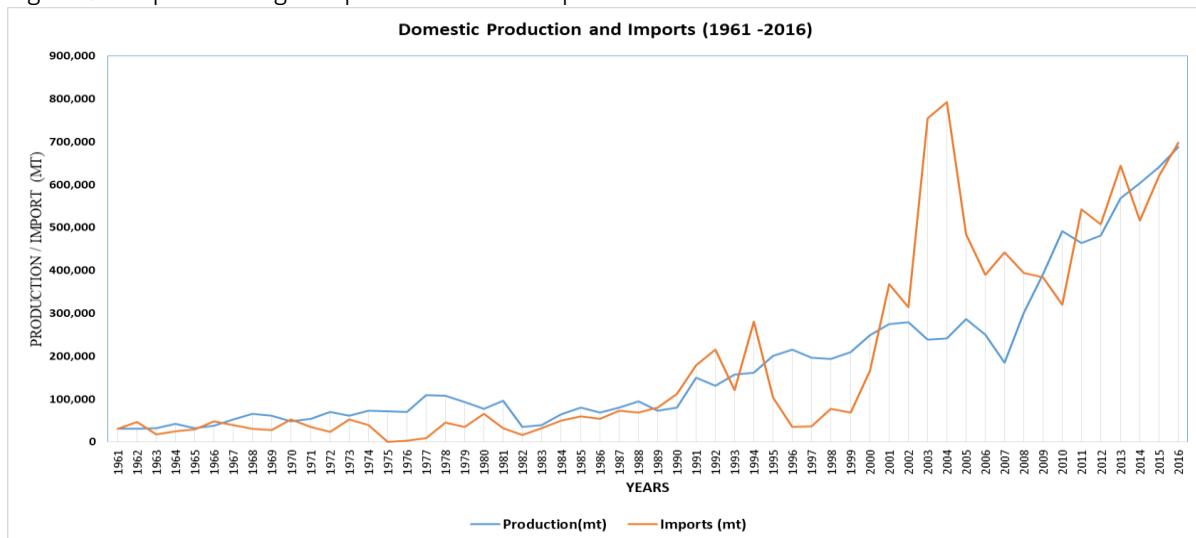
Introduction

Rice is the second most important staple cereal in Ghana after maize and its consumption continue to grow over the last two decades. In the Northern Belt, rice cultivation in lowlands has emerged with great potential to reduce poverty levels. MoFA has increased its support to rice production in the northern region through the Planting for Foods and Jobs (PFJ) initiative with the goal of making Ghana self-sufficient in rice by 2023. Evidence shows that rice yields can increase from 15 bags to 50 bags per acre through timely planting, proper agronomic practices, certified seeds, and fertilizers. Nevertheless, the lack of appropriate agricultural machinery and inadequate linkages to markets paying remunerative prices, affect the wider adoption of rice production by smallholders in the region.

Status of Crop

In 2017, Ghana's national production was able to satisfy about 47% of rice domestic demand and imported the remaining 53%. Importation of rice into the country costs government huge sums of money. In 2016, Ghana imported about 698,000 mt of rice worth 287.4 million USD. Thus, it is important to increase rice productivity and overall production to meet the country's growing demand and to improve overall food security. Figure below shows that domestic rice production has been on the increase for the last 40 years.

Figure 7:Graph showing rice production and imports from 1961 to 2016



In 2017, almost 240,000 ha of land were cropped to rice in Ghana (189,000 in 2012, or +27% in 5 years). Production varies between regions and ecological zones based on the production systems (rain-fed or irrigated), availability and suitability of soil and rice lowlands for production. Within each agro-ecological zone there are distinct rice ecosystems. The rain-fed systems (drylands and lowlands) accounts for 75 percent of the production area, the irrigated system accounts for about 10 percent

and the inland swamps and valley bottoms for 15 percent. In terms of total growing area under rice production, the irrigated ecology is less important than other ecologies but in terms of output per unit area the irrigated ecology is far superior to the remaining three ecologies.

In terms of yields, there is a wide gap between the potential yield and the actuals. The average achievable yield is 3.01 mt/ha compared to a potential yield of 6 mt/ha. However, yields are higher on irrigated lands as compared to rain-fed. Average yields have increased over the years from 2.36 in 2011 to 2.69 in 2014 and 3.01 in 2017.

Production

Location

Rice is produced across the three main agro-ecological zones (Guinea Savannahh, Forest and Coastal Savannahh) of Ghana.

The Guinea Savannahh zone covers the five Northern regions (Savannahh, Northern, Upper East, North East and Upper West). There are many irrigation schemes (Tono, Vea, Bontanga, Golinga, Libga) and rice valleys (such as Fumbisi, Nabogu-Nasia, Zakoli) developed in the Guinea Savannahh zone. The main seeding method is broadcasting, which is easier and less expensive, even on irrigated fields. Direct sowing or dibbling and nursing of seedlings are done on irrigated fields. Improved rice varieties grown include Jasmine 85, Togo Marshall, and AGRA. One of the prominent indigenous varieties include, mandi and several others although grown in smaller scale.

The Forest zone covers the Ashanti, Ahafo, Bono, Bono East, Oti, Eastern, Western North, and Western regions. There are rice valleys in Ahafo Ano North Municipal, Ejura and New Edubiase Districts. The main seeding method is direct seeding and nursing. The major varieties include Jasmine 85, AGRA and Togo Marshal. Other varieties are Gomba (brown rice), Lapex, Aflao, Amankwatia, etc. The Coastal Savannahh covers Volta, Greater Accra, and Central region. Rice production in this zone is concentrated in Volta and Greater Accra. There are well developed irrigation schemes (Aveyime, Wetta/Affife) and valleys across the Volta region. The Kpong irrigation scheme located in the Greater Accra serves rice valleys in Asutuare, Akuse and other areas. The main seeding methods are broadcasting and nursing of seeds (transplanting). There is an important indigenous rice variety called Viwonor which is known for its nutritional characteristics. The improved rice varieties include Jasmine 85, AGRA, and Togo Marshal. Other varieties include Amankwatia, Kawumo, Saudi Arabia and Akwa Blue.

The rainfall pattern in the Savannahh ecological zone is unimodal. The rains start from the month of May and may last up to October. Rice is usually grown during this period. Farmers on valleys usually plant early to avoid flooding. In the Savannahh zone, farmers on irrigated plots start land preparations after the rainy season. However, farmers in the Forest and Coastal zones experienced two rainy seasons (major and minor) during the year. The major rains begin in March and end in August/September whiles the minor rains begin in September and end in November.

The three major rice producing regions in Ghana are Volta, Northern and Upper East and these regions account for 78% of domestic rice production. The region with the least volume of rice production is Central. Table below shows the top five rice producing regions in Ghana from 2014 to 2016.

Table 6:Top Five Rice Producing Regions in Ghana (Three Year Average, 2014-2016)

Regions	Yearly average (mt) 2014 – 2016	Share of Overall Total production
Volta	206,910	32%
Northern	177,465	27.5%
Upper East	118,250	18%
Eastern	34,270	5%
Ashanti	33,670	5%

Sub Total	570,565	88.5%
Total National Production	644,400	100%

Available data from SRID indicate that domestic rice production would be in the tune of 720,000 tons in 2017.

Processing

There are many small mills sited in all parts of the country across rural areas. Locally produced rice marketing and pricing are poorly structured. Price is less stable in these areas, with low prices at peak periods immediately after harvest and high prices during lean season prior to production season. Medium rice processors lack the necessary investment and capital to carry out downstream activities, including high-quality milling, packaging, branding, and marketing. Misconceptions regarding the quality and nutritional value of local rice as well as post-harvest inefficiencies in storage have hindered their growth. Therefore, the market is mainly structured around major processing companies that buy paddy from local farmers for processing into quality rice meeting imported rice standard and distribute it through supermarkets, retailers, restaurants, and institutions across the country.

One of the most renowned brands has been the AVANSH'S ROYAL FARMERS which is produced at Nyankpala in the Tolon District of Northern Region. AVNASH has the largest rice processing plant, not only in the country but across West Africa. It is a state-of-the-art facility with installed capacity of 500 metric tons of paddy rice processed per day, sufficient for feeding the country with the highest quality of rice. However, AVNASH is struggling with the current domestic supply of rice paddy which is not able to meet the capacity of the installed mill, though the sitting of the mill offers opportunity for farmers, transporters, aggregators, mechanized service suppliers, inputs providers and other value chain actors within the rice sector.

Other outstanding mills include the Wienco mill in Sogakope in the Volta region through Global Agricultural Development Company (GADCO) which produces the ADUANEHENNE and COPA rice brands. Another large and modern mill that process local paddy is the Worawora rice mill also in the Volta region which produces the EDWUMAWURA rice. In the Greater Accra region, Richland Company installed in Asutuare a rice mill which produces the rice brand MR. RABBIT JASMINE rice.

Market opportunities

Description

Domestic importers have increasingly turned to Asian rice, particularly Thai jasmine rice, whose quality image has improved substantially and is highly prized by consumers. Thailand aromatic rice is becoming the preferred rice of those shopping in the 'quality' segment of the market, chosen for its special taste and aroma.

Potential for value creation

Involvement of SMEs and job creation

Rice demand is projected to grow at a compound annual growth of 11.8 percent in the medium term (MiDA 2010).

Main constraints and challenge

Rice farmers lack adequate finance to acquire inputs from dealers and more than 60% of them depend on their own capital. In this constrained environment, farmers reduce inputs usage and use seeds from previous crop harvest which result in low crop yields. They sometimes had to source for finance from informal money lenders with high interest rates. In the case where a purchasing agreement exists (most often verbal), farmers may be partially financed by aggregators and

processors with the hope that farmers will repay the cost of inputs through crop produce, yet for the buyer with the risk of side-selling. Farmers are also confronted with means of harvesting as there are inadequate number of combine harvesters. After harvesting comes the issue of marketing where aggregators and processors do not pay farmers on time after taking produce.

Climate

While the price of rice is projected to increase 60% by 2015 without climate change, it could go up by as much as 121% once climate change is considered.

Quantitative Analysis

Figure 8: Rice Crop Calendar under Rainfed Cultivation in the Northern Belt

ACTIVITIES	Month							
	April	May	June	July	Aug	Sept	Oct	
Land rent								
Land Preparation								
- Clearing								
- Weedicide application								
- Ploughing & Harrowing								
Bunding Maintenance								
Planting								
- certified seed								
- Labour for planting								
Thining after germination								
Weedicide Application (pre-emergence)								
1st Fertilizer Application								
Manual Weeding								
2nd Fertilizer Application								
Light hand picking								
Harvesting								
Threshing								
Sale of Paddy								

Figure 9: Rice Crop Calendar (Middle Belt)

	Mar	Apr	May	Jun	Jul	Aug
Land hiring						
Land preparation						
-Land clearing						
-Ploughing						
- Tilling						
Seeding						
Certified Seed						
Fertilizer Application						
Herbicide Application						
Light hand picking						

Rodent control					
Bird control					
Harvesting					
Threshing					
Winnowing					
- Recovery					
- Available for sale by Outgrower					

Table 7: Rice Crop Budget

	unit	qty per acre	unit price	Amount
			GH ¢	GH ¢
Hiring of Land	acre	1	300	300
Land preparation				
Ploughing	acre	1	80	80
Tiling	acre	1	60	60
Weedicide	lts	3	15	45
Weedicide Application	manday	3	20	60
Certified seed	10 kg	2	30	60
Planting	acre	1	180	180
Fertilizers and Agrochemicals				
NPK	50 kg	2	85	170
Urea	50 kg	1	80	80
1st weed control: Herbicide (superdupa)	250 ml	2	45	90
Labor				
Application of NPK fert	acre	1	40	40
Application of Urea	acre	1	20	20
1st Weed control: Application of herbicide (superdupa)	acre	1	60	60
Rodent control	acre	1	40	40
Bird Control	acre	1	150	150
Harvesting	acre	1	200	200
Gathering	acre	1	120	120
Threshing	acre	1	160	160
Sacks	pcs	20	3	60
Transport	acre produce	1	100	100
Extension and supervision	acre	1	50	50
Crop insurance	acre	5%		106
Total				2,231
Sales		20	195	3,900
Gross Margin				1,669
Gross Margin %				43%
Proxy IRR				75%

SECTION 5: SHEA NUT VALUE CHAIN ANALYSIS

Introduction

Shea is continuously touted as the cocoa of the Northern Development Zone (NDZ) with the only difference being that it grows on its own in the wild. Shea currently generates an average of 2006⁶¹ million dollars from export of raw shea nut and butter.

Production

Location

The NDZ covers mostly the Savannah regions of Ghana even though the southern part has some forest. The NDZ is bounded by international borders with Burkina Faso on the north and west, as well as Togo on the east with direct road connectivity to the main urban centres of these countries. It has an urban population of about 1.085 million and a rural population of 3.143 million. The predominant economic activity is agriculture even though other activities such as industry, tourism, and mining exist in smaller scales. The zone has more than 51% of the landmass of Ghana.

The zone is drained by the Black and White Volta and their tributaries like river Nasia, river Daka, among others. The zone has potential to be the supplier of agricultural products and agro processed products to the country and neighbouring countries given the necessary assistance

VC description and identification of main VC actors

Pickers

These pickers of nut are predominantly women groups who move through the wild and pick the nuts when it is in season. The challenge with this side of the value chain is that these women pickers also try to forward integrate in the value chain to process the nut into butter because of its traditional underpinning and personal fulfilment to see a process start and end. However, the limited scale of these pickers does not make the economic sense for processing the nut themselves. There is the need therefore for focusing on their side of the value chain.

Example of women shea picking, and processing group is the Kanvili Shea Butter Group. This group is based in Kanvili in the Tamale Metropolitan of the Northern Region with 54 female members with the exception of the secretary and the miller. Kanvili women shea processing group. These women are 54 in number and they have two men the secretary and the machine miller. The group supplies a secondary processor and aggregator called Sandam with Shea nuts and funds for their operation. The company in turn has provided the group with the processing center including sheds, water storage tanks, milling machine, and improved stoves with chimney.

Aggregators

Aggregators in the shea value chain are in the form of small to medium scale individual aggregators and large institutional buyers. Some of these institutional buyers are basically subsidiaries of multinationals in Europe and America. The crux of the issue with aggregators is the small to medium scale aggregators. These may be registered companies alright, but inherently controlled and championed by one person and have limited financial resources to fund their equipment needs and working capital. The role of NGOs and ESG companies (impact investors) in the aggregation phase is also worth noting, with the idea of procuring nuts from the women pickers as a means of giving them sustainable livelihoods. These agencies then link up with processors and exporters.

Aggregators in this space include Borimakoso (Tamale Aboabo market), it has women in the following towns and villages in the NDZ.

Table 8: Women shea pickers from Borimakoso Enterprise

⁶¹ As indicated by COCOBOD

Location	No of Pickers (women)
Dwankora	47
Gushie	32
Nalerigu	17
Zabzugu Tatale (new group)	12
Salaga (queen mothers of pickers)	39
Chamba	29
Djimle (Yendi)	18
Pishowo (Karaga)	9
Chedereh	6
Total	209

The firm supports the pickers with the following, hand gloves, wellington boot, cutlass, buckets, rubber bowls, mosquito nets, torch light. The company also plans to include national health insurance for 50 women, and anti-snake serum.

Processors

Shea processing in the value chain is dominated by institutional processors and local women cooperatives. The latter group's process is very much manual and traditional, taking a lot more time and labor. They produce chiefly, unrefined yellow and ivory butter but other cooperatives add further value by producing the refined ones. This group has seen a lot of NGO activities in recent times because of the place of women in the process as a way of boosting gender equality. Strict analysis of the traditional process will hardly yield meaningful economic return because of its low scale and manual nature. The institutional processors can be divided into two key modules of operation. The first module is the processors who have invested in shea processing plants and are into direct processing of shea nut. The second module is the processors who team up with the local women cooperatives by supervising production and off-taking the butter from them for onward marketing and exports. The operations of the free zone shea processing company may be able to boost the potential of the value chain.

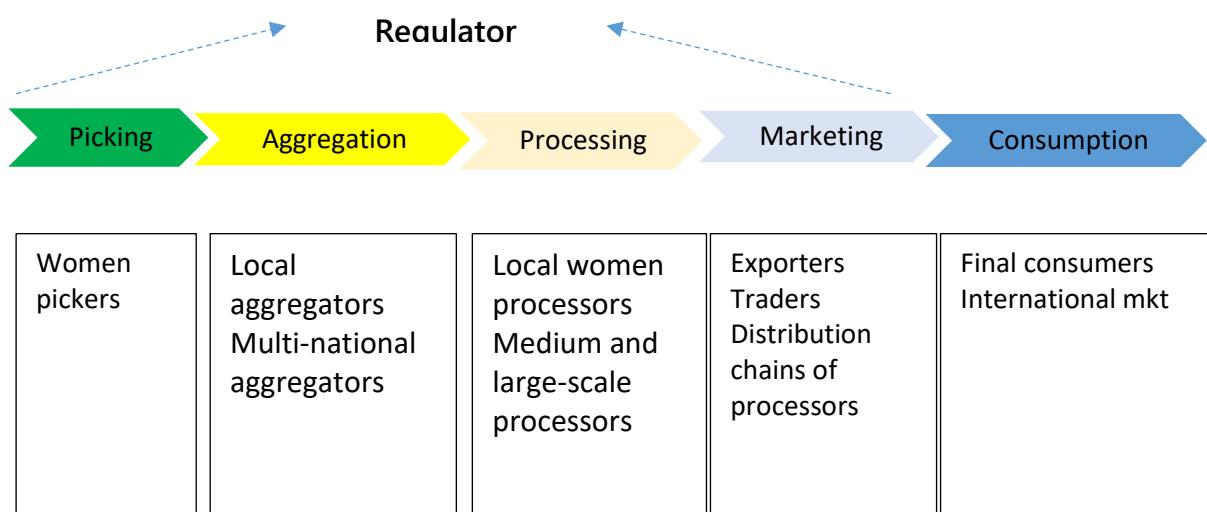


Figure 10:Shea Value Chain Chart in Northern Ghana

Market opportunities

The industry is currently assuming a large-scale commercial status with the advent of large-scale shea (nut and butter) buyers and exporters who have in recent years discovered the high value of shea on the international market and are cashing in on it as quickly as possible. Ghana is currently collecting 130,000 metric tons of shea nuts but has the capacity to do 200,000 tons. Ghana recorded USD 33,572,000 in value of exported processed or industrial shea nuts.

Shea butter has become popular in the cosmetics industries because of its medicinal features. Apart from the cosmetics, it has been identified as a key organic oil with fats that are easily broken down by the body and has had its demand boosted in the EU especially. The demand for shea is likely to increase in the future because of the above reasons and as such a need of substantial investment in the value chain to take advantage of the increased demand. An important feature of the shea from the NDZ is its higher content of shea butter which makes it well positioned to serve both the local and the foreign market.

Main constraints and challenge

1. Unavailability of vital processing machineries for the women primary processors. For instance, the Kinvili shea group indicated that they needed a kneading machine which can reduce drudgery. Other critical utilities needed include source of water.
2. Marketing problem, these women groups are unable to market in bulk but only in bites apart from what they process for the major processors. These groups ideally prefer to collect the nuts all by themselves process and supply the butter.
3. The challenge of snake bites face in the fields has been thoroughly deliberated by major value chain players and addressed to a larger extent by the provision of protective gears and snake serum kits.

Institutional analysis and VC management

The most active stakeholders in the shea industry are Civil Society Groups comprising the Shea Dealers Associations in all the regions of Northern Ghana, individuals as well as NGOs such as SNV, a Dutch Development Organization, TechnoServe, a US-oriented Food Security organization, the Association of Church Development Projects (ACDEP) and its subsidiary, Savannah Farmers Marketing Company, Ghana Nuts and PBC.

Women/youths/PWD

The primary production is dominated by pickers who move in the wild to pick nuts for further processing and sale of raw nuts. Consequently, these women pickers are subject to conditions like snake bites. Aggregators and other NGOs provide support in the form of snake serum and protective gears. These activities are found to add value to the lives of women in the zone.

Quantitative Analysis

Table 9: Shea Processing Budget Per Kg

				KG	Ton
REVENUE PER KG OF SHEA NUTS				2.00	1,995
	Volume (Kg)	Cost per Kg	Total Amount		
Riped Fruits Collection (Man Hours)	1	0.40	0.40		
Depulping of Fruits (Man Hours)	1	0.01	0.01		
Boiling of Fruits	1	0.23	0.23		
Water Expense	1	0.11	0.11		
Firewood Expense	1	0.11	0.11		

Drying Cost (Tarpulin Expense)	1	0.03	0.03		
De-husking and Sorting Cost	1	0.01	0.01		
Mortar Expense	1	0.01	0.01		
Labour Expense	1	-			
Packaging Expense	1	0.01	0.01		
Storage Expense	1	0.01	0.01		
Transportation	1	0.05	0.05		
Handling Expense	1	0.01	0.01		
TOTAL MATERIAL COST PER KG			0.70		
Consumables	1	0.54	0.54		
Hardware	1	0.18	0.18		
TOTAL SUPPLY CHAIN COST				1.42	1,421.58
Gross Profit				0.57	573.42
GM				29%	29%
OVER HEADS					
Administration Cost		0.02			
CSR Activities		0.01			
Communication		0.01			
Social Security Contribution		0.02			17.10
Council Fees		0.11			
TOTAL OVERHEADS				0.17	171.00
PBIT				0.40	402.42

VC ANALYSIS: VEGETABLES

Introduction

Vegetables can make an important contribution to food and nutritional security and can enhance livelihood of smallholders due to their high farmgate values per unit land area. Besides their economic, nutritional, and medicinal importance, vegetables are considered valuable because of their ability to fit into year-round production systems.

In Ghana, cultivation of vegetables is an excellent source of employment for both rural and urban dwellers as it takes place in many rural areas through truck farming and in the outskirts of towns and cities in the form of market and backyard gardening to supply fresh produce to urban markets. It thus plays an important socio-economic role as well as in diversifying diets for improved nutrition. Ghana benefits from considerable foreign exchange through the export of vegetables such as okra and chillies to European countries. Chilli exports for instance have ranged between 26,000 and 41,000 MT per annum between 2010 and 2015 with corresponding foreign exchange from US\$18.2 to US\$28.7 million.

Pepper is the fourth most harvested crop in Ghana after cassava, plantain, and yam. It contributed GHS 2.01 million (7%) of estimated annual sales of GHS 29.51 million of fruits, roots and vegetables in Ghana in 2007. With the increase in population, rising household income levels, the influx of malls and the establishment of hospitality centers, the consumption of pepper is on the rise.

As a commercial crop, pepper was ranked as the second valuable vegetable crop ahead of popular vegetables like okra and eggplant with an estimated total production of 88,000 metric tons in 2011. Ghana is ranked fourth in pepper production in Africa after Egypt, Nigeria, and Algeria.

Main vegetables consumed in Northern Ghana

Food Group	Specific vegetables
Vitamin A rich vegetables and tubers	Carrots, red pepper, sweet potato
Dark green leafy vegetables	Amaranth, roselle, jute mallow, okra leaves, onion leaves
Other vegetables	Cabbage, garlic, okra, onion, tomato, eggplant, lettuce

Production

Location

Around 80,000 ha are used for vegetable production in Ghana. Production of fresh vegetables takes place all around the country and is strongly related to the specific weather conditions and market windows. Irrigated agriculture is on the increase leading to new production areas around the Volta and Volta Lake as well as specific irrigation areas in and around Accra.

South Ghana leads the production of pepper, as it has a competitive advantage over the North, because of the benefit of its two rainy seasons. It is estimated that around 1000,000 households are engaged in the cultivation of pepper in Ghana as a livelihood, and 20% of these households would be based in North Ghana. The price of pepper is low at harvest, but rises to over 200% during the dry season, because pepper is rarely cultivated under irrigation in Ghana.

The major buyers of pepper are south Ghana based, with Accra, Kumasi, Techiman and Tamale being the key pepper markets. There are several road side and local markets within the environs of farm communities manned by pepper farmers or local trader.

In Ashanti region, more than 90% of the farmers engaged in cash crops cultivate tomato, hot pepper, garden eggs, and okra. Exotic vegetables such as cabbage, cucumber and carrot are not popular among them. Also, traditional leafy vegetables are not popular either. In that region, vegetables are mainly grown for sale (80%), before home consumption.

Crop systems and characterization of producers

Vegetable cropping systems were sole cropping, relay intercropping or multiple cropping where different vegetables were cultivated on separate plots.

Pepper grows relatively quick with a maturity period of 3 to 4 months. It is mostly cultivated by smallholder farmers with average plot sizes of between 0.8Ha and 2.4Ha. Ghana produced 117,000 t over 14,000 ha in 2013. Statistics account for an increase on yields of 7 percent annually and 9 percent on production for the period 2009-2013 while acreage has remained stable. Yields has grown up to 8Mt/Ha, yet far below the national achievable 32.3Mt/Ha, a situation that is reflective of the poor access to quality seeds, bad agronomic practices, poor use of organic and inorganic fertilizer, pest, and disease infestation. About 70% of pepper farmers produce under rain-fed conditions. However, with irrigation, it is possible to grow the crop all year round, which would transform farmer's incomes.

Ghana cultivates about 46,000 ha of tomato per year, which is between 5 and 10 percent of the acreage dedicated to food crops. As of 2013, production was estimated at about 340,000 t. The average yields oscillate around 7-7.5 t/ha, which is only 50 percent of what is deemed as achievable by MoFA. Kenyan farmers produce 22 t/ha and neighboring Burkinabe farmers 9 t/ha.

Pepper farming is heavily resource intensive. It requires about two times the labour and financing resource required to cultivate grains. Improved seeds and fertilizer constitute one of the major costs of the pepper farmer.

Overall farmers dedicate only a fraction of land to vegetable production. They are hardly organized in vegetable or horticulture groups, and neither are they trained specifically on vegetable production. Only in a few instances farmers work together to supply specialized suppliers and have more specialized knowledge on vegetable cultivation.

In Northern Ghana, where there are no major buyers or exporters, there are virtually no out-grower schemes running, although linkages that result from repeated transactions between traders and producers prevail. Buyers from the South do provide seed to some larger farmers and nominate women traders to whom the farmer should sell as agents for the buyer. As these relationships are not formalized, the buyers change, and the new buyers introduce other varieties. With farmers retaining seeds, this results in many varieties being grown on the same plot of land, further depressing productivity.

VC description and identification of main VC actors

Local market centres are placed at the heart of the value chain and their performance make an impact both up and down the chain. In Ghana they are mostly operated by so-called « market queens » who serve as a point of sale for most buyers who run shops, hotels, and restaurants. The vegetable traders in Ghana are organized under these “queens”. The market queen is selected by all traders and is later introduced to the local traditional community leaders and the district assembly. For tomatoes, onions, and exotic vegetables (hot peppers, okra etc.), there are different market queens.

Domestic bulk suppliers supply over 80 percent of the produce sold in the local market centres. Most of the bulk suppliers have supply contracts with the market queens, their supplies are regular and volumes are large. Some bulk suppliers can also supply directly to institutions or even hotels.

Itinerant suppliers supply around 15 percent of the produce sold at local market centres. They operate similarly to the domestic bulk suppliers, but their volumes are small and do not have contracts or supply arrangements with the buyers/market queens.

The majority of the pepper traders deal in both fresh and dry pepper products with few dealing in one product only. Pepper products sold include fresh, dried powdered, dry pepper, shito and fresh hot pepper paste.

A few traders provide loans to some farmers they have worked with for some time, and the farmers sell their produce to them. This practice though helpful to farmers is very limited in scope and size of assistance.

Market power on the pepper value chain rests with buyers who have access to final markets. This is due partly to farmers' need for cash, forcing them to sell immediately after harvest, but mainly since the farmer is remote from the market and has no alternative but to sell through several intermediaries who all take a share of the final value created. The uncertainty over the market, caused by weak and informal relationships between actors on the value chain is a great limitation to farmer productivity, as they are unwilling to grow new varieties for fear that they may not be in demand in the local markets.

Market opportunities

Overall vegetable consumption in Ghana is still relatively small, also in comparison with other African countries like Kenya, but is expanding rapidly. Apart from local vegetables the most important vegetables are tomatoes, peppers (both sweet and hot chillies), onions and okra. Especially the market for tomatoes and peppers has boomed recently.

The national consumption of pepper is estimated to be 230,000Mt per annum, with a growth rate of about 8% annually. Production has however failed to keep pace with demand, increasing marginally from 27,000Mt in 2000 to 79,000Mt in 2008. This supply gap is primarily due to low productivity.

Most of the pepper traders deal in both fresh and dry pepper products with few dealings in one product only. Pepper products sold include fresh, dried powdered, dry pepper, shito and fresh hot pepper paste.

The main market for vegetables for the coming years will still be dominated by open markets and smaller, street shops. The production systems will compete on price and less on quality. These markets include the large Agbogbloshie, Makola and Tudu markets where specific commodity associations manage the market system. Price fluctuations are high following the different production periods.

In terms of exports, Ghana's vegetables show potential. While traditionally fruits were the main horticultural export crops, chillies and Asian vegetables (different types of gourds and okra) have become popular. In addition, baby corn and butternut squash production are picking up significantly since the arrival of the multinational VegPro. In general, exports of peppers are believed to have a comparative advantage over competitors like Kenya, given Ghana's climatologic conditions and relatively short distance to the EU market.

Main constraints and challenge

The main constraints to enhancing productivity includes low soil fertility, poor use of organic and inorganic fertilizer, pests and diseases pressure with ineffective management practices, inadequate access to finance, unavailability and high cost of irrigation systems, inadequate knowledge of improved technologies coupled with the use of unimproved varieties.

Lack of farmer access to high quality seeds of improved vegetable cultivars is one of the major constraints to the successful expansion of the vegetable industry in Ghana. The use of poor-quality vegetable seeds mainly obtained from informal sources by most farmers has compromised yields and productivity and rendered serious challenges to the success of crop productivity and improvement initiatives. Boosting agricultural productivity will require a more professional input supply system with better and more tailor-made information for farmers on the use, adaptability and effectiveness of seeds, fertilizers, and pesticides. The public extension system increasingly faces challenges and agro-dealers so far have not taken up the challenge to also provide quality information and services.

Production of the crop is also mainly under rain-fed conditions and thus forcing the crop compete with other staple crops for land, labour, mechanization, and other productive resources, making it quite difficult for most farmers to increase their average land holding for production. There are also high post-harvest losses (estimated at 50%) because of poor farmer knowledge and skill in appropriate handling methods and lack of technology like cold storage.

Another constraint to enhancing productivity is the undersupply of public service and support. Access roads from many farmer communities are in a deplorable condition, creating market access constraints for farmers. Funding for critical activities such as knowledge and information services, research and irrigation services are heavily inadequate and poorly governed. There is no significant public investment on the pepper value chain. Privately funded research is limited to foreign seed and input supplying companies with representation in Ghana.

Less endowed farmers, with limited capital to invest depend on rural banks and micro finance institutions to enable them to cultivate the crop. Most of these financial institutions are ill resourced to advance agricultural loans to assist farmers improve their productivity.

Women/youths/PWD

Women constitute the largest group that provides market access to pepper farmers. As "middlemen", they practically control the supply of pepper to the major markets as they own majority of the trucks that transports the product from the farm communities to the open markets.

VC ANALYSIS: SMALL RUMINANTS

Introduction

Ghana produces only 30% of the national demand for meat. Northern Ghana accounts for 70% of the local production. Livestock keeping makes significant contribution to rural livelihoods. It provides employment and serves as a source of wealth creation for reducing poverty. The traditional system of producing small ruminants (sheep and goats) contributes significantly to the socioeconomic wellbeing of farm households in northern Ghana. Besides provision of meat and serving as an important source of income, sheep and goats also offer important non-pecuniary benefits such as the provision of draught power, hide, manure, savings, insurance against crop failure, farm portfolio diversification, and strong social relations. The traditional system of ownership is culturally complex and subsistent in nature. This has negatively affected expansion and commercialization of cattle production in Ghana. Livestock production in Ghana is low compared to demand. This is attributable to the fact that the potential to develop and expand the animal sector is not fully tapped. The country has a high potential to become self-sufficient in animal production, yet large quantities of meat are imported to meet demand. Small ruminant promotion should aim at improving production and productivity as a means of ensuring increasing meat production, consumption as well as rural family income diversification.

Importation of live animals into Ghana

Year	Sheep	Goats
2013	16,738	16,953
2014	22,188	32,012
2015	15,763	20,004
2016	13,854	16,900

Production Location

Northern Ghana, comprising the Upper East, Upper West, and Northern Regions, is the livestock hub of the country. It ranks first in the livestock production of Ghana. The region is well known to produce sheep (30% of the national output) and goats (35% of the national output).

In Ghana, small ruminants play an important role in food production systems. They have been an integral part of most rural, urban and peri urban households for a long time and their small sizes and relatively low cost of production make them a unique resource particularly suited to the limited resource base of these households. Sheep and goats are widely distributed and adapted in all agro-ecological zones due to the various adaptive features they possess: higher fertility, shorter generation interval, higher adaptation to harsh environment and ability to thrive on limited feed.

Production systems and characterization of producers

The dominant production system is the extensive system (free-range). Under this system, no standard ruminant management practices are followed. It is characterized by minimum inputs, no investments beyond the foundation stock with animals grazing around, scavenging on refuse dumps, and sleeping on verandas and in the open. Animals do not benefit from prophylactic or curative medicinal treatment, little or no supplementary feed is offered, no good flock management is practiced and there is generally poor housing. Indications that the productivity of small ruminants in this system is low and that there is ample opportunity for improvement. Commercial cattle production outside the household is common involving farmers hiring the services of herdsmen to keep and manage the animals outside the community.

There are many breeds of sheep, but the dominant is the indigenous West African Dwarf (WAD) or the Djallonke, distributed nation-wide. The WAD is acknowledged for its hardiness, trypanotolerance, tick tolerance, prolificacy, and suitability for year-round breeding. Although it is a small animal with an adult male weight of 25- 30kg and female weight of 20-25 kg, the WAD has the potential to be improved genetically through selection.

In Ghana the WAD is mostly found in the south. The larger and long legged Sahelian sheep, and other crosses are found mostly in the north and peri-urban areas of the south.

The non-adoption of fodder technologies can be attributed to a number of elements including: household labour constraint during harvesting of food crops and preparation of dry season vegetable production (which is a principal commercial enterprise) and inadequate attention for non-market institutional constraints that inhibited competitiveness of smallholder producers.

VC description and identification of main VC actors

The market structure of sheep and goat is characteristically lengthy, about 3 to 5 stages between producers and consumers, without significant value addition. The main actors in the cattle VC are farmers who are the primary producers, aggregators/ middlemen, large-scale regional livestock traders, transporters, feed (crop residues and conventional feeds) sellers, butchers, meat and milk processors, caterers, food vendors and restaurants, rural banks, veterinary medicine shops, international NGOs, and regulatory institutions (taxation, licensing, and warranties). The livestock VC in Ghana is not formally structured with the objective of creating jobs and improving local economies. The market channels of small ruminant farmers are through butchers and itinerant traders acting on behalf of abattoirs and food vendors. Some of the itinerant traders retail the animals at the weekly markets. They sell live animals to household for food or for breeding purposes whiles butchers and food vendors trade in meat to customers.

Auction sales, sales to abattoirs, speculators, and private sales as the major modes of sales of livestock, with sales to abattoirs and speculators providing the most access to price information. A poorly functioning market of small ruminants could bring up about huge inequities in income distribution owing to exploitation by middlemen.

Market opportunities

Livestock marketing encompasses the sale, purchase or exchange of live animals and their products (milk, meat, wool, and hides) for income. Meat from sheep and goat are highly patronized by revelers of "chop bars" in all regions across the nation. Participation of small farmers in markets for small ruminants is relatively low in Ghana. Limitations experienced by smallholders i.e., water shortages during the dry season, feed-related or health-related high mortality and theft of livestock persist because of institutional constraints. These include structural limitations related to availability of arable lands, weak support systems for animal production and health services delivery, communities' preference that are skewed towards crop production more than animal husbandry, ineffective traditional and formal structures for justice delivery, and gaps in the interaction between communities and district and national level organizations such as the Ministry of Food and Agriculture, district assemblies, rural banks, and non-governmental organizations as well as traders and butchers.

Confronted with such constraints, the strategies that most smallholders have adopted to be resilient entail diversified sources of livelihood, low input use in small ruminant production, and maintaining the flock as a capital stock and insurance. Only a few smallholders engage in market or demand-driven production and/or exhibit successful strategies in small ruminant husbandry. For most smallholders, market production, which requires high levels of external inputs or intensification of resource use, may not be a viable option.

Women/youths/PWD

In the traditional system of rearing cattle in Ghana, cattle can be acquired and cared for by any member of the household but their ownership, control, and the decision to sell or slaughter for consumption is often the sole responsibility of the male household head. In recent times, this system of ownership and control is changing as more youth and women are gaining rights to take decision on how to manage and dispose off their animals.

Institutional analysis and VC management

There are currently cattle farmers' and butchers' associations in most cattle producing areas. Several interventions with a focus on smallholder small ruminant commercialization have been made to improve Ghanaian small ruminant production systems and markets, such as the National Livestock Services Project (1993 – 1999) and the Livestock Development Project (2003 – 2009). However, these have not changed the small ruminant production and marketing systems in any significant way. Under the "Rearing for Food and Jobs" policy programme of the Ghanaian Government, farmers can be profiled and formalized into primary farmer-based organizations to enable them benefit from training and credit.

Nutrition and food security

The meat of small ruminants is a source of protein in many local cereal-based diets and can improve the nutrition of children and pregnant women. The size of small ruminants, which, on average, generates about 20 to 35kg carcass weight, allows rural households to conveniently process them easily for home consumption with little or no need for preservation.

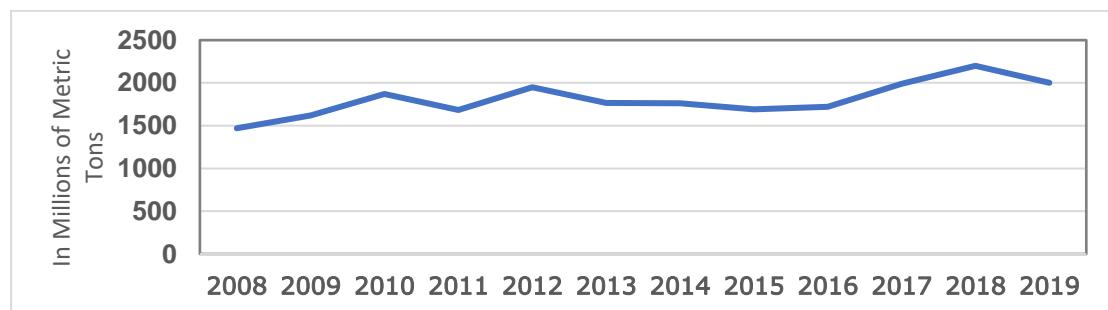
SECTION 1: MAIZE VALUE CHAIN ANALYSIS

Introduction

Maize is regarded as the most important cereal crop on the domestic market in Ghana and it is one of the largest agricultural commodities in terms of production volume. It accounts for 3.3% of total agricultural production volume and about 65% of cereal output in Ghana, howbeit, with a reported post-harvest loss between 5% and 70%. Current yield rate stands at about 2.73 tons per hectare, an increase from 2.42 tons per hectare in 2019, and has been increasing for the last three years. In terms of its uses, maize is an important and major raw material in the production of poultry feed as well as a substitute for the brewing industry

Status of the crop/produce

Maize production recorded a 4-year CAGR of about 8.05% from the year 2015 to 2018, the highest among the major crops cultivated in Ghana. Trend analysis of maize production in Ghana reveals a general upward trend, however the period between 2013 and 2017 saw a flattening of the curve, indicating little or no growth in maize production within this period. However, the period between 2015 and 2018 saw a clear increasing trend, perhaps due to the government flagship program of PFJ and RFJ, which basically subsidized critical imports for the cultivation of maize and other crops. Interestingly, even the fall army worm (FAW) infestation could not curtail the growth of maize production within this period. From the trend, 2019 saw a decrease in maize production by about 9% compared to production level in 2018.



Crop systems and characterization of producers

In Ghana, maize is mainly cultivated under traditional production methods and rain-fed conditions. Average yield of maize for the year 2019 was about 2.42 MT/ha of a potential yield of 5.5 MT/ha, rising to about 2.73 MT/ha in 2020. Maize is grown throughout Ghana; however, the leading

producing areas are mainly in the middle- (Bono East, Bono, Ahafo, Eastern, and Ashanti regions) where about 84% of maize is grown, with the remaining 16% being grown in the northern regions of Ghana (Northern, Northeast, Savannah, Upper East, and Upper West). While the middle belt does two cycles of maize per year, the northern belt does only one cycle in a year. Field report reveals that maize from the latter destination is normally free from aflatoxins because of extensive dry season to allow for natural sun drying. As a result, maize grains from these areas are desired for the breweries and food processing entities. Maize from the middle belt (especially in the major season), however, needs mechanical drying to be at the highest quality desired by both industrial and domestic users.

Production

Maize production is predominantly under rainfed cultivation with no irrigation.

Location:

Upper East – Tumu

The agro-ecological zones for maize cultivation in Ghana can be grouped into four main zones with differing system of maize cultivation. However, the major zones for maize cultivation are those located in the middle belt, (forest zone, and transition zone) and the northern belt (Guinea Savannah).

- Coastal Savannah zone:

The coastal Savannah zone comprises a narrow belt of Savannah that runs along the coast and widens towards the east side of Ghana. Maize mostly intercropped with cassava are grown by farmers. This zone experiences bimodally distributed annual rainfall totaling around 800 mm, and maize planting normally begins at onset of the major rainy season (March or April). Low productivity has been reported due to the light soil texture and low fertility. Areas include, Central, Accra, Volta, Oti.

- Forest zone:

The forest zone lies down just inland the coastal Savannah. Most of Ghana's forest is semi-deciduous, with a small area of high rain forest in the South-Western part of the country close to the border with Côte d'Ivoire. The cultivated maize is mostly intercropped with cassava, plantain, and cocoyam. The annual rainfall averaging about 1,500 mm is observed, and maize is planted both in the major and minor rainy seasons (March and September respectively). Areas typically include, Bono, Ahafo, Eastern, and Volta.

- Transition zone:

The forest zone gradually gives way to the transition zone towards the Northern part of Ghana. This zone is an important area for commercial grain production, and is characterized by deep, friable soils, and the relatively sparse tree cover allowing for progressive cultivation. Annual rainfall averaging about 1,300 mm is bimodally distributed. Maize cultivation is done both in the major and minor rainy seasons mostly as a monocrop or intercrop. Areas under this zone include, North of Ashanti, Bono East, and Oti.

- Guinea Savannah zone:

Most of the lands in the Northern part of Ghana are in this zone. There is a single season of rain per year averaging 1,100 mm. Although sorghum and millet are the predominant cereals, maize is equally grown. Maize can be intercropped with legumes and other crops.

VC description and identification of main VC actors

Small holder farmers: The total maize production in Ghana is done by about 70% of small holder framers. These are made up of both peasant and commercial farmers who cultivate maize in small quantities. The difference here is that the peasants concentrate on cultivating maize mainly for

personal and domestic uses, while commercial farmers cultivate for sale to other actors along the value chain. They are also cases where farmers cultivate maize for both reasons. They are commercial farmers because they farm with the objective of making profit at the end of the season and that informs the approach to farming. The approach to ensuring farmer welfare is the formation of Farmer Based Organizations (FBOs) to give small holder farmers one voice and strength in negotiations as well as accessing market and finance. However, there are very few properly registered and administered FBOs in the middle and northern belts. The MoFA websites has record of only ten maize (FBOs) in the middle and norther belts, excluding Eastern region, which has about twenty-seven (27) maize based FBOs.

Women are also landowners and do production as well. Women do more of the planting, harvesting, and threshing, sometimes pest control (spraying).

Nucleus farmers: these include large scale farmers who cultivate maize. Most of them may typically have small-holder farmers that they work with to help them meet grain orders.

Input Providers: Inputs form most of the cost component in maize cultivation. Inputs come in the form of seeds, fertilizers, agro-chemicals, among others. With respect to seed, farmers use both hybrid and OPV seeds. Hybrid seeds are provided through Government sources and some nucleus farmers, while different OPV seeds are obtained from local seed sources. The situation on the ground is that hybrid seeds are not regularly obtained since they are imported. Again, hybrid seeds sold in per acre packages; and are calibrated based on using planters. However, farmers use manual planting, hence are not able to achieve the recommended plant density Some actors such as Agromite source for hybrid seed from outside Ghana with permission of the government while others make use of available seed companies in Ghana. Field report revealed that farmers, especially those in the middle belt worry of the incidence of armyworm against ineffective pest control chemicals. According to them, the preferred insecticide (Attack) is not readily available.

Mechanization Providers: Current demand of mechanization services by small holder farmers is primarily focused on land preparation services, especially plowing. The services are provided by two main groups, nucleus farmers and agriculture mechanization service businesses. Players such as Agromite Limited, provides other mechanization services such as harvesting, and post-harvest services to small holder farmers and some other nucleus farmers and recover their monies through in-kind produce at the end of harvest. Major constraint in this segment of the value chain is low operational scale due to machinery being idle for long periods within the year and being needed at specific times in the crop calendar within specific locations. This affects profitability of investment. With such a low operational scale, it is essential to consider various options for introducing low-cost, small tractors suited to the current farming scale in the country. Also, a used tractor model is one of the options available for industry players to consider. Tractor-hire services can play an important role in transforming smallholder maize production. Another solution is to move machinery between the northern and middle belt because of differing crop calendars of the two zones, howbeit, it may be only viable in large scale.

Other challenges include inadequate tractor services for land preparation (ploughing, harrowing) against a growing demand for tractors for land preparation services during peak times in the season. Again, high competition for tractors, especially, in the middle belt. For instance, tractors from the northern belt comes to augment what is in the middle belt, but they come late in the season, delaying planting.

Aggregation

Maize aggregators come in the form of small, medium, and large aggregators. Large and medium aggregators are usually private entities such as Onuado farms, who typically also engage in cultivation. The following situations typically exist with such aggregators.

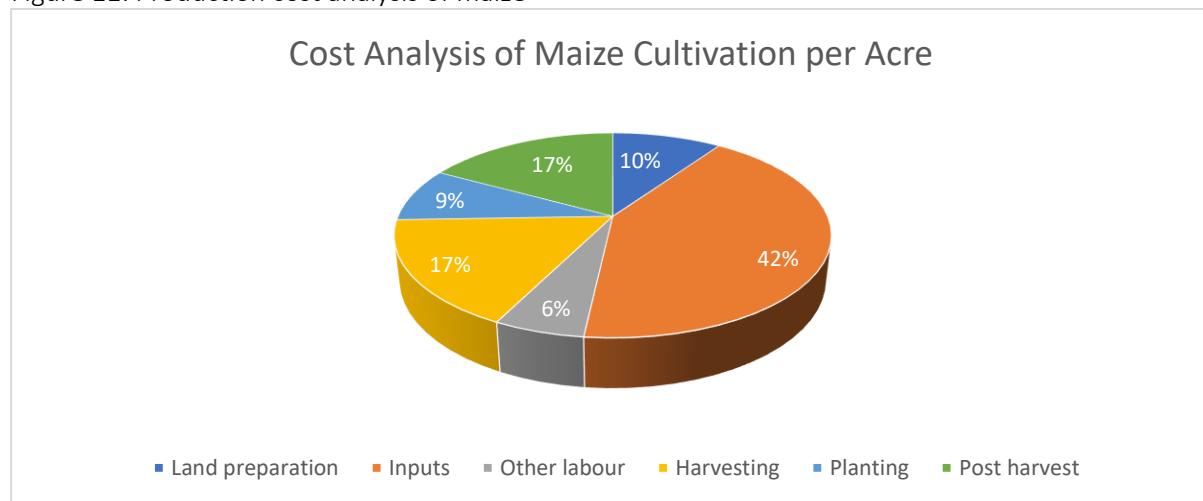
Use own resources with limited bank loan or other financing facilities.

Have sub-aggregators at the community level who do the initial bulking from the farmers.
 Provide inputs and land preparation services to small holder farmers who are associated with them
 Sometimes also provide loans to small holder farmers for their livelihood needs, and recovered in-kind (maize produce)
 Aggregator supplies maize to larger buyers in Kumasi, Accra, Sunyani
 Operates warehouse for storage
 Require several equipment to be able to service farmers adequately. These include tractors and implements, planters, threshers, among others.

Market Opportunities

The maize value chain has strong market linkages right from the upstream to the downstream. At the upstream of the value chain, maize cultivation creates ready market for the input industry such as fertilizer producers and marketers, agro-chemicals, and seeds. Inputs alone form about 42% of maize production. This is followed by harvesting activities, and post harvesting activities with forming about 17% each of the production of maize.

Figure 11: Production cost analysis of maize



Furthermore, there are series of opportunities created at the downstream segment of the maize value chain. These opportunities are in aggregation, animal feed processing, processing of maize grits for the brewery industry.

Main challenges of the maize value chain are inadequate mechanization to improve efficiency in cultivation, Low quality input such as fertilizer, inadequate storage space at appropriate areas and changing rainfall patterns

1. Aggregation- The maize market is made of the formal and informal markets. The formal markets include formal maize aggregating companies who source for maize, clean and dry for onward sales to the industrial process in the beverage, poultry, and other food industries. These aggregators often engage in production themselves while also organizing small holder farmers. The informal market includes the middlemen and women who source for maize in the major maize markets.

2. Processing and utilization of maize represents up to 20% to 25% of the total maize marketed in Ghana, as follows.

1. Breweries are important players in the Ghana maize market. Usually, sorghum is preferred to maize in brewing, but breweries substitute maize if attainable at a competitive price. The general rule of thumb is that maize grits price of US\$0.80/kg is the highest amount at which brewers consider substituting grits for sorghum.

2. The poultry industry is another important player in the maize market in Ghana. According to the latest records about 250,000 metric tons of maize is used for poultry feed annually in Ghana (FAO 2012). The poultry industry therefore provides a great opportunity for maize production in Ghana.

Potential for Value Creation

The post-harvest economy in the maize value chain is large and has a huge potential. There are opportunities for investment in warehousing infrastructure at relevant locations, drying facilities, cleaning facilities, haulage, haulage insurance, semi-processing of maize into maize grits, processing of maize into animal feed, and domestic use forming a core part of the cuisine of northern Ghana.

SMEs and Job Creation

Small and medium scale enterprises are into input provision, cultivation, the provision of IT services, aggregation, transportation, warehousing, insurance, semi-processing, and processing of maize. This does create a good number of jobs for the youth and has the potential to further create a great number of both direct and indirect jobs for the youth.

Main constraints and challenge

1. Inadequate mechanization to improve efficiency in cultivation: For instance, Agromite Limited is one of the most resourceful Agro-SMEs in the Sisala East and West zones, however, it is only able to provide only 15% mechanization coverage for its 6000 acres production
2. Low quality input such as fertilizer: Farmers indicated that they received low quality fertilizers which led to bad yield for many of them. In the same vein, others testified that they bought quality fertilizer brands and saw about a 100% increase in their yield.
3. Inadequate storage space at appropriate areas.
4. Changing rainfall patterns
5. Farmers in the middle belt revealed that transportation of produce from farm to market is a challenge due to competing demands on KIA trucks and of the bad farm roads.

Women/youths/PWD

Potential for inclusion and job creation

Participation of women in maize cultivation is relatively lower compared to men, and women participation in other related crops such as soya. Field reports reveal about 20% women participation in maize cultivation in the northern belt. However, maize cultivation among women in the middle belt is slightly higher, about 25%, compared to the northern belt. One of the reasons boils down to land tenure system, which is more flexible in the middle belt as against the northern belt.

Aggregation especially within the informal markets serves as an opportunity for women to participate in and out of the zone under consideration. A typical example of such opportunity is the largely untapped potential of the maize traders at Ejura, who are predominantly women. Currently, the following situations persist for these women.

No benefit from any Government intervention and yet their working environment is in deplorable state.

No proper place of storage of grain at the market.

No credit for them to procure maize and store and expand their business. Sometimes when there is a glut, a lot of maize is wasted on the market due to lack of proper storage and inability to mob it and store.

Absence of weights and measures is affecting their activities because they are unable to communicate standard prices across the markets they trade with.

Consequently, what is needed is collaboration with these traders and others else where to have an arrangement where they are supported to handle grain trade in a more harmonized and coordinated manner including management of strategic stocks.

Institutional Analysis and VC Management

Farmers that work with Agromite are organized on community basis with leaders for each community level, who respond to field officers responsible for monitoring and supervising farmers.

Climate and Potential Impact of Climate Change on Production Capacities

Climate change has affected the rainfall pattern in Tumu and its surroundings. Farmers reported that the rains start later than the usual month of June and ends around the month of October. This has dire consequences on the yield and important post-harvest activities such as drying.

Farmers in the middle belt equally reported of having observed changes in weather conditions that affect their production activities (inadequate and erratic rainfall pattern, high incidence of armyworm)

Nutrition and Food Security

Maize remains an important part of Ghanaian cuisine, featuring in a range of delicacies by different groups of people in Ghana. Popular foods include porridge, banku, kenkey, among others. Increase in maize yield has positive impact on food security while decrease in maize yield could have dire consequence on food security.

Quantitative Analysis

Figure shows a typical

Figure 12: Maize Crop Calendar in the Northern Belt of Ghana

	April	May	June	July	August	Sept	Oct	Nov
Northern belt (1st Cycle)	April	May	June	July	August	Sept	Oct	Nov
Hiring of land								
Ploughing								
Planting								
Weed Control 1								
Fertilizer application								
Top dressing								
Weed control 2								
Harvesting								
Threshing								
Sales								

Table 10: Maize Crop Budget in the Northern Belt

	Crop Budget (Maize)			
	unit	qty per acre	Unit price	Amount
			GH ¢	GH ¢
Land Rent	acre	1	50	50
Land preparation:				
Harrowing	acre	1	120	120
Planting:				
Seeding and basal application	acre	1	150	150
Seed	1kg bag	10	30	300
Weed control 1:				
Broad spectrum Weedicide	lts	1	17	17
Selective weedicide	lts	1	30	30
Spraying of broad spectrum weedicide	acre	1	50	50
Spraying selective weedicide	acre	1	50	50

Fertilizer application:				
fertilizer (basal application)	50kg bag	2	130	260
Fertilizer top dressing	acre	1	135	135
Harvesting cost	acre	1	300	300
Threshing	acre	1	300	300
Total production cost				1,762
Revenue	100 kg bags	20	130	2,600
Gross margin				838
Gross margin percentage				32.23%
Gross ROI				47.56%

SECTION 2: SOYA VALUE CHAIN ANALYSIS

Introduction

Soybean was first introduced to the Gold Coast in 1910, one hundred and ten years ago. Since its first foray into Ghana, soy has gone through several development phases. Soy as a crop has comparative advantage over other crops in Ghana due to the following.

Highly reliable and ready market for soybeans when compared with other crops

Soybeans has a higher market price value than other traditional farm crops

Due to its limited usage of fertilizer, its production cost is lower than other farm crops

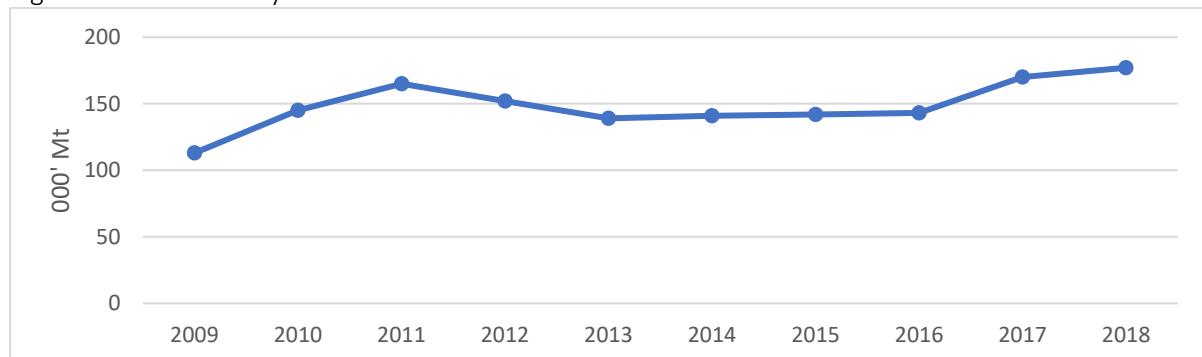
It is environmentally friendly due to its nitrogen fixing properties which replenishes the fertility of the soil

There is no waste product with soybeans in the sense that most of its bi products are used for several things such as poultry feed, animal feed, composting etc.

Status of the Crop/Produce

Soybean production is driven by Ghanaian poultry industry. The size of Ghanaian commercial poultry production is pivotal to accurately assessing the volumes of imported soybean meal (and feed concentrates). Currently, soy production is increasing with more assured markets in Ghana. As shown in Figure 4, soy production dipped from 2011 to 2013 after a peak within the period of 2009 to 2011. In the period between 2013 and 2016, the soy production curve flattened with little or no movement. However, the period between 2016 and 2018 recovered significant increase in soy production, hitting a 10 year high in the year 2018.

Figure 13: Trend of Soy Production in Ghana from 2008 to 2018



This has been partly spurred by the activities of importers from Turkey, India, Denmark, Cote D'Ivoire, Burkina Faso, who buy in large quantities for exports to Europe and for their local industries.

Aggregators in the soy value chain explain that this is due to the fact that very little chemicals and fertilizer are used in the cultivation of soy as such it makes Ghana's soy near organic when test against the various chemical contents. Local soybean production does have a slight advantage over imported

beans, as smaller processors are practically unable to import beans to run through their facilities. The smaller quantities required by these processors must come as container trade, which comes at a higher logistical price than bulk shipments. Only Ghana Nuts, the largest processor, can utilize a larger bulk shipment.

Production

Location

The agro-ecological zones for soya cultivation in Ghana can be grouped into two main zones with differing system of maize cultivation, namely the transition zone and the northern belt (Guinea Savannah).

- Transition zone:

The forest zone gradually gives way to the transition zone towards the Northern part of Ghana. This zone is an important area for commercial grain production, and is characterized by deep, friable soils, and the relatively sparse tree cover allowing for progressive cultivation. Annual rainfall averaging about 1,300 mm is bimodally distributed. Maize cultivation is done both in the major and minor rainy seasons mostly as a monocrop or intercrop. Areas under this zone include, North of Ashanti, Bono East, and Oti.

- Guinea Savannah zone:

Most of the lands in the Northern part of Ghana are in this zone. There is a single season of rain per year averaging 1,100 mm. Although sorghum and millet are the predominant cereals, maize is equally grown. Maize can be intercropped with legumes and other crops.

Tumu and its environs in the Sisala East and West have a single maximus rainfall regime which starts from June and ends in October. This is normally followed by a dry spell from November to May. The Sisala East and West districts are in the Guinea Savannah vegetation zone where large portions of land are categorized as fairly and fairly to marginally suitable for the cultivation of crops including soya. The area present land highly suitable for extensive mechanized cultivation of export and food crops.

VC description and identification of main VC actors

Input Providers: There are currently two broad categories of input providers in the zone, namely, the providers under the government subsidy support and private input providers without government subsidy support. Some actors source for their seed from outside Ghana with permission of the government while others make use of available seed companies in Ghana. The most important inputs include fertilizers, herbicides, certified seeds, among others.

Mechanization Providers: These players such as Agromite Limited, provides land preparation, harvesting, and post-harvest services to mostly small holder farmers and some other nucleus farmers. Such players recover their monies through in-kind produce at the end of harvest.

Small holder farmers: these are commercial farmers who cultivate maize in small quantities. They are commercial farmers because they farm with the objective of making profit at the end of the season and that informs the approach to farming.

Nucleus farmers: these include large scale farmers who cultivate maize. Most of them may typically have small-holder farmers that they work with to help them meet grain orders.

Market opportunities

Description

The soya market is made of the formal and informal markets. The formal markets include formal soya aggregating companies who source for soya, clean and dry for onward sales to the industrial process

in the poultry, and other food industries. These aggregators often engage in production themselves while also organizing small holder farmers. The informal market includes the middlemen and women who source for soya in the major maize markets.

Potential for Value Creation

The post-harvest economy in the soya value chain is large and has a huge potential. There are opportunities for investment in warehousing infrastructure at relevant locations, drying facilities, cleaning facilities, haulage, haulage insurance, processing of soya into animal feed.

SMEs and job creation

Small and medium scale enterprises are into input provision, cultivation, the provision of IT services, aggregation, transportation, warehousing, insurance, semi-processing, and processing of soya. This does create a good number of jobs for the youth and has the potential to further create a great number of both direct and indirect jobs for the youth.

Main Constraints and Challenge

1. Inadequate mechanization to improve efficiency in cultivation. For instance, Agromite Limited is one of the most resourceful Agro-SMEs in the Sisala East and West zones, however, it is only able to provide only 15% mechanization coverage for its 6000 acres production
2. Low quality input such as fertilizer. Farmers indicated that they received low quality fertilizers which led to bad yield for many of them. In the same vein, others testified that they bought quality fertilizer brands and saw about a 100% increase in their yield.
3. Inadequate storage space at appropriate areas.
4. Changing rainfall patterns

Women/youths/PWD

Women in the production areas, especially in the northern belt favor the cultivation of soya compared to maize as the latter is seen as a more masculine crop and the former a feminine crop. They explain that the agronomic practices in soya are seen to be less difficult compared to maize. In effect, at the small-holder level, as women dominate in soya cultivation, men dominate in maize cultivation.

Climate and Potential Impact of CC on Production Capacities

Farmers in the Tumu area report that the rainfall pattern has altered, shifting from the usual June to July ending, therefore affects planting times and by extension the yield and post-harvest activities.

Quantitative analysis

Figure 14: Soya Crop Calendar in the Northern Belt

Soy Crop Calendar	Crop Calendar (Soy)							
	April	May	June	July	August	Sept	Oct	
Northern belt (1st Cycle)	April	May	June	July	August	Sept	Oct	
Hiring of land								
ploughing								
Planting								
Pre-emergence weed control								
Fertilizer application								
Ammonia application								
Post - emergence weed control								
Harvesting								
Gathering								

Table 11: Soya Crop Budget

Activity description	Unit measure	Qty	Unit Price	Amount
			GH ¢	GH ¢
Land preparation:				
harrowing	acre	1	120	120.00
Certified Seed	kg	18	10	180.00
Seeding and basal application	acre	1	150	150.00
Broad spectrum Weedicide	lts	1	17	17.00
Selective weedicide	lts	1	30	30.00
Spraying of broad spectrum weedicide	acre	1	50	50.00
Spraying selective weedicide	acre	1	50	50.00
fertilizer (basal application)	50kg bag	2	130	260.00
Fertilizer top dressing	acre	1	135	135.00
Harvesting cost	acre	1	300	300.00
Threshing	acre	1	300	300.00
Production Cost				1,592.00
Crop Insurance	% of prd		5%	79.60
Total Production Cost				1,671.60
Revenue				
Yield	100 kg bag	15		
Price	100 kg bag	150		
Total Revenue	100 kg bag	15	180	2,700
Gross Margin				1,028
Gross Margin percent				38%
Proxy IRR				62%

SECTION 3: CASHEW VALUE CHAIN ANALYSIS

Introduction

The cashew nut industry offers tremendous developmental opportunity for Ghana as the industry is becoming a major avenue for job creation in the rural areas and a good source of foreign exchange for Ghana in general. Over the past decade, Ghana has seen increased interest in its cashew sector particularly by buyers from India, Vietnam, and Brazil. These companies buy in large quantities, export to their home countries for processing and onward export to the USA or EU and for their own home consumption. Currently the USA consumes about 55% of the world's cashew exports, with India also being a major consumer. With declining raw cashew nut production in India and Vietnam, increasing attention is turned to West Africa where current production does not meet the total requirement of the Asian market. The conducive business environment provided by Ghana has seen entities from these countries setting up purchasing outlets in the country.

The cashew value chain offers an important potential for employment and wealth creation, climate change mitigation through climate smart agriculture and the economic empowerment of women and youth, especially in vulnerable rural areas.

Status of Crop

Production of RCN has been on the rise in the last five years chiefly because of increase in cultivation and farm establishments. Cashew productivity in terms of kilogram per hectare has not seen same increase as production volume. Table 1 shows volumes of RCN and cashew productivity in Ghana from 2015 to 2020.

Table 12: Cashew Production and Productivity in Ghana

	2015	2016	2017	2018	2019
Production of RCN (MT)	70,000	75,000	75,000	110,000	85,962*
Productivity (kg/ha)	958	606	600	750	-

Source: Comcashew

Production

Cashew is grown as a smallholder crop in Ghana and the commercial plantation sector is small. It is estimated that about 88-90% of cashew farms are owned by smallholders, with farms ranging in size from a minimum of 0.8 ha to 3.0 ha. Large plantations account for 12% of cashew farms and are between 4 ha and 40 ha. Most of small producers rely on family labor or hired labor, especially for weeding and harvesting activities.

Farmers' interest in cashew production relates to the availability of ready market due to the high import demand for raw cashew nuts by Asian processors. Cashew production generally forms the main source of income of producers in top producer regions (Ahafo, Bono, Bono East). The ongoing climatic condition changes have reportedly worsened other sources of income such as cocoa and food crop sales.

The effective production acreage was estimated at 280,000 hectares in 2018, against 325,000 that are planted (86%). Some 125,000 producers would have been involved in cashew production in 2019.

Cashew is invariably established among short-term intercrops and intercropping is pursued if space and soil fertility allow. The most common intercrops in both the Forest-Savannah Transition and Interior Savannah zones are yam, groundnut, soybean, and maize. Pineapples, pepper, and maize are the most important intercrops for cashew farming in the Coastal Savannah agroecological zone. Remarkably cashew is harvested during the lean season for all major staples (e.g., maize, yam, plantain, and millet).

In Ghana, trees are relatively young. In 2018, national yield was recorded at 400 kg/hectare, down from 600 in 2016 and 2017 (yield was at 950 kg/hectare in 2015 according to GIZ). The regional yield ranges from 350 kg/ha to a top of 650kg/ha in the Forest-Savannah Transition zone.

Location:

The cashew tree grows with a minimum of attention and is easily cultivated. It is usually found up in regions where the annual rainfall is as low as 500 mm and as high as 3,750 mm. For maximum productivity, good soil and adequate moisture are essential. The tree has an extensive root system, which helps it to tolerate a wide range of moisture levels and soil types, but commercial production is only advisable in well-drained, sandy loam or red soils.

Cashew is grown as a cash crop in four agro-ecological zones, namely the Interior Savannah (Guinea and Sudan Savannahs), Forest-Savannah Transition and Coastal Savannah. All regions of Ghana except for the Western/Western North Regions would be suitable for cashew production. Among these agroecological zones, Forest-Savannah Transition is regarded as the most suitable for cashew cultivation, while Coastal Savannah is considered only marginally suitable.

Agro-ecological zones	Regions	Rainfall (mm)	Temperatures (°C)		Soil types
			Max	Min	
Forest-Savannah transition	North of Ashanti, Bono, Bono East, Ahafo, Eastern, Volta, Oti	Rainfall is characteristically bimodal and ranges from 1,200-1,400 mm per year. The major season starts at the end of March and the minor season at the beginning of September. 5 dry months.	29/33	19/22	Soil types are suitable for cashew. These are highly deep soils and mostly of a medium texture. Soil moisture and nutrient retention is low to moderate.
Interior Guinea Savannah	Northern, Upper East	Rainfall ranges from 1,000-1,200 mm. This zone has unimodal rainfall which starts at the end of April and runs until end August/September. 6-7 dry months.	32/34	20/22	Soils of good physical characteristics, well to moderately well drained, and feature low levels of organic matter and nitrogen.
Interior Sudan Savannah	Upper East	Rainfall ranges from 1,000-1,200 mm. This zone has unimodal rainfall which starts at the end of April and runs until end August/September. 7-8 dry months.	32/34	20/22	Soils are heterogeneous, deep to moderately deep, and medium textured. Moisture and nutrient retention is low to moderate.
Coastal Savannah	Central, Accra, Volta, Oti	This zone features a bimodal rainfall pattern. Rainfall ranges from 750- 1,000 mm per year, and is very low along the coast but increases towards inland areas. The major season starts at the end of March. 4 dry months.	29/33	20/24	Organic matter levels are generally very low.

VC description and identification of main VC actors

The cashew production sub-segment in Ghana is largely a small-holder activity with majority of farmers having an average farm size of between 0.8 ha and 2.5 ha and over 60,000 small-holder farmers are engaged in the cultivation of the crop in Ghana. The production sub-segment also has players such as seedling producers, who may double up as commercial farmers, research institutions, donor agencies and projects in cashew production, among other players. Production entails farm establishment and annual maintenance.

Primary producers predominantly relate to aggregators and sub-aggregators who are close to their communities. Farmers typically receive financial and technical assistance from aggregators during off-season to increase productivity and sell to aggregators providing these forms of assistance. However, some farmers engage in side-selling leading to defaults after harvest. Farmers also seldom relate to the big exporting firms and processors.

Aggregation

Aggregators buy raw cashew nuts (RCN) from farmers and store them in their warehouses and in turn sell to exporters and processors at the appropriate time. In other words, they serve as the link between the primary producers (smallholder farmers and commercial farmers) and the processors and exporters. Some aggregators have sub-aggregators stationed in the producing communities, who would typically aggregate in much smaller quantities and transfer to the larger aggregators in due course. Aggregators deal with both smallholder farmers and commercial farmers. Again, they deal with bigger trading partners typically from India, and other cashew processing countries. Aggregators typically provide some assistance to farmers during the off-season in the form of inputs, extension services, pruning services, among others. In other cases, aggregators offer direct financial assistance to help with the maintenance to the fields. Aggregators also have relationships with other commercial farmers.

Processing

In the cashew processing sub-sector in Ghana, there is processing of cashew fruit and that of the raw cashew nut. Raw cashew nut processing has the primary processing and secondary processing. The primary processors process raw cashew nuts into kernels for exports and for domestic sales to the secondary processors, who are predominantly roasters. The secondary processors buy the kernels from the primary processors and roast them for sales domestically. There are currently 14 processors in Ghana with 6 active and 8 firms closed because of lack of sustainable supply of raw cashew nuts. Some processors in the value chain include, USIBRAS Ghana Limited (Prampram operates 15000 to 20,000 Mt out of installed capacity of 30,000 MT), Mim Cashews and Agricultural Products Ltd., Kona Agro processing Limited (Wenchi - shut down in 2015), Kabile Cashew Farmers' Cooperative Company, Nimdee Hyren Company Limited, Nafana Agro Processing Company, Agrokings Limited, Gensap Ventures and Innov. Organic Limited.

The processing segment is in the middle of the value chain. It deals with producers and exporters of kernels. It also deals with primary and secondary processors. There are currently 3 companies operating in Ghana with the required food safety standards. Other processors have enrolled on the ACA seal, and they have had their initial audits. Firms under this segment work with producers and aggregators of raw cashew nuts (RCN) and work from primary processors (kernel).

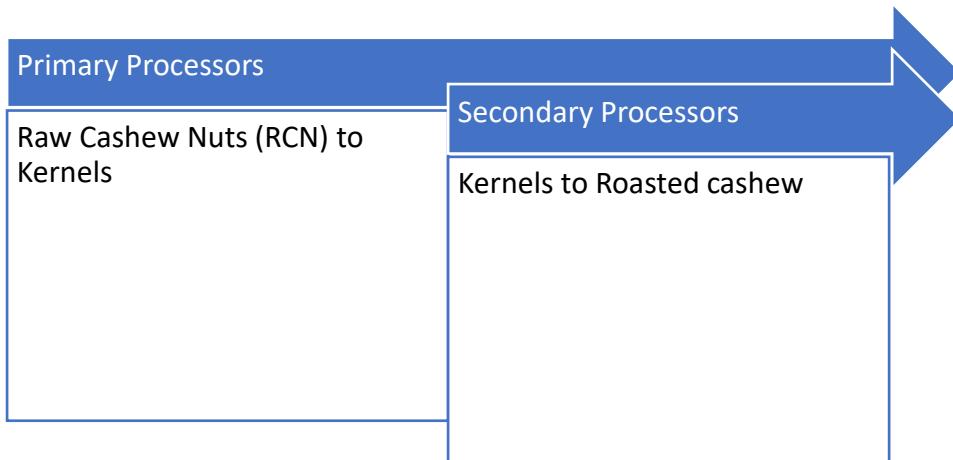


Figure 15: Raw Cashew Nut Processing in Ghana
(own construct)

Processors relate with the farmers/producers. Producers include both large farmers and smallholder farmer groups. Currently, processors relate more with smallholder farmers and aggregators. The relation is about 60-70% with aggregators, and 30% with farmers directly.

The primary processors, who process raw cashew nuts to kernels sell to the secondary processors, the roasters in the domestic market. The roasters/secondary processors, sell to supermarkets and shops domestically. Currently, exportation of roasted cashew is limited, and this segment would need some capital injection to enable them produce more efficiently to export. In addition, roasters do not currently have the food safety standards required by international markets, hence they are feeding the local market.

Export and International Buyers

Specific Activity within the Cashew Value Chain

The exporters/international buyers, work with producer cooperatives. Currently, there is one processor with the required food standards/certification, that these exporters buy from. The main business partners include the following.

1. Farmers, farmer-based organizations, freight forwarders,
2. Customers in Vietnam and India.
3. Processors side, these firms work with processors, depending on the relationship in the past they can toll process, buying the RCN and giving it to the processor to process.

Market Opportunities

Global demand for cashew nuts has been growing at a rate of 7% per annum over the last decade, and demand for cashew kernels is expected to grow by 85% in the years ahead. Consumption rates are predicted to remain high due to the growing awareness of the health and nutritional benefits of cashew nuts.

Ghana would have 14 significant processors (2019), yet half was closed at that time for lack of raw material. They employ some 4,700 workers. Ghana processed some 10,000 MT of nuts locally in 2018 (8% of production) for an installed capacity of 50,000 (20% used), down from 65,000 in 2015. The average processing level over the last 5 years was 7,250 MT.

Around 90% of Ghana's cashew nuts are exported in their raw form to India and Vietnam. Here the nuts are processed and re-exported to the US, Europe, the Middle East, China and Australia. On the Vietnamese market, the price of the kernel is at minimum 4 times higher than the RCN. The competition between Vietnam and India for sourcing raw nuts in Africa is intensified by demand from

local cashew processors, a process that drives the farm gate price of cashew nuts higher, thereby incentivizing farmers to shift from food production to cashew nuts in African countries. Producers usually capture between 60 and 70% of the FOB price of RCN. According to GIZ, job creation in the cashew VC is 75% in production, 20% in trade and 5% in processing.

Toll processing- in this, exporters finance acquisition of raw cashew nuts and then processor would charge a tolling fee for the processing, so that these buyers could ultimately have the kernels for export.

There has been a lot of focus by various organizations that have been instrumental in helping farmers with best practices. Ghana is very advanced in relation to other countries, although production is not as high.

Market availability - There is a big and ready market for kernels, but because of the operational and financial challenges of processing firms in Ghana, they are unable to supply the required volumes. Therefore, with the needed support, firms could be efficient and competitive enough to supply the market. There are now efforts to regulate all the value chain actors. Cashew production in Ghana continues to increase and farmers are showing greater interest in its cultivation. As a result of combined efforts of development agencies and other cashew stakeholders in Ghana, production is sure to increase in the foreseeable future.

Main Constraints and Challenge

Production-related Challenges

1. Inadequate sustainable form of financing to help in good agronomic practices.
2. Inadequate improved seedling and cashew variety leading to uncompetitive yields. Due to the poor planting materials used over the last 3 decades, yields are not as high as expected.
3. Access to quality inputs.
4. Farmer side selling making it difficult to partner with other players in the cashew value chains especially aggregators.

Aggregation-related Challenges

1. Side selling among farmers: Farmers typically side sell RCN to higher bidding entities and aggregators, after benefiting from aggregators who offer them with advances/financial assistance. You may advance money to other buyers, and they may not bring you the RCN, they may sell to others. We try to find producers/buyers that are trustworthy.
2. Most of the farmers seek assistance off season from multiple intermediaries, and at the time of collection, they are burdened with greater levels of debt.

Processing-related Challenges

Cashew processors in Ghana face several challenges, enumerated as follows

1. Access to appropriate finance. One of the foremost challenges is not just access to finance but access to appropriate ones that would guarantee profitability and long-term growth. These finance sources must come with suitable interest rates, tenures, collateral considerations, and moratorium. This is because margins associated with processed kernels are thin and simply may not jive with the current high interest rates. Lack of access to appropriate finance leads to the following challenges.
2. Accessing raw material – although raw cashew nuts are available, there is high competition from exporters. There are also other costs that processors incur in addition to procurement cost, such as inventory costs. These costs are secondary to the core processing cost and as such lengthens the cash conversion cycle, the period within which stock is converted to cash.
 - a. Cost of technology. Most factories of processors run on manual operations (about 70-80%) because of limited financial capacity to the required machinery to automate most of the processing activities to increase efficiency and reduce labor cost.

It is difficult to have the right skills/capacity for factories.

In Ghana, the cashew industry and purchases are not regulated and as such, unregistered companies are able to purchase RCN at the farm gate. This situation means most unregistered companies always flood the local market, creating unhealthy competition to push RCN price up to the disadvantage of processors.

Challenges related to Exporters and International Buyers

1. Loyalty of farmers is a challenge, firms in this space can have a relationship with farmers during the maintenance stage of the cashew crop calendar by supplying them with the needed inputs and services, but farmers show little or no commitment during harvest, and sell to other companies who offer more during harvest.
2. Typically, other international buyers, non-registered and non-tax paying show up during the harvest period and buy large quantities of the cashew nuts by bidding higher than the regulated firms.
3. Tremendous amount of high costs in the infrastructure.
4. A lot of processors not competitive with Asian competitors.

Proffered Solutions to Challenges

1. Industry regulation will help stabilize prices of raw cashew nuts and reduce farmer side selling to some extent
2. There are two ways to ameliorate the yield challenge.
 - a. First by replacing the top productive parts of the tree with a new improved variety through a process of grafting called top-working.
 - b. Secondly, by pruning of trees for regrowth and eliminating diseased branches. This encourages new shoots to form and hence better yield.
- These two processes, top-working and pruning requires skilled manpower and use of tree cutting devices such as motorized saws. This equipment is expensive for the ordinary smallholder farmer. The arrangement under a potential cashew scheme is for the aggregator or processing (technical operator) to recruit a gang of skilled personnel with the requisite equipment and training to organize and deliver the service to farmers. This will then be transferred as non-cash credit to the farmer to be paid in-kind during harvest.
3. Development of formal and organized schemes for farmers with written and enforceable contracts between farmers and aggregators could limit the incidence of side-selling.
4. Toll processing- is a way to address some of the challenges already outlined. This can be beneficial to both secondary processors who need kernels by buying the raw cashew nuts for the primary processors to process for them and paying a tolling fee, and the primary processors who process raw cashew nuts to obtain raw cashew nuts to process and make money.
5. One of the issues is appropriate finance that is backed by collateral. It is difficult to provide collateral, given that the value of the factories and assets are most often lower than the loans required. One of the collateral considerations would be to allow the use of raw cashew nut as collateral to finance activities given the high value of raw cashew nuts.
6. Growing local artisans to strengthen the provision of support machines to support local processing. Processing machines can reduce the cost of processing by about 30% by reducing the cost of labor.

Institutional analysis and VC management

Competitive Cashew Initiative (ComCashew)/GIZ

Comcashew is a programme of GIZ set up to enhance competitiveness in the cashew value chains in Ghana and elsewhere on the African continent. Comcashew provides support in areas ranging from research, to production, processing, marketing, capacity development and policy advice. Ultimately, new opportunities for employment, especially for women, along the value chain have been created, specifically in rural areas, thereby ensuring an increase in and diversification of income.

Brazil Government

The Brazil government through The Brazilian Cooperation Agency (ABC) and Embrada has invested in training and capacity-building for experts and farmers on research to improve genetic materials and cashew fruit processing technologies in Ghana and continues to do so.

Adventist Development and Relief Agency (ADRA)

ADRA plays important role in the cashew value chain in Ghana. Some of its activities have centred on improving cashew yield and farmer income through training of extension officers and farmers.

Swiss State Secretariat for Economic Affairs (SECO)

SECO also plays an important role in the cashew production in Ghana. This predominantly comes through financing training programmes for major players in the cashew value chain to increase competitiveness. It also co-funds the Comcashew with the EU.

Private Sector

Private sector organizations also remain pivotal in the cashew value chain in Ghana. The organizations include the African Cashew Alliance (ACA), Ghana Cashew Industry Association, and the Association of Cashew Processors.

Women/youths/PWD

Women would account for 10-15% of the cashew producers. As a tree crop, cashew was regarded as an individual man's property to be passed on to his wife and children rather than to extended family members, which differed from the communal land tenure arrangements governing food crop cultivation. The tendency for land, cash crops and income to be controlled by men, despite women's and young people's significant labor contributions to family farms, and for women to rely on food crop production for their main source of income and for household food security, means that women and girls are more likely to lose out when cashew plantations are expanded to the detriment of land for food crops.

The physical strength and financial commitment needed for the cashew farming activity does not permit most women to be actively involved in the venture but to be helping hands to their husbands. Women's role in cashew production has been traditionally defined as overseeing harvesting, transporting, sorting, and drying the fruit. In some cashew producing communities, women make juice and alcohol from cashew apples, and are therefore highly involved in the processing of apples and nuts at the household level. Furthermore, many women participate in the selling of raw nuts at marketing centers. However, large traders/exporters and their agents generally tend to be men.

Policy and Regulation

Cashew production falls under the Ministry of Food and Agriculture (MoFA) while its export falls under the ministry of Trade and Industry. In direct relation to cashew, there is the National tree crops Board. In terms of policy and regulation, there is the 10-year cashew development policy which outlines government strategy to develop the cashew value chain. Cashew also falls under the government initiative of Planting for Export and Rural Development (PERD).

Climate and potential impact of CC on production capacities

Climate change has affected the rainfall distribution and extended dry spells while shortening the rainy season. This has led to increase fires that destroy a lot of farms within the transition zones. Fire belts are being constructed by a lot of farmers a coping mechanism.

Nutrition and food security

Research found that farmers in the area previously referred to as the Brong Ahafo region of Ghana, which produces about 30% of national food needs and leads in the production of local staples such as

maize, yam and cassava, have come to dedicate increasing portions of their land to cashew nut production, with only a small portion of land set aside for household food cropping. The conversion of fertile land into cash crop production presents significant challenges for ensuring long-term food security in Ghana. To date, national agricultural planning and policy appears to prioritize production of export commodities and agricultural ‘modernisation’ above local food production. While GoG can continue to support the development of Ghana’s export cashew industry, there is a vital need for programmes that increase support for local food crop farmers and domestic food provisioning.

Despite the possible economic benefits that might be realized via cashew production, many farmers expressed growing concerns about the impacts of expanding cashew production for local food provisioning. The majority of described being worried about the impacts of changes in land use, alongside the concentration of land amongst elites, including the possible impacts for meeting national food needs. Some farmers described a reduction in the production of food as driving the cost of food upwards at local markets.

Quantitative analysis

Figure 16: Cashew Crop Maintenance Calendar

ACTIVITY	MONTHS											
	JAN	FEB	MAR CH	APRIL	MA Y	JUNE	JULY	AU G	SEP	OCT	NOV	DEC
1st Weeding												
Fire Belt												
2nd Weeding												
Pruning												
Fertilizer Application												
- Inorganic Fertilizers												
- Poultry Manure												
Pest & Disease Control												
- Fungicides												
- Insecticide												
Flowering												
Maturing of Fruits & Harvesting/Pickings												
Transport/Grading & Sales												
Staff Training												
Farmer Sensitisation & Training												

Table 13: Cashew Crop Budget of Cashew Maintenance Per Acre

			unit price	cost /acre
Cost Item	Unit Measure	Qty	GH¢	GH¢
1st Weeding	Acre	1	100	100
Fire Belt creation	Acre	1	100	100
2nd Weeding	Acre	1	100	100
Pruning	Acre	1	130	130
Fertilizer Application				

- Inorganic Fertilizers	50kgBag	1	128	128
Transportation of Fertilizer	50kgBag	1	10	10
Application of Inorg. Fert	Acre	1	20	20
Pest & Disease Control				
Fungicides	kg	1	135	135
Spraying of Fungicide	Manday	1	20	20
Insecticides	Lit	1	35	35
Spraying of Insecticides	Manday	1	20	20
Harvesting				
Picking and separation	Manday	2	15	30
Carting cost	TnT	1	20	20
Jute sacks	85kgBag	6	3	18
Total Cost of Cashew maintenance				866
Total annual cost of farm maintenance				866
Yield				
Cashew	85kgBag yr7 onwards	6		
Sales				
Cashew		6	434	2604
Total Revenue				2604
Gross margin				1,738
Gross margin %				66%

SECTION 4: RICE VALUE CHAIN

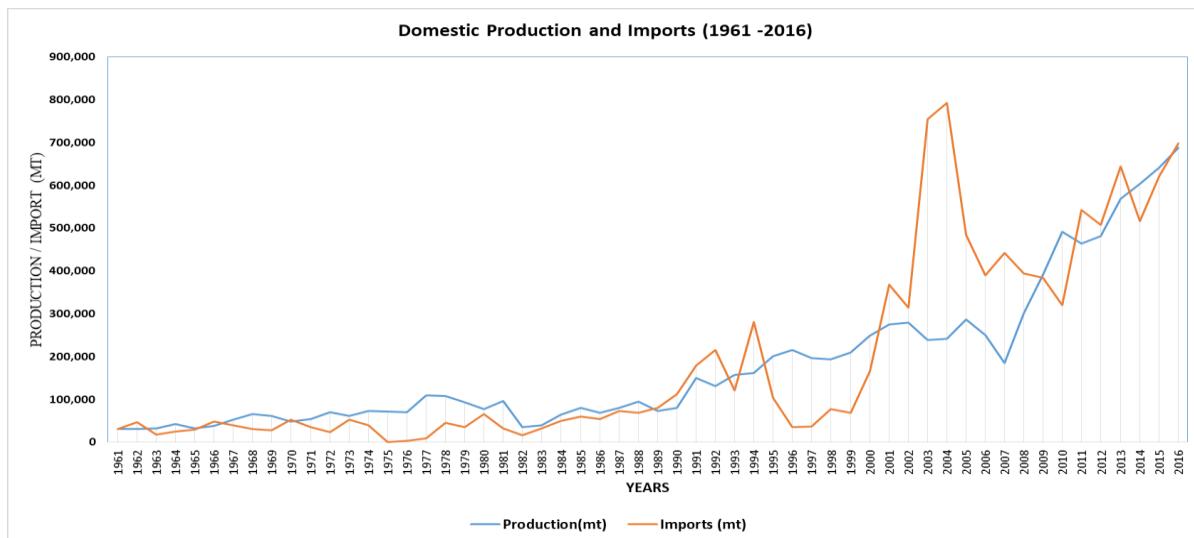
Introduction

Rice is the second most important staple cereal in Ghana after maize and its consumption continue to grow over the last two decades. In the Northern Belt, rice cultivation in lowlands has emerged with great potential to reduce poverty levels. MoFA has increased its support to rice production in the northern region through the Planting for Foods and Jobs (PFJ) initiative with the goal of making Ghana self-sufficient in rice by 2023. Evidence shows that rice yields can increase from 15 bags to 50 bags per acre through timely planting, proper agronomic practices, certified seeds, and fertilizers. Nevertheless, the lack of appropriate agricultural machinery and inadequate linkages to markets paying remunerative prices, affect the wider adoption of rice production by smallholders in the region.

Status of Crop

In 2017, Ghana's national production was able to satisfy about 47% of rice domestic demand and imported the remaining 53%. Importation of rice into the country costs government huge sums of money. In 2016, Ghana imported about 698,000 mt of rice worth 287.4 million USD. Thus, it is important to increase rice productivity and overall production to meet the country's growing demand and to improve overall food security. Figure below shows that domestic rice production has been on the increase for the last 40 years.

Figure 17:Graph showing rice production and imports from 1961 to 2016



In 2017, almost 240,000 ha of land were cropped to rice in Ghana (189,000 in 2012, or +27% in 5 years). Production varies between regions and ecological zones based on the production systems (rain-fed or irrigated), availability and suitability of soil and rice lowlands for production. Within each agro-ecological zone there are distinct rice ecosystems. The rain-fed systems (drylands and lowlands) accounts for 75 percent of the production area, the irrigated system accounts for about 10 percent and the inland swamps and valley bottoms for 15 percent. In terms of total growing area under rice production, the irrigated ecology is less important than other ecologies but in terms of output per unit area the irrigated ecology is far superior to the remaining three ecologies.

In terms of yields, there is a wide gap between the potential yield and the actuals. The average achievable yield is 3.01 mt/ha compared to a potential yield of 6 mt/ha. However, yields are higher on irrigated lands as compared to rain-fed. Average yields have increased over the years from 2.36 in 2011 to 2.69 in 2014 and 3.01 in 2017.

Production

Location

Rice is produced across the three main agro-ecological zones (Guinea Savannah, Forest and Coastal Savannah) of Ghana.

The Guinea Savannah zone covers the five Northern regions (Savannah, Northern, Upper East, North East and Upper West). There are many irrigation schemes (Tono, Vea, Bontanga, Golinga, Libga) and rice valleys (such as Fumbisi, Nabogu-Nasia, Zakoli) developed in the Guinea Savannah zone. The main seeding method is broadcasting, which is easier and less expensive, even on irrigated fields. Direct sowing or dibbling and nursing of seedlings are done on irrigated fields. Improved rice varieties grown include Jasmine 85, Togo Marshall, and AGRA. One of the prominent indigenous varieties include, mandi and several others although grown in smaller scale.

The Forest zone covers the Ashanti, Ahafo, Bono, Bono East, Oti, Eastern, Western North, and Western regions. There are rice valleys in Ahafo Ano North Municipal, Ejura and New Edubiase Districts. The main seeding method is direct seeding and nursing. The major varieties include Jasmine 85, AGRA and Togo Marshal. Other varieties are Gomba (brown rice), Lapex, Aflao, Amankwatin, etc. The Coastal Savannah covers Volta, Greater Accra, and Central region. Rice production in this zone is concentrated in Volta and Greater Accra. There are well developed irrigation schemes (Aveyime, Wetta/Affife) and valleys across the Volta region. The Kpong irrigation scheme located in the Greater Accra serves rice valleys in Asutuare, Akuse and other areas. The main seeding methods are broadcasting and nursing of seeds (transplanting). There is an important indigenous rice variety called Viwonor which is known for its nutritional characteristics. The improved rice varieties include Jasmine

85, AGRA, and Togo Marshal. Other varieties include Amankwaria, Kawumo, Saudi Arabia and Akwa Blue.

The rainfall pattern in the Savannah ecological zone is unimodal. The rains start from the month of May and may last up to October. Rice is usually grown during this period. Farmers on valleys usually plant early to avoid flooding. In the Savannah zone, farmers on irrigated plots start land preparations after the rainy season. However, farmers in the Forest and Coastal zones experienced two rainy seasons (major and minor) during the year. The major rains begin in March and end in August/September while the minor rains begin in September and end in November.

The three major rice producing regions in Ghana are Volta, Northern and Upper East and these regions account for 78% of domestic rice production. The region with the least volume of rice production is Central. Table below shows the top five rice producing regions in Ghana from 2014 to 2016.

Table 14:Top Five Rice Producing Regions in Ghana (Three Year Average, 2014-2016)

Regions	Yearly average (mt) 2014 – 2016	Share of Overall Total production
Volta	206,910	32%
Northern	177,465	27.5%
Upper East	118,250	18%
Eastern	34,270	5%
Ashanti	33,670	5%
Sub Total	570,565	88.5%
Total National Production	644,400	100%

Available data from SRID indicate that domestic rice production would be in the tune of 720,000 tons in 2017.

Processing

There are many small mills sited in all parts of the country across rural areas. Locally produced rice marketing and pricing are poorly structured. Price is less stable in these areas, with low prices at peak periods immediately after harvest and high prices during lean season prior to production season. Medium rice processors lack the necessary investment and capital to carry out downstream activities, including high-quality milling, packaging, branding, and marketing. Misconceptions regarding the quality and nutritional value of local rice as well as post-harvest inefficiencies in storage have hindered their growth. Therefore, the market is mainly structured around major processing companies that buy paddy from local farmers for processing into quality rice meeting imported rice standard and distribute it through supermarkets, retailers, restaurants, and institutions across the country.

One of the most renowned brands has been the AVANSH'S ROYAL FARMERS which is produced at Nyankpala in the Tolon District of Northern Region. AVNASH has the largest rice processing plant, not only in the country but across West Africa. It is a state-of-the-art facility with installed capacity of 500 metric tons of paddy rice processed per day, sufficient for feeding the country with the highest quality of rice. However, AVNASH is struggling with the current domestic supply of rice paddy which is not able to meet the capacity of the installed mill, though the sitting of the mill offers opportunity for farmers, transporters, aggregators, mechanized service suppliers, inputs providers and other value chain actors within the rice sector.

Other outstanding mills include the Wienco mill in Sogakope in the Volta region through Global Agricultural Development Company (GADCO) which produces the ADUANEHEN and COPA rice

brands. Another large and modern mill that process local paddy is the Worawora rice mill also in the Volta region which produces the EDWUMAWURA rice. In the Greater Accra region, Richland Company installed in Asutuare a rice mill which produces the rice brand MR. RABBIT JASMINE rice.

Market opportunities

Description

Domestic importers have increasingly turned to Asian rice, particularly Thai jasmine rice, whose quality image has improved substantially and is highly prized by consumers. Thailand aromatic rice is becoming the preferred rice of those shopping in the 'quality' segment of the market, chosen for its special taste and aroma.

Potential for value creation

Involvement of SMEs and job creation

Rice demand is projected to grow at a compound annual growth of 11.8 percent in the medium term (MiDA 2010).

Main constraints and challenge

Rice farmers lack adequate finance to acquire inputs from dealers and more than 60% of them depend on their own capital. In this constrained environment, farmers reduce inputs usage and use seeds from previous crop harvest which result in low crop yields. They sometimes had to source for finance from informal money lenders with high interest rates. In the case where a purchasing agreement exists (most often verbal), farmers may be partially financed by aggregators and processors with the hope that farmers will repay the cost of inputs through crop produce, yet for the buyer with the risk of side-selling. Farmers are also confronted with means of harvesting as there are inadequate number of combine harvesters. After harvesting comes the issue of marketing where aggregators and processors do not pay farmers on time after taking produce.

Climate

While the price of rice is projected to increase 60% by 2015 without climate change, it could go up by as much as 121% once climate change is considered.

Quantitative Analysis

Figure 18: Rice Crop Calendar under Rainfed Cultivation in the Northern Belt

	Month						
ACTIVITIES	April	May	June	July	Aug	Sept	Oct
Land rent							
Land Preparation							
- Clearing							
- Weedicide application							
- Ploughing & Harrowing							
Bunding Maintenance							
Planting							
- certified seed							
- Labour for planting							
Thining after germination							
Weedicide Application (pre-emergence)							
1st Fertilizer Application							

Manual Weeding				2		
2nd Fertilizer Application				3		
Light hand picking					4	
Harvesting						5
Threshing						6
Sale of Paddy						7

Figure 19: Rice Crop Calendar (Middle Belt)

	Mar	Apr	May	Jun	Jul	Aug
Land hiring						
Land preparation						
-Land clearing						
-Ploughing						
- Tilling						
Seeding						
Certified Seed						
Fertilizer Application						
Herbicide Application						
Light hand picking						
Rodent control						
Bird control						
Harvesting						
Threshing						
Winnowing						
- Recovery						
- Available for sale by Outgrower						

Table 15: Rice Crop Budget

	unit	qty per acre	unit price	Amount
			GH ¢	GH ¢
Hiring of Land	acre	1	300	300
Land preparation				
Ploughing	acre	1	80	80
Tiling	acre	1	60	60
Weedicide	lts	3	15	45
Weedicide Application	manday	3	20	60
Certified seed	10 kg	2	30	60
Planting	acre	1	180	180
Fertilizers and Agrochemicals				
NPK	50 kg	2	85	170
Urea	50 kg	1	80	80
1st weed control: Herbicide (superdupa)	250 ml	2	45	90

Labor				
Application of NPK fert	acre	1	40	40
Application of Urea	acre	1	20	20
1st Weed control: Application of herbicide (superdupa)	acre	1	60	60
Rodent control	acre	1	40	40
Bird Control	acre	1	150	150
Harvesting	acre	1	200	200
Gathering	acre	1	120	120
Threshing	acre	1	160	160
Sacks	pcs	20	3	60
Transport	acre produce	1	100	100
Extension and supervision	acre	1	50	50
Crop insurance	acre	5%		106
Total				2,231
Sales		20	195	3,900
Gross Margin				1,669
Gross Margin %				43%
Proxy IRR				75%

SECTION 5: SHEA NUT VALUE CHAIN ANALYSIS

Introduction

Shea is continuously touted as the cocoa of the Northern Development Zone (NDZ) with the only difference being that it grows on its own in the wild. Shea currently generates an average of 20062 million dollars from export of raw shea nut and butter.

Production

Location

The NDZ covers mostly the Savannah regions of Ghana even though the southern part has some forest. The NDZ is bounded by international borders with Burkina Faso on the north and west, as well as Togo on the east with direct road connectivity to the main urban centres of these countries. It has an urban population of about 1.085 million and a rural population of 3.143 million. The predominant economic activity is agriculture even though other activities such as industry, tourism, and mining exist in smaller scales. The zone has more than 51% of the landmass of Ghana.

The zone is drained by the Black and White Volta and their tributaries like river Nasia, river Daka, among others. The zone has potential to be the supplier of agricultural products and agro processed products to the country and neighbouring countries given the necessary assistance

VC description and identification of main VC actors

Pickers

These pickers of nut are predominantly women groups who move through the wild and pick the nuts when it is in season. The challenge with this side of the value chain is that these women pickers also try to forward integrate in the value chain to process the nut into butter because of its traditional

⁶² As indicated by COCOBOD

underpinning and personal fulfilment to see a process start and end. However, the limited scale of these pickers does not make the economic sense for processing the nut themselves. There is the need therefore for focusing on their side of the value chain.

Example of women shea picking, and processing group is the Kanvili Shea Butter Group. This group is based in Kanvili in the Tamale Metropolitan of the Northern Region with 54 female members with the exception of the secretary and the miller. Kanvili women shea processing group. These women are 54 in number and they have two men the secretary and the machine miller. The group supplies a secondary processor and aggregator called Sandam with Shea nuts and funds for their operation. The company in turn has provided the group with the processing center including sheds, water storage tanks, milling machine, and improved stoves with chimney.

Aggregators

Aggregators in the shea value chain are in the form of small to medium scale individual aggregators and large institutional buyers. Some of these institutional buyers are basically subsidiaries of multinationals in Europe and America. The crux of the issue with aggregators is the small to medium scale aggregators. These may be registered companies alright, but inherently controlled and championed by one person and have limited financial resources to fund their equipment needs and working capital. The role of NGOs and ESG companies (impact investors) in the aggregation phase is also worth noting, with the idea of procuring nuts from the women pickers as a means of giving them sustainable livelihoods. These agencies then link up with processors and exporters.

Aggregators in this space include Borimakaso (Tamale Aboabo market), it has women in the following towns and villages in the NDZ.

Table 16: Women shea pickers from Borimakoso Enterprise

Location	No of Pickers (women)
Dwankora	47
Gushie	32
Nalerigu	17
Zabzugu Tatale (new group)	12
Salaga (queen mothers of pickers)	39
Chamba	29
Djimle (Yendi)	18
Pishowo (Karaga)	9
Chedereh	6
Total	209

The firm supports the pickers with the following, hand gloves, wellington boot, cutlass, buckets, rubber bowls, mosquito nets, torch light. The company also plans to include national health insurance for 50 women, and anti-snake serum.

Processors

Shea processing in the value chain is dominated by institutional processors and local women cooperatives. The latter group's process is very much manual and traditional, taking a lot more time and labor. They produce chiefly, unrefined yellow and ivory butter but other cooperatives add further value by producing the refined ones. This group has seen a lot of NGO activities in recent times because of the place of women in the process as a way of boosting gender equality. Strict analysis of the traditional process will hardly yield meaningful economic return because of its low scale and manual nature. The institutional processors can be divided into two key modules of operation. The first module is the processors who have invested in shea processing plants and are into direct processing of shea nut. The second module is the processors who team up with the local women cooperatives by supervising production and off-taking the butter from them for onward marketing

and exports. The operations of the free zone shea processing company may be able to boost the potential of the value chain.

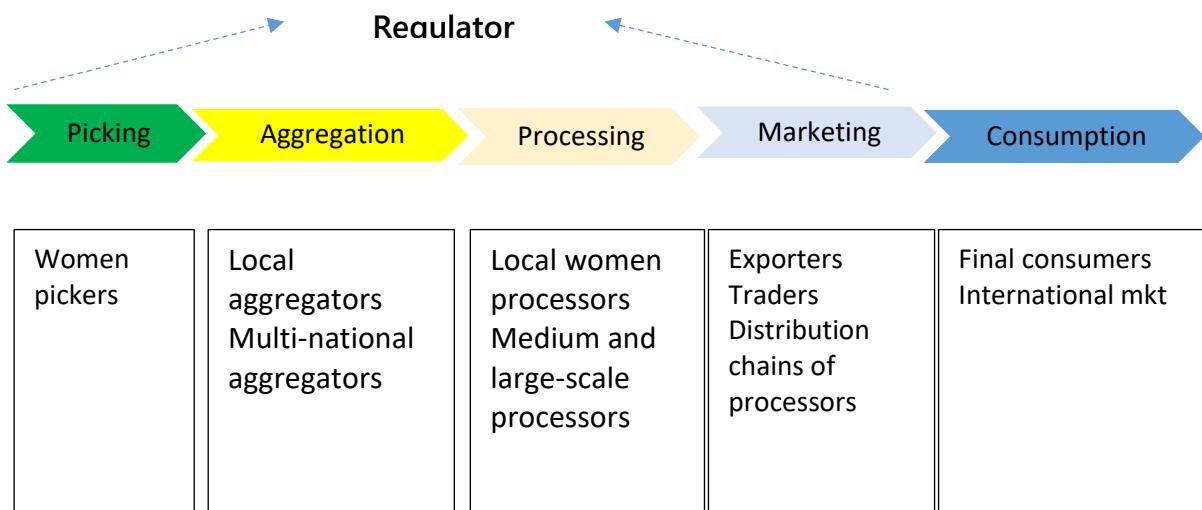


Figure 20:Shea Value Chain Chart in Northern Ghana

Market opportunities

The industry is currently assuming a large-scale commercial status with the advent of large-scale shea (nut and butter) buyers and exporters who have in recent years discovered the high value of shea on the international market and are cashing in on it as quickly as possible. Ghana is currently collecting 130,000 metric tons of shea nuts but has the capacity to do 200,000 tons. Ghana recorded USD 33,572,000 in value of exported processed or industrial shea nuts.

Shea butter has become popular in the cosmetics industries because of its medicinal features. Apart from the cosmetics, it has been identified as a key organic oil with fats that are easily broken down by the body and has had its demand boosted in the EU especially. The demand for shea is likely to increase in the future because of the above reasons and as such a need of substantial investment in the value chain to take advantage of the increased demand. An important feature of the shea from the NDZ is its higher content of shea butter which makes it well positioned to serve both the local and the foreign market.

Main constraints and challenge

1. Unavailability of vital processing machineries for the women primary processors. For instance, the Kinvili shea group indicated that they needed a kneading machine which can reduce drudgery. Other critical utilities needed include source of water.
2. Marketing problem, these women groups are unable to market in bulk but only in bites apart from what they process for the major processors. These groups ideally prefer to collect the nuts all by themselves process and supply the butter.
3. The challenge of snake bites face in the fields has been thoroughly deliberated by major value chain players and addressed to a larger extent by the provision of protective gears and snake serum kits.

Institutional analysis and VC management

The most active stakeholders in the shea industry are Civil Society Groups comprising the Shea Dealers Associations in all the regions of Northern Ghana, individuals as well as NGOs such as SNV, a Dutch Development Organization, TechnoServe, a US-oriented Food Security organization, the

Association of Church Development Projects (ACDEP) and its subsidiary, Savannah Farmers Marketing Company, Ghana Nuts and PBC.

Women/youths/PWD

The primary production is dominated by pickers who move in the wild to pick nuts for further processing and sale of raw nuts. Consequently, these women pickers are subject to conditions like snake bites. Aggregators and other NGOs provide support in the form of snake serum and protective gears. These activities are found to add value to the lives of women in the zone.

Quantitative Analysis

Table 17: Shea Processing Budget Per Kg

				KG	Ton
REVENUE PER KG OF SHEA NUTS				2.00	1,995
	Volume (Kg)	Cost per Kg	Total Amount		
Riped Fruits Collection (Man Hours)	1	0.40	0.40		
Depulping of Fruits (Man Hours)	1	0.01	0.01		
Boiling of Fruits	1	0.23	0.23		
Water Expense	1	0.11	0.11		
Firewood Expense	1	0.11	0.11		
Drying Cost (Tarpulin Expense)	1	0.03	0.03		
De-husking and Sorting Cost	1	0.01	0.01		
Mortar Expense	1	0.01	0.01		
Labour Expense	1	-			
Packaging Expense	1	0.01	0.01		
Storage Expense	1	0.01	0.01		
Transportation	1	0.05	0.05		
Handling Expense	1	0.01	0.01		
TOTAL MATERIAL COST PER KG			0.70		
Consumables	1	0.54	0.54		
Hardware	1	0.18	0.18		
TOTAL SUPPLY CHAIN COST				1.42	1,421.58
Gross Profit				0.57	573.42
GM				29%	29%
OVER HEADS					
Administration Cost		0.02			
CSR Activities		0.01			
Communication		0.01			
Social Security Contribution		0.02			17.10
Council Fees		0.11			
TOTAL OVERHEADS				0.17	171.00

PBIT				0.40	402.42
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VC ANALYSIS: VEGETABLES

Introduction

Vegetables can make an important contribution to food and nutritional security and can enhance livelihood of smallholders due to their high farmgate values per unit land area. Besides their economic, nutritional, and medicinal importance, vegetables are considered valuable because of their ability to fit into year-round production systems.

In Ghana, cultivation of vegetables is an excellent source of employment for both rural and urban dwellers as it takes place in many rural areas through truck farming and in the outskirts of towns and cities in the form of market and backyard gardening to supply fresh produce to urban markets. It thus plays an important socio-economic role as well as in diversifying diets for improved nutrition. Ghana benefits from considerable foreign exchange through the export of vegetables such as okra and chillies to European countries. Chilli exports for instance have ranged between 26,000 and 41,000 MT per annum between 2010 and 2015 with corresponding foreign exchange from US\$18.2 to US\$28.7 million.

Pepper is the fourth most harvested crop in Ghana after cassava, plantain, and yam. It contributed GHS 2.01 million (7%) of estimated annual sales of GHS 29.51 million of fruits, roots and vegetables in Ghana in 2007. With the increase in population, rising household income levels, the influx of malls and the establishment of hospitality centers, the consumption of pepper is on the rise.

As a commercial crop, pepper was ranked as the second valuable vegetable crop ahead of popular vegetables like okra and eggplant with an estimated total production of 88,000 metric tons in 2011. Ghana is ranked fourth in pepper production in Africa after Egypt, Nigeria, and Algeria.

Main vegetables consumed in Northern Ghana

Food Group	Specific vegetables
Vitamin A rich vegetables and tubers	Carrots, red pepper, sweet potato
Dark green leafy vegetables	Amaranth, roselle, jute mallow, okra leaves, onion leaves
Other vegetables	Cabbage, garlic, okra, onion, tomato, eggplant, lettuce

Production

Location

Around 80,000 ha are used for vegetable production in Ghana. Production of fresh vegetables takes place all around the country and is strongly related to the specific weather conditions and market windows. Irrigated agriculture is on the increase leading to new production areas around the Volta and Volta Lake as well as specific irrigation areas in and around Accra.

South Ghana leads the production of pepper, as it has a competitive advantage over the North, because of the benefit of its two rainy seasons. It is estimated that around 1000,000 households are engaged in the cultivation of pepper in Ghana as a livelihood, and 20% of these households would be based in North Ghana. The price of pepper is low at harvest, but rises to over 200% during the dry season, because pepper is rarely cultivated under irrigation in Ghana.

The major buyers of pepper are south Ghana based, with Accra, Kumasi, Techiman and Tamale being the key pepper markets. There are several road side and local markets within the environs of farm communities manned by pepper farmers or local trader.

In Ashanti region, more than 90% of the farmers engaged in cash crops cultivate tomato, hot pepper, garden eggs, and okra. Exotic vegetables such as cabbage, cucumber and carrot are not popular among them. Also, traditional leafy vegetables are not popular either. In that region, vegetables are mainly grown for sale (80%), before home consumption.

Crop systems and characterization of producers

Vegetable cropping systems were sole cropping, relay intercropping or multiple cropping where different vegetables were cultivated on separate plots.

Pepper grows relatively quick with a maturity period of 3 to 4 months. It is mostly cultivated by smallholder farmers with average plot sizes of between 0.8Ha and 2.4Ha. Ghana produced 117,000 t over 14,000 ha in 2013. Statistics account for an increase on yields of 7 percent annually and 9 percent on production for the period 2009-2013 while acreage has remained stable. Yields has grown up to 8Mt/Ha, yet far below the national achievable 32.3Mt/Ha, a situation that is reflective of the poor access to quality seeds, bad agronomic practices, poor use of organic and inorganic fertilizer, pest, and disease infestation. About 70% of pepper farmers produce under rain-fed conditions. However, with irrigation, it is possible to grow the crop all year round, which would transform farmer's incomes.

Ghana cultivates about 46,000 ha of tomato per year, which is between 5 and 10 percent of the acreage dedicated to food crops. As of 2013, production was estimated at about 340,000 t. The average yields oscillate around 7-7.5 t/ha, which is only 50 percent of what is deemed as achievable by MoFA. Kenyan farmers produce 22 t/ha and neighboring Burkinabe farmers 9 t/ha.

Pepper farming is heavily resource intensive. It requires about two time the labour and financing resource required to cultivate grains. Improved seeds and fertilizer constitute one of the major costs of the pepper farmer.

Overall farmers dedicate only a fraction of land to vegetable production. They are hardly organized in vegetable or horticulture groups, and neither are they trained specifically on vegetable production. Only in a few instances farmers work together to supply specialized suppliers and have more specialized knowledge on vegetable cultivation.

In Northern Ghana, where there are no major buyers or exporters, there are virtually no out-grower schemes running, although linkages that result from repeated transactions between traders and producers prevail. Buyers from the South do provide seed to some larger farmers and nominate women traders to whom the farmer should sell as agents for the buyer. As these relationships are not formalized, the buyers change, and the new buyers introduces other varieties. With farmers retaining seeds, this results in many varieties being grown on the same plot of land, further depressing productivity.

VC description and identification of main VC actors

Local market centres are placed at the heart of the value chain and their performance make an impact both up and down the chain. In Ghana they are mostly operated by so-called « market queens » who serve as a point of sale for most buyers who run shops, hotels, and restaurants. The vegetable traders in Ghana are organized under these “queens”. The market queen is selected by all traders and is later introduced to the local traditional community leaders and the district assembly. For tomatoes, onions, and exotic vegetables (hot peppers, okra etc.), there are different market queens.

Domestic bulk suppliers supply over 80 percent of the produce sold in the local market centres. Most of the bulk suppliers have supply contracts with the market queens, their supplies are regular and volumes are large. Some bulk suppliers can also supply directly to institutions or even hotels.

Itinerant suppliers supply around 15 percent of the produce sold at local market centres. They operate similarly to the domestic bulk suppliers, but their volumes are small and do not have contracts or supply arrangements with the buyers/market queens.

The majority of the pepper traders deal in both fresh and dry pepper products with few dealing in one product only. Pepper products sold include fresh, dried powdered, dry pepper, shito and fresh hot pepper paste.

A few traders provide loans to some farmers they have worked with for some time, and the farmers sell their produce to them. This practice though helpful to farmers is very limited in scope and size of assistance.

Market power on the pepper value chain rests with buyers who have access to final markets. This is due partly to farmers' need for cash, forcing them to sell immediately after harvest, but mainly since the farmer is remote from the market and has no alternative but to sell through several intermediaries who all take a share of the final value created. The uncertainty over the market, caused by weak and informal relationships between actors on the value chain is a great limitation to farmer productivity, as they are unwilling to grow new varieties for fear that they may not be in demand in the local markets.

Market opportunities

Overall vegetable consumption in Ghana is still relatively small, also in comparison with other African countries like Kenya, but is expanding rapidly. Apart from local vegetables the most important vegetables are tomatoes, peppers (both sweet and hot chillies), onions and okra. Especially the market for tomatoes and peppers has boomed recently.

The national consumption of pepper is estimated to be 230,000Mt per annum, with a growth rate of about 8% annually. Production has however failed to keep pace with demand, increasing marginally from 27,000Mt in 2000 to 79,000Mt in 2008. This supply gap is primarily due to low productivity. Most of the pepper traders deal in both fresh and dry pepper products with few dealings in one product only. Pepper products sold include fresh, dried powdered, dry pepper, shito and fresh hot pepper paste.

The main market for vegetables for the coming years will still be dominated by open markets and smaller, street shops. The production systems will compete on price and less on quality. These markets include the large Agbogbloshie, Makola and Tudu markets where specific commodity associations manage the market system. Price fluctuations are high following the different production periods.

In terms of exports, Ghana's vegetables show potential. While traditionally fruits were the main horticultural export crops, chillies and Asian vegetables (different types of gourds and okra) have become popular. In addition, baby corn and butternut squash production are picking up significantly since the arrival of the multinational VegPro. In general, exports of peppers are believed to have a comparative advantage over competitors like Kenya, given Ghana's climatologic conditions and relatively short distance to the EU market.

Main constraints and challenge

The main constraints to enhancing productivity includes low soil fertility, poor use of organic and inorganic fertilizer, pests and diseases pressure with ineffective management practices, inadequate access to finance, unavailability and high cost of irrigation systems, inadequate knowledge of improved technologies coupled with the use of unimproved varieties.

Lack of farmer access to high quality seeds of improved vegetable cultivars is one of the major constraints to the successful expansion of the vegetable industry in Ghana. The use of poor-quality vegetable seeds mainly obtained from informal sources by most farmers has compromised yields and productivity and rendered serious challenges to the success of crop productivity and improvement initiatives. Boosting agricultural productivity will require a more professional input supply system with better and more tailor-made information for farmers on the use, adaptability and effectiveness of seeds, fertilizers, and pesticides. The public extension system increasingly faces challenges and agro-dealers so far have not taken up the challenge to also provide quality information and services.

Production of the crop is also mainly under rain-fed conditions and thus forcing the crop compete with other staple crops for land, labour, mechanization, and other productive resources, making it quite difficult for most farmers to increase their average land holding for production. There are also high post-harvest losses (estimated at 50%) because of poor farmer knowledge and skill in appropriate handling methods and lack of technology like cold storage.

Another constraint to enhancing productivity is the undersupply of public service and support. Access roads from many farmer communities are in a deplorable condition, creating market access constraints for farmers. Funding for critical activities such as knowledge and information services, research and irrigation services are heavily inadequate and poorly governed. There is no significant public investment on the pepper value chain. Privately funded research is limited to foreign seed and input supplying companies with representation in Ghana.

Less endowed farmers, with limited capital to invest depend on rural banks and micro finance institutions to enable them to cultivate the crop. Most of these financial institutions are ill resourced to advance agricultural loans to assist farmers improve their productivity.

Women/youths/PWD

Women constitute the largest group that provides market access to pepper farmers. As “middlemen”, they practically control the supply of pepper to the major markets as they own majority of the trucks that transports the product from the farm communities to the open markets.

VC ANALYSIS: SMALL RUMINANTS

Introduction

Ghana produces only 30% of the national demand for meat. Northern Ghana accounts for 70% of the local production. Livestock keeping makes significant contribution to rural livelihoods. It provides employment and serves as a source of wealth creation for reducing poverty. The traditional system of producing small ruminants (sheep and goats) contributes significantly to the socioeconomic wellbeing of farm households in northern Ghana. Besides provision of meat and serving as an important source of income, sheep and goats also offer important non-pecuniary benefits such as the provision of draught power, hide, manure, savings, insurance against crop failure, farm portfolio diversification, and strong social relations. The traditional system of ownership is culturally complex and subsistent in nature. This has negatively affected expansion and commercialization of cattle production in Ghana. Livestock production in Ghana is low compared to demand. This is attributable to the fact that the potential to develop and expand the animal sector is not fully tapped. The country has a high potential to become self-sufficient in animal production, yet large quantities of meat are imported to meet demand. Small ruminant promotion should aim at improving production and productivity as a means of ensuring increasing meat production, consumption as well as rural family income diversification.

Importation of live animals into Ghana

Year	Sheep	Goats
2013	16,738	16,953
2014	22,188	32,012
2015	15,763	20,004
2016	13,854	16,900

Production

Location

Northern Ghana, comprising the Upper East, Upper West, and Northern Regions, is the livestock hub of the country. It ranks first in the livestock production of Ghana. The region is well known to produce sheep (30% of the national output) and goats (35% of the national output).

In Ghana, small ruminants play an important role in food production systems. They have been an integral part of most rural, urban and peri urban households for a long time and their small sizes and relatively low cost of production make them a unique resource particularly suited to the limited resource base of these households. Sheep and goats are widely distributed and adapted in all agro-ecological zones due to the various adaptive features they possess: higher fertility, shorter generation interval, higher adaptation to harsh environment and ability to thrive on limited feed.

Production systems and characterization of producers

The dominant production system is the extensive system (free-range). Under this system, no standard ruminant management practices are followed. It is characterized by minimum inputs, no investments beyond the foundation stock with animals grazing around, scavenging on refuse dumps, and sleeping on verandas and in the open. Animals do not benefit from prophylactic or curative medicinal treatment, little or no supplementary feed is offered, no good flock management is practiced and there is generally poor housing. Indications that the productivity of small ruminants in this system is low and that there is ample opportunity for improvement. Commercial cattle production outside the household is common involving farmers hiring the services of herdsmen to keep and manage the animals outside the community.

There are many breeds of sheep, but the dominant is the indigenous West African Dwarf (WAD) or the Djallonke, distributed nation-wide. The WAD is acknowledged for its hardiness, trypanotolerance, tick tolerance, prolificacy, and suitability for year-round breeding. Although it is a small animal with an adult male weight of 25- 30kg and female weight of 20-25 kg, the WAD has the potential to be improved genetically through selection.

In Ghana the WAD is mostly found in the south. The larger and long legged Sahelian sheep, and other crosses are found mostly in the north and peri-urban areas of the south.

The non-adoption of fodder technologies can be attributed to a number of elements including: household labour constraint during harvesting of food crops and preparation of dry season vegetable production (which is a principal commercial enterprise) and inadequate attention for non-market institutional constraints that inhibited competitiveness of smallholder producers.

VC description and identification of main VC actors

The market structure of sheep and goat is characteristically lengthy, about 3 to 5 stages between producers and consumers, without significant value addition. The main actors in the cattle VC are farmers who are the primary producers, aggregators/ middlemen, large-scale regional livestock traders, transporters, feed (crop residues and conventional feeds) sellers, butchers, meat and milk processors, caterers, food vendors and restaurants, rural banks, veterinary medicine shops, international NGOs, and regulatory institutions (taxation, licensing, and warranties). The livestock VC in Ghana is not formally structured with the objective of creating jobs and improving local economies. The market channels of small ruminant farmers are through butchers and itinerant traders acting on behalf of abattoirs and food vendors. Some of the itinerant traders retail the animals at the weekly markets. They sell live animals to household for food or for breeding purposes whiles butchers and food vendors trade in meat to customers.

Auction sales, sales to abattoirs, speculators, and private sales as the major modes of sales of livestock, with sales to abattoirs and speculators providing the most access to price information. A poorly functioning market of small ruminants could bring up about huge inequities in income distribution owing to exploitation by middlemen.

Market opportunities

Livestock marketing encompasses the sale, purchase or exchange of live animals and their products (milk, meat, wool, and hides) for income. Meat from sheep and goat are highly patronized by revelers of "chop bars" in all regions across the nation. Participation of small farmers in markets for small ruminants is relatively low in Ghana. Limitations experienced by smallholders i.e., water shortages

during the dry season, feed-related or health-related high mortality and theft of livestock persist because of institutional constraints. These include structural limitations related to availability of arable lands, weak support systems for animal production and health services delivery, communities' preference that are skewed towards crop production more than animal husbandry, ineffective traditional and formal structures for justice delivery, and gaps in the interaction between communities and district and national level organizations such as the Ministry of Food and Agriculture, district assemblies, rural banks, and non-governmental organizations as well as traders and butchers.

Confronted with such constraints, the strategies that most smallholders have adopted to be resilient entail diversified sources of livelihood, low input use in small ruminant production, and maintaining the flock as a capital stock and insurance. Only a few smallholders engage in market or demand-driven production and/or exhibit successful strategies in small ruminant husbandry. For most smallholders, market production, which requires high levels of external inputs or intensification of resource use, may not be a viable option.

Women/youths/PWD

In the traditional system of rearing cattle in Ghana, cattle can be acquired and cared for by any member of the household but their ownership, control, and the decision to sell or slaughter for consumption is often the sole responsibility of the male household head. In recent times, this system of ownership and control is changing as more youth and women are gaining rights to take decision on how to manage and dispose off their animals.

Institutional analysis and VC management

There are currently cattle farmers' and butchers' associations in most cattle producing areas. Several interventions with a focus on smallholder small ruminant commercialization have been made to improve Ghanaian small ruminant production systems and markets, such as the National Livestock Services Project (1993 – 1999) and the Livestock Development Project (2003 – 2009). However, these have not changed the small ruminant production and marketing systems in any significant way. Under the "Rearing for Food and Jobs" policy programme of the Ghanaian Government, farmers can be profiled and formalized into primary farmer-based organizations to enable them benefit from training and credit.

Nutrition and food security

The meat of small ruminants is a source of protein in many local cereal-based diets and can improve the nutrition of children and pregnant women. The size of small ruminants, which, on average, generates about 20 to 35kg carcass weight, allows rural households to conveniently process them easily for home consumption with little or no need for preservation.

VC ANALYSIS: POULTRY

The domestic poultry meat market in 2017 was estimated at 193,000 MT, and the combined contribution of spent layers, broilers, cockerels, local chickens and guinea fowls representing the local poultry meat production was estimated at 35,000 MT. The imported frozen chicken was estimated at 158, 000 MT in 2018, representing over 80% of the market share, due its affordability, availability, accessibility and convenient packaging for consumers. This gap between production and consumption has been filled by the imported frozen chicken mainly from the USA, Brazil and EU.

High production costs hinder the production of chicken, the country's most popular meat. Poultry meat production in Ghana is low due to the perceived lack of market for locally produced broilers. Instead, most poultry farmers produce eggs and reserve poultry meat production only for the various festivities such as Christmas, Eid-ul Fitr, Eid-ul Adha, etc.

Poultry meat production, importation and consumption (,000 MT) in 2018

	2015	%	2016	%	2017	%
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Production	33	22	33	19	35	18
Imports	118	78	144	81	158	82
Total Supply	151		177		193	

From GPP, the figures would be today more of a market size in the range of 350,000 MT, and a share of the local production around 5% only (95% importation). This would mean production has declined over the last 5 years. On the contrary, Ghana is self-sufficient for eggs.

Production

Location

The major commercial chicken production zones are the urban areas in Ashanti, Bono, Bono East, and Greater Accra Regions and the administrative capitals of Western, Eastern, Central and Volta Regions. The Bono and Bono East Regions have the highest concentration of poultry farms in the country, but there is no hatchery, feed mill nor processing plant there.

	Regions	Urban areas
Poultry farms	Bono	Dormaa Ahenkro Sunyani
	Bono East	Techiman
	Ashanti	Kumasi
	Eastern	Jamasi-Agona
	Greater Accra	Koforidua Accra
Guinea fowl	Upper East	Bolgatanga Paga Bawku
	Upper West	Wa Tumu Jirapa
	Northern	Tamale Savalugu Sanlerigu Kumbugu

Production systems and characterization of producers

There has been a steady growth in the production of chicken locally since the year 2000. The stock of chicken increased from 20.5 million in 2000 to 74.5 million animals in 2017.

Commercial poultry production in Ghana can be categorized into large-scale, medium-scale and small-scale enterprises. Domestic commercial farms are privately owned by individuals or a family. All poultry farmers in Ghana, regardless of the scale of production, finance all their activities and are responsible for marketing their own produce.

Farm categories	Birds number	Farm breakdown in Ghana
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Large scale	beyond 50,000	20% (40 large poultry farms)
Medium scale	from 15,000 to 50,000	80%
Small scale	Less than 15,000	

The medium-scale and the small-scale categories rely on hatcheries for their day-old chicks and feed mills for their feed. The large and medium-scale category produces primarily eggs. Included in the small-scale category are backyard poultry producers who mainly produce broiler birds. The medium and small-scale operators practice minimal biosecurity, predisposing these farms to disease outbreaks.

Ghanaian poultry producers need eight to ten weeks to produce broilers up to an average live weight of 2.0-2.25 against a standard of six weeks which increases the cost of production. This yield gap is due to a number of factors which include: poor quality of DOCs, insufficient vaccination coverage, poor feeding and overcrowding. The average cost per kg of producing broilers in Ghana is estimated at GH15 (USD 2.7) for large-scale producers and higher for small-scale producers. Layer birds reach 16 weeks before starting laying eggs. Average industry egg production is 230 to 250 eggs per layer per year.

Farmers have very limited knowledge in feed formulation. More than 80% of poultry farmers in Ghana produce their own feed because of the cost of feed on the market. Feed cost constitutes about 60%-70% of total cost of production, making the unit cost per live bird very high. Partnerships with local training institutions to run short courses for poultry farmers in the areas of bio-security systems, feed formulation, use of veterinary medicines, administering of vaccines, etc. are needed.

VC description and identification of main VC actors

The VC is said to be highly fragmented, with producers' associations reluctant to work together. Also, most of these associations would not be reliable partners as they would have been formed only to capture subsidies.

The outgrower model is not dominant so far, with large producers tending to be fully integrated (production of feed, hatcheries, processing capacities, etc.). However, some of the major players have showed interest to test the model under the GPP approach.

Production of day-old chicks (DOC): even though there are local hatcheries that produce day-old chicks, the quality is generally low, so most poultry farmers prefer to buy imported day-old chicks, especially layer day-old chicks. In 2018, Ghana imported more than 500,000 broiler day-old chicks and more than 7,100,000 layer day-old chicks. Currently, day-old chicks for commercial production are primarily supplied by 15 local hatcheries and 8 importers. The importers mostly import the day-old chicks from the Netherlands and Belgium. Demand for day-old chicks exceeds supply by both local hatcheries and imports.

Feed production: Ghana's poultry feed industry has shifted to producing layer feed due to the drop off in domestic broiler production. About 80% of feed produced by commercial feed millers is layer feed.

Feed manufacturers in Ghana can be categorized into commercial feed millers and on-farm self-millers. Ghana has about 17 commercial feed mills with a total installed operating capacity of 1,000 metric tons (MT) per day. However, most feed millers are only producing at about 40 to 50 % of their capacity due to low demand from the local poultry industry. The average amount of compound feed produced in Ghana is about 10,000 MT annually in the past few years.

Broiler feed is primarily purchased by small-scale backyard poultry producers because large-scale poultry producers mostly make their own feed. The commercial feed millers produce mainly mash feed, a few produce high feed concentrates, and one feed mill pellets feed. Most small-and medium-scale poultry producers prefer feed concentrates because it is cheap, convenient and less bulky for transportation.

The main ingredients for compound feed are locally produced maize or imported yellow maize and wheat bran. Maize typically would form about 60% of total feed formulation. The poultry industry consumes nearly 30% of all maize produced in Ghana. Feed prices in Ghana have been increasing primarily due to the rising cost of maize. The GoG program “Planting for Food and Jobs” is expected to cause a reduction in maize prices. Soybean meal inclusion in poultry feed is low due to its high cost. The inclusion level of soybean meal ranges from 10 to 18% of the feed ration for layers and 15 to 25% for broilers. Controlling animal feed costs is critical in this industry since it represents approximately 60-70% of total production cost. For this reason, feed manufacturers are switching to low-cost substitutes such as palm-kernel cake, groundnut cake and fish meal, by-products of agro-processing.

Market opportunities

The market grows at a rate of 6% per annum. However, consumption patterns of households in urban areas in Ghana are heavily weighted towards imported frozen poultry products. The reasons for this trend are that it is cheaper than locally produced poultry (in 2019, 2.5 USD/kg against 2.7 USD for locally produced broiler) and it is already pre-cut and dressed. As such, the convenience of a ready-to-use chicken product has boosted consumer demand. Furthermore, the rapid growth in the restaurant, hotel and fast food sector has increased demand for frozen poultry products in the past few years.

The national value chain does not respond to the needs of the market and has led to a decline in market share to 5%. Market needs require poultry meat to be affordable, available, accessible and conveniently packaged. However, local poultry processors in Ghana lack the infrastructure and equipment to produce chicken cuts that are preferred by most consumers.

Opportunities exist to increase production to fill the 158, 000 tons supply gap being occupied with importation of frozen chicken currently. To substitute import, investments are needed in processing plants, setting up of hatcheries, proper vaccination and good biosecurity measures to reduce morbidity and mortality, increasing local production of maize and soya bean to reduce feed cost, breeding and using locally adaptable birds for poultry meat production.

Main constraints and challenge

Significant constraints to poultry meat production in Ghana have made the value chain uncompetitive. Competition from the subsidized imported dressed chicken is the foremost problem for broiler production in Ghana. Imported poultry used to be cheaper by 50-60 percent than the locally produced. Apart from its affordability, the imported frozen chicken is available throughout the country in a convenient package. Ghanaians have continued over the recent years to develop the preference for this imported frozen chicken, which has now taken over 80% of the chicken meat market in the country. Most poultry companies are today focused on eggs.

The high cost of quality blended feeds, that represent more than 60 percent of total production costs, and inefficient feed management practices are largely responsible for the high production costs of poultry products. It is mainly caused by high cost of maize and soyabean meal which are the two main ingredients used in the preparation of poultry feed. The production of these key ingredients is insufficient to meet competing demand for human consumption as staples and animal feed.

Therefore, a chunk of the maize and soya bean used in the poultry industry is imported, which raises the cost of these grains. It is compounded by the fact that some feed mills are producing below capacity.

Veterinary extension service is significantly inadequate within the poultry production regions in the country. This has resulted in frequent spread of disease-causing pathogens and high mortalities among birds. Farmers tend to use antibiotics indiscriminately in an attempt to solve the problems. Over the years, Ghanaian poultry farmers have been relying on DOCs imported from temperate regions. These birds are selected for greater growth rate and body weight based on environmentally controlled conditions and are not therefore able to perform up to their full potential when raised under tropical conditions. The use of poultry breed which have been developed under tropical

conditions is crucial for enhanced productivity and heat and disease resistance. In Ghana, birds that are adaptable to heat stress have been developed at KNUST⁶³ and Animal Research and need to be spread. More generally, the sanitary situation in most Ghanaian poultry farms is poor which results in substantial losses due to morbidity and mortality.

Besides, there are other constraints impacting negatively on the domestic poultry production competitiveness, including inadequate financial and insurance instruments to support value chain actors, high interest rates on loans for production or inadequate cold processing and storage facilities and transport.

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The Animal Production Directorate (APD) and the Veterinary Services Directorate (VSD) of the Ministry of Food and Agriculture (MoFA) has the oversight responsibility of the Poultry sector and other animals/livestock. While APD oversees production issues, VSD takes care of health. Their roles are to ensure effective and efficient implementation of government policies on livestock and poultry.

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Existing Poultry Producer Associations and Clusters (2016)

⁶³ Kwame Nkrumah University of Science and Technology

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Upper East Region						
1	Asera	GF	Bongo	Bongo	Guinea Savannahh	20
2	Asongtaaba	GF	Gagbire	Gagbire (Tempane)	Guinea Savannahh	62
3	Bolgatanga	GF	Bolga	Bolga Municipal	Guinea Savannahh	53
4	Korania	GF	Korania	Kasena Nankana Municipal	Guinea Savannahh	28
5	Yam-Zamsug	GF	Teli	(Telli Zebilla),	Guinea Savannahh	16
6	Zuarungu	GF	Zuarungu	Bolga Municipal	Guinea Savannahh	69
7	Bawku	Poultry	Bawku	Bawku Municipal	Sudan Savannahh	45
8	Bawku Municip.	GF	Bawku	Bawku Municipal	Sudan Savannahh	32
9	Bawku East	GF	Bawku	Bawku East	Sudan Savannahh	40
10	Paga	GF	Paga	Kasena Nankana Municipal	Guinea Savannahh	37
Upper West Region						
11	Gbare	GF	Gbare	Jirapa	Guinea Savannahh	72
12	Sissala East	GF	Tumu	Sissala East District	Guinea Savannahh	30
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18	Lawra	GF	Lawra	Lawra District	Guinea Savannahh	54
19	Charia	Poultry	Charia	Wa	Guinea Savannahh	56
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22	Tamale	GF	Tamale	Tamale	Guinea Savannahh	40

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24	Kumbugu	GF	Kumbugu	Kumbugu	Guinea Savannahh	150
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47	GNAPF		Accra	Accra Metro.	Coastal Savannahh	10 Reg. Assoc.

Climate

In Ghana, temperatures are often too high for chicken which cause heat stress. It causes significant reductions in growth, egg production and fertility and compromises immune competence, renders farm animals susceptible to diseases and increases mortality and production. The local poultry breeds in Ghana are adaptable but are highly unproductive. On the contrary, exotic birds imported from Europe by small- and large-scale poultry farms are highly sensitive to heat. The effect of heat stress is exacerbated by climate change. However, efforts to mitigate the effects of climate change have been biased towards crop production.

VC ANALYSIS: POULTRY

The domestic poultry meat market in 2017 was estimated at 193,000 MT, and the combined contribution of spent layers, broilers, cockerels, local chickens and guinea fowls representing the local poultry meat production was estimated at 35,000 MT. The imported frozen chicken was estimated at 158,000 MT in 2018, representing over 80% of the market share, due to its affordability, availability, accessibility and convenient packaging for consumers. This gap between production and consumption has been filled by the imported frozen chicken mainly from the USA, Brazil and EU.

High production costs hinder the production of chicken, the country's most popular meat. Poultry meat production in Ghana is low due to the perceived lack of market for locally produced broilers. Instead, most poultry farmers produce eggs and reserve poultry meat production only for the various festivities such as Christmas, Eid-ul Fitr, Eid-ul Adha, etc.

Poultry meat production, importation and consumption (,000 MT) in 2018

	2015	%	2016	%	2017	%
Production	33	22	33	19	35	18
Imports	118	78	144	81	158	82
Total Supply	151		177		193	

From GPP, the figures would be today more of a market size in the range of 350,000 MT, and a share of the local production around 5% only (95% importation). This would mean production has declined over the last 5 years. On the contrary, Ghana is self-sufficient for eggs.

Production

Location

The major commercial chicken production zones are the urban areas in Ashanti, Bono, Bono East, and Greater Accra Regions and the administrative capitals of Western, Eastern, Central and Volta Regions. The Bono and Bono East Regions have the highest concentration of poultry farms in the country, but there is no hatchery, feed mill nor processing plant there.

	Regions	Urban areas
Poultry farms	Bono	Dormaa Ahenkro Sunyani
	Bono East	Techiman
	Ashanti	Kumasi
	Eastern	Jamasi-Agona Koforidua
	Greater Accra	Accra

Guinea fowl	Upper East Upper West Northern	Bolgatanga Paga Bawku Wa Tumu Jirapa Tamale Savalugu Sanlerigu Kumbugu
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Production systems and characterization of producers

There has been a steady growth in the production of chicken locally since the year 2000. The stock of chicken increased from 20.5 million in 2000 to 74.5 million animals in 2017.

Commercial poultry production in Ghana can be categorized into large-scale, medium-scale and small-scale enterprises. Domestic commercial farms are privately owned by individuals or a family. All poultry farmers in Ghana, regardless of the scale of production, finance all their activities and are responsible for marketing their own produce.

Farm categories	Birds number	Farm breakdown in Ghana
Large scale	beyond 50,000	20% (40 large poultry farms)
Medium scale	from 15,000 to 50,000	
Small scale	Less than 15,000	80%

The medium-scale and the small-scale categories rely on hatcheries for their day-old chicks and feed mills for their feed. The large and medium-scale category produces primarily eggs. Included in the small-scale category are backyard poultry producers who mainly produce broiler birds. The medium and small-scale operators practice minimal biosecurity, predisposing these farms to disease outbreaks.

Ghanaian poultry producers need eight to ten weeks to produce broilers up to an average live weight of 2.0-2.25 against a standard of six weeks which increases the cost of production. This yield gap is due to a number of factors which include: poor quality of DOCs, insufficient vaccination coverage, poor feeding and overcrowding. The average cost per kg of producing broilers in Ghana is estimated at GH15 (USD 2.7) for large-scale producers and higher for small-scale producers. Layer birds reach 16 weeks before starting laying eggs. Average industry egg production is 230 to 250 eggs per layer per year.

Farmers have very limited knowledge in feed formulation. More than 80% of poultry farmers in Ghana produce their own feed because of the cost of feed on the market. Feed cost constitutes about 60%-70% of total cost of production, making the unit cost per live bird very high. Partnerships with local training institutions to run short courses for poultry farmers in the areas of bio-security systems, feed formulation, use of veterinary medicines, administering of vaccines, etc. are needed.

VC description and identification of main VC actors

The VC is said to be highly fragmented, with producers' associations reluctant to work together. Also, most of these associations would not be reliable partners as they would have been formed only to capture subsidies.

The outgrower model is not dominant so far, with large producers tending to be fully integrated (production of feed, hatcheries, processing capacities, etc.). However, some of the major players have showed interest to test the model under the GPP approach.

Production of day-old chicks (DOC): even though there are local hatcheries that produce day-old chicks, the quality is generally low, so most poultry farmers prefer to buy imported day-old chicks, especially layer day-old chicks. In 2018, Ghana imported more than 500,000 broiler day-old chicks and more than 7,100,000 layer day-old chicks. Currently, day-old chicks for commercial production are primarily supplied by 15 local hatcheries and 8 importers. The importers mostly import the day-old chicks from the Netherlands and Belgium. Demand for day-old chicks exceeds supply by both local hatcheries and imports.

Feed production: Ghana's poultry feed industry has shifted to producing layer feed due to the drop off in domestic broiler production. About 80% of feed produced by commercial feed millers is layer feed.

Feed manufacturers in Ghana can be categorized into commercial feed millers and on-farm self--millers. Ghana has about 17 commercial feed mills with a total installed operating capacity of 1,000 metric tons (MT) per day. However, most feed millers are only producing at about 40 to 50 % of their capacity due to low demand from the local poultry industry. The average amount of compound feed produced in Ghana is about 10,000 MT annually in the past few years.

Broiler feed is primarily purchased by small-scale backyard poultry producers because large-scale poultry producers mostly make their own feed. The commercial feed millers produce mainly mash feed, a few produce high feed concentrates, and one feed mill pellets feed. Most small-and medium-scale poultry producers prefer feed concentrates because it is cheap, convenient and less bulky for transportation.

The main ingredients for compound feed are locally produced maize or imported yellow maize and wheat bran. Maize typically would form about 60% of total feed formulation. The poultry industry consumes nearly 30% of all maize produced in Ghana. Feed prices in Ghana have been increasing primarily due to the rising cost of maize. The GoG program "Planting for Food and Jobs" is expected to cause a reduction in maize prices. Soybean meal inclusion in poultry feed is low due to its high cost. The inclusion level of soybean meal ranges from 10 to 18% of the feed ration for layers and 15 to 25% for broilers. Controlling animal feed costs is critical in this industry since it represents approximately 60-70% of total production cost. For this reason, feed manufacturers are switching to low-cost substitutes such as palm-kernel cake, groundnut cake and fish meal, by-products of agro-processing.

Market opportunities

The market grows at a rate of 6% per annum. However, consumption patterns of households in urban areas in Ghana are heavily weighted towards imported frozen poultry products. The reasons for this trend are that it is cheaper than locally produced poultry (in 2019, 2.5 USD/kg against 2.7 USD for locally produced broiler) and it is already pre-cut and dressed. As such, the convenience of a ready-to-use chicken product has boosted consumer demand. Furthermore, the rapid growth in the restaurant, hotel and fast food sector has increased demand for frozen poultry products in the past few years.

The national value chain does not respond to the needs of the market and has led to a decline in market share to 5%. Market needs require poultry meat to be affordable, available, accessible and conveniently packaged. However, local poultry processors in Ghana lack the infrastructure and equipment to produce chicken cuts that are preferred by most consumers.

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Main constraints and challenge

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Annex 8. Estimated single blended rate for apex Ghana

Background:

IFAD project design team has requested assistance from PMI team to calculate a weighted single interest rate for a combined fund sourced from five different lines of credit being offered by public and private sources. The five lines of credit will be domiciled with an Apex Bank Ghana. Each of these five lines of credit have a maturity of 20 years. The APEX will then on-lend to IFAD/PROSPER clients who are AgriSMEs and Coops. They in turn will on-lend to small farmers.

The lines of credit are:

- 1) LoC1 – \$6.9 m from GCF to Apex at interest rate of 0%
- 2) LoC2 – \$13.9 m from GCF to Apex at interest rate of 1%
- 3) LoC3 – \$14 m from IFAD to Apex at interest rate of 2%
- 4) LoC4 – \$1 m from other investors to Apex at interest rate of 4%
- 5) LoC5 – \$2.5 m for Apex's own resources at treasury bond rate of 12%

Assumptions:

The analysis is based on the following questionable assumptions:

Risk Profile/Premium: Level of risk for AgriSME and FO is exactly the same. Therefore, risk premiums are assumed to be the same, which is not realistic.

Ops EXP/Spreads: Assumptions based on typical spreads charged by impact investors active in Ghana. Bank benchmark COC rates (term deposits) in Ghana are between 9-12%.

Results:

Nominal Rate - APEX to Clients (Average): 9.5%

Nominal Rate - APEX to Risky Clients: 9.9%

Nominal Rate - APEX to Less Risky Clients: 8.7%

The rates to final beneficiaries above still stand in the concessional range, since for reference, near-prime rates practiced in Ghana are on average 21% p.a.⁶⁵

Weighted COC Calculation:

	Amount	Weight	Cost
Concessional Tranche			
LOC1-	\$6.9M	(19.27%)	0
LOC2-	\$13.9M	(38.8%)	.388
LOC3-	\$14 M	(39.1%)	.78
LOC4-	\$1M	(2.8%)	.112

Weighted Total Average Cost on Concessional: 1.28%

Single Interest Rate Calculation – Hard Currency (HC)

Weighted Average Cost of Funding	1.28%	Drawn from calculation above
ADD: Operating Expenses	2.5%	Based on typical FM fees charged over AUM

⁶⁵ More details at <https://www.bog.gov.gh/economic-data/interest-rates/>.

ADD: Risk Premium	2.52% PEGGED (See point 1 below)	Assumes high risk Agri market
ADD: Spread	1.0%	Assumes additional opportunity costs /plus margins
Nominal RATE in USD	7.3%	APEX to Clients

(1) Risk-premium is pegged by a 1.5 FIXED Agri market multiplier of the difference between US average lending rates (PEG1 - 3.54% in 2020) and US 20-year T-bill (PEG2 - 1.86% in 10-9-21):

$$\text{Risk-premium HC} = 1.5 \times (\text{PEG1} - \text{PEG2}) = 1.5 \times (3.54 - 1.86) = 2.52\%$$

Single Interest Rate Calculation – Soft Currency (SC)

SC Cost of Funding	12%	Apex Required Return
ADD: Operating Expenses	2.5%	Based on typical FM fees charged over AUM
ADD: Risk Premium	13.5% PEGGED (See point 2 below)	Assumes high risk Agri market
ADD: Spread	1%	Assumes additional opportunity costs /plus margins
Nominal RATE	29%	APEX to Clients

(2) Risk-premium is pegged by a 1.5 FIXED Agri market multiplier of the difference between Ghana's average lending rates (PEG3 - 21% in December 2020) and Apex's benchmark term deposits (PEG4 - 12%):

$$\text{Risk-premium SC} = 1.5 \times (\text{PEG3} - \text{PEG4}) = 1.5 \times (21 - 12) = 13.5\%$$

Final WACC – Incorporating HC and SC

WACC	Amount (M)	Weight	Rate	Cost
Concessional HC	35.8	93.5%	7.3%	0.068
Commercial SC	2.5	6.5%	29.0%	0.019
Sum	38.3			8.7%

Of course, the PEGGED values 1-4 can be calculated and included to the final WACC for each year by Apex, to ensure that, given the project's long duration, we don't end up making loans too cheap or expensive for the proposed mechanism. To the final WACC, we add a 0-1.5% Individual Risk Spread, to be charged based on the risk parameters of each entity (e.g., size, financial health, repayment history).

Annex 9. Rural finance environment in Ghana

According to AfDB, Africa's financial system is lagging behind other developing regions in every dimension of financial sector development, from regulations, and product sophistication to access, gender, and inclusion. The financial systems are small, concentrated, and unaffordable, with limited outreach. However, financial systems in Africa have also seen dramatic transformation, over the past two decades, in market structure and stability. There are enormous differences across sub-regions and countries, ranging from well-developed financial systems in middle-income countries, to shallow banking systems offering only the most basic banking services in fragile and poor states. Variation and disparity also exists within countries, like Ghana's polarized demographic structure between the northern regions, and the fast-developing southern regions. Every sub-region on the African continent fares differently in terms of progress towards financial development but as a whole access to finance is one of the major constraints for private sector development. The World Bank's enterprise survey's data reveals that many African MSMEs report access to finance as a major barrier.

Overview of the rural financial sector in Ghana

According to the National Financial Inclusion and Development Strategy Report (2018), the financial sector in Ghana grew over the past few years, but it remains bank-dominated and citycentric. Access to sustainable financing remains a huge challenge in rural Ghana notwithstanding decades of interventions by various donor-funded projects, NGOs and philanthropic individuals. The poorest regions are the most financially excluded, particularly in the northern belt, implying that rural residents and women have less access to banks than do their urban and male counterparts. Rural residents, women, and the poor rely on Non-Bank Financial Institutions (NBFIs) and informal financial services. Most prominently those are rural banks, savings and loans companies and microfinance institutions with social missions which provide the financial intermediation services for the rural population of Ghana, as opposed to the commercial banks which are predominant in the city centres. The low economic activity (depending mainly on low-value agriculture), very high transaction costs associated with providing credit in small volumes to widely dispersed and often remotely located borrowers, the high volatility of agricultural production arising from the uncertainty of rain patterns, among other factors, make rural communities unattractive to major financial institutions which have the capacity to spur on development. The emergence of rural community banks (RCBs), savings and loans companies (S&Ls) and microfinance institutions (MFIs) was in response to ever growing need to rope every Ghanaian into the banking system for development. RCBs, S&Ls and MFIs have designed tailor-made products which fit the unique needs of the unbanked rural poor.

Rural Community Banks (RCBs)

RCBs are specialised institutions engaged primarily in deposit-taking business within a defined catchment area. They are unit banks owned by members of the rural community through the purchase of shares and are licensed to provide financial intermediation. They were first initiated in 1976 to expand savings mobilization and credit services in rural areas not served by commercial and development banks. In recent times, rural banks in Ghana are the largest providers of formal financial services in rural areas and hold a big chunk of the total banking outlets in the country (IFAD, 2008).

RCBs are licensed and regulated by the Bank of Ghana (BoG) in accordance with the Banks and Specialized Deposit-Taking Institutions Act, 2016 (Act 930) to offer savings, credit and payment services. The mobilization of savings and granting of credits are basic banking activities that give rise to risk in the operations of the RCBs, hence the role of the BoG.

To establish an RCB, the BoG has established various requirements, among which are the following: The minimum paid-up capital of GH₵1,000,000 or as may be determined by BoG from time to time, with not more than 25% of the initial paid-up capital held in property, plant and equipment (capital

expenditure). In other words, at least 75% of the initial paid-up capital shall be in liquid cash resources to support operations.

The shareholding of rural banks is restricted only to Ghanaians as follows:

- Individual shareholding; not exceeding 30% of total shares,
- Community participation; not less than 20% of total shares,
- Family participation; not exceeding 40% of total shares, and
- Corporate bodies; not exceeding 50% of total shares.

Within the supervisory structure for the RCBs is the ARB Apex Bank Limited which acts as their “mini-central bank”. The ARB Apex Bank Limited was registered as a public limited liability company in January 2000 with the RCBs being its shareholders. It was granted a banking licence in June 2001 and was admitted to the Bankers Clearing House as the 19th member in August 2001. ARB Apex Bank Limited has 11 branch offices throughout the country in the following locations: Accra, Cocoa House, Kumasi, Sunyani, Bolgatanga, Cape Coast, Takoradi, Koforidua, Hohoe, Tamale and Wa.

The ARB Apex Bank Limited offers the following services to the RCBs:

- Cheque clearing services,
- Corresponding banking services,
- E-Banking services,
- Purchase of government securities,
- Remittance services,
- Fixed term deposit services (the apex certificate of deposit), and
- Financing (on-lending to RCBs).

There are currently 144 licensed RCBs which are spread across the country and offering various financial and transformational services to the rural population. Of the 144 RCBs nationwide, 70 are located within the Middle and Northern belts, representing 49% of the total number of RCBs (refer to the list below).

Table 1: List of RCBs in Middle and Northern belts

RURAL BANKS IN NMIDDLE AND NORTHERN BELTS				
Name	Address	Telephone #	Email Address	Region
Adansi Rural Bank	Fomena, Head Office	+233 57 443 8510	adansiruralbank@yahoo.com	Ashanti
Ahafo Ano Premier Rural Bank	Wioso, Head Office	+233 20 998 1757	premieraahaano@yahoo.co.uk	Ashanti
Akrofum Area Rural Bank	Akrofum, Head Office	+233 24 489 2655	aarbh@ yahoo.com	Ashanti
Amanano Rural Bank	Nyinahin, Head Office	+233 20 800 7254	amananorbl.nyinahin@yahoo.com	Ashanti
Amansie West Rural Bank	Antoakrom, Head Office	+233 27 759 9442	awrbilimited@yahoo.com	Ashanti
Asante Akyem Rural Bank	Juansa, Head Office	+233 50 133 3446	asanteakyemrb2010@yahoo.com	Ashanti
Asokore Rural Bank	Asokore, Head Office	+233 32 209 2188	info@amrb.com.gh	Ashanti
Atwima Kwanwoma Rural Bank	Head Office	+233 32 229 8900	atwikwancentral@yahoo.com	Ashanti
Atwima Mponua Rural Bank	Toase, Head Office	+233 50 590 3125	atwimamponua@yahoo.com	Ashanti
Atwima Rural Bank	Foase, Head Office	+233 50 138 7040	foaseatwima@yahoo.com	Ashanti
Bosomtwe Rural Bank	Kuntenene, Head Office	+233 32 209 8076	bosomtwerb@yahoo.com	Ashanti
Bosome Freho Rural Bank	Head Office	+233 24 360 0001	bosomfreho@yahoo.com	Ashanti
Juaben Rural Bank	Juaben, Head Office	+233 20 852 1968	jrbmain@gmail.com	Ashanti
Kumawuman Rural Bank	Kumawu, Head Office	+233 20 202 9550	kumawumanrb@yahoo.com	Ashanti
Kwamaman Rural Bank	Kwamang, Head Office	+233 50 128 9184	kwamaman82@yahoo.com	Ashanti
Nsutaman Rural Bank	Nsuta, Head Office	+233 32 249 0680	nsutamanrbl@yahoo.com	Ashanti
Nwabiagya Rural Bank	Barekese, Head Office	+233 32 209 1880	Nwabiagyarb@yahoo.co.uk	Ashanti
Odotorobi Rural Bank	Jacobu, Head Office	+233 20 870 9493	odotobribank@yahoo.com	Ashanti
Offinso Rural Bank	Offinso, Head Office	+233 32 209 1619	frankkfrimpong@yahoo.com	Ashanti
Okomfo Anokye Rural Bank	Wiamoase, Head Office	+233 20 434 4906	okofokr83@yahoo.com	Ashanti
Otuasekan Rural Bank	Kofiase, Head Office	+233 32 209 2002	otuasekanrbl@yahoo.com	Ashanti
Sekyedumase Rural Bank	Sekyedumase, Head Office	+233 50 128 6161	info@sekobank.com	Ashanti
Sekyere Rural Bank	Jamasi, Head Office	+233 32 209 1612	info@seyerebank.com	Ashanti
Yaa Asantewaa Rural Bank	Ejisu, Head Office	+233 54 194 3586	yarbg@ yahoo.com	Ashanti
Ejuraman Rural Bank	Ejura, Head Office	+233 20 923 5573	info@erbank.com.gh	Ashanti
Akumadan Rural Bank	Akumadan, Head Office	+233 50 158 4413	info@akumadanruralbank.com	Ashanti
Asokore Mampong Rural Bank	Asokore Mampong	+233 32 249 4413, 50 15	info@amrb.com.gh	Ashanti
Tepaman Rural Bank	Tepa Ashanti, Head Office	+233 50 129 5909	tepamanruralbank@yahoo.com	Ashanti
Kwabre Area Rural Bank	Kodie-Kumasi Head Office	+233 32 249 8368/9		Ashanti
Ahafo Community Bank	Kukuom, Head Office P.O. Box 33	+233 35 209 5470	atwimamponua@yahoo.com	Ahafo Region
Asutifi Rural Bank	Acherensua, Head Office	+233 50 149 5901	info@asutifiruralbank.com	Ahafo Region
Atweaban Rural Bank	Box 18, Brong Ahafo/Duayaw-Nkwa	0264787023; 020803042	info@eastakimruralbankltd.com	Ahafo Region
Bomaa Area Rural Bank	Bomaa, Head Office P. O. Box 108, E	+233 50 133 8174	jomororuralbank@yahoo.com	Ahafo Region
Derma Rural Bank	Derma, Head Office P.O. Box 1	+233 50 125 5049	dermaarearuralbankltd@rocketmail	Ahafo Region
Amantin & Kasei Rural Bank	P O Box 128 Ejura Ashanti	+233 20 205 5170	amakacom@ymail.com	Bono East
Fiagya Rural Bank	P. O. Box 130, Nkoranza	+233 20 437 1847	fiagyruralbank@yahoo.com	Bono East
Kintampo Rural Bank	P. O. Box 98, Kintampo	+233 50 125 5074	kintamporuralbankltd@yahoo.com	Bono East
Nkoranza Kwabre Rural Bank	P.O.Box 97	+233 20 261 3286	nkorabre1983@yahoo.com	Bono East
Yapra Rural Bank	P.O.Box 109,	+233 20 207 7430	yaprabank@yahoo.com	Bono East
Baduman Rural Bank	P.O.Box 6, Badu	+233 20 693 9866 35 205	brbbadu@yahoo.com	Bono Region
Bomosadu Rural Bank	P. O. Box 432, Senase, Berekum, Br	+233 50 443 6394	bomosadurb@gmail.com	Bono Region
Capital Rural Bank	P. O. Box 18, Abesim	+233 20 872 5878	crbabesimagency@yahoo.com	Bono Region
Drobo Community Bank	P. O. Box 12 Drobo	+233 50 309 5003	ferkanda1@yahoo.co.uk	Bono Region
Nafana Rural Bank	P. O. Box 123.Sampa	+233 24 221 0416	nafanaruralbank@yahoo.com	Bono Region
Nkoranman Rural Bank	P. O. Box 20, Berekum-Seikwa	+233 50 699 5019	nkoranmanrbl@yahoo.com	Bono Region
Nkrankwanta Area Rural Bank	P.O.Box 1 Nkrankwanta	+233 50 689 1011	narbank@yahoo.com	Bono Region
Nsoatremen Rural Bank	P. O. Box 14 Nsoatre	+233 35 202 3669	nsoatrerb@gmail.com	Bono Region
Suma Rural Bank	P. O. Box13, Suma Ahenkro,B/A	+233 20 207 7804	sumaruralbank@yahoo.com	Bono Region
Wamvie Rural Bank	P. O. Box 26 Wamvie, B/A	+233 20 997 7754	wrbheadoffice@yahoo.com	Bono Region
Wenchi Rural Bank	P. O. Box W30	+233 35 219 7204	wenchirb4u@yahoo.com	Bono Region
Kaaseman Rural Bank	P. O. Box 157 Berekum	+233 20 435 5327	kaasemanruralbank@yahoo.com	Bono Region
Asubonten Rural Bank	P.O. Box 57, Worawora	+233 20 320 2332	asubontenrb@gmail.com	Oti Region
Kpassa Rural Bank	P. O. Box 10 Nkwanta	+233 54 433 2289	department.kpassarbl.ict@gmail.co	Oti Region
North Volta Rural Bank	P. O. Box 5 Jasikan	+233 50 144 8009	northvolta@yahoo.com	Oti Region
Kaakye Rural Bank	P O Box Kc 33, Kete-Krachi	+233 30 396 2568	kaakyebank@yahoo.com	Oti Region
Bangmarigu Community Bank Lir	Walewale Box 34 Savelugu	0208 286 372; 05445570	westmcb@live.co.uk	Northern East
Bessfa Rural Bank Limited	Garu P. O. Box 160 - Bawku	0209320568	bessfarb@yahoo.com	Upper East
Bongo Rural Bank Limited	Bongo, P.O.Box 39, Bongo	0382093960	bongoruralbankltd@yahoo.com	Upper East
Bonzali Rural Bank Limited	Nayilifong, P.O.Box 1197	03720-22506	bonzaliruralbank@yahoo.com	Northern
Borimanga Rural Bank Limited	Mohifong, Box 34 Savelugu	03720-93217	borimangabank@yahoo.com	Northern
Builsa Community Bank Limited	Sandema Town P. O. Box 25	0242973741; 020828126	bucobank@gmail.com	Upper East
Buuwuloso One Stop Rural Bank	P.O. Box Dm111, Damongo	0372094942	buuwulosorb@yahoo.com	Northern
Lawra Area Rural Bank Limited	Lawra P.O.Box38	0501389618	lawrarearuralbanklimited@yahoo.co	Upper West
Maltaaba Community Bank	Bongo, Head Office	+233 50 655 0500		Upper West
Naara Rural Bank Limited	Paga Town P. O. Box 14	0244881321 , 020877991	naararural@yahoo.com	Upper East
Nandom Rural Bank Limited	Nandom Lorry StationBox10 Nando	0501287701 / 2	nandomruralbank@yahoo.com	Upper West
Sissala Rural Bank Limited	Tumu P O Box 98	0244097070		Upper West
Sonzele Rural Bank	Jirapa District P. O. Box 16	0244293957	sonzelruralbank@yahoo.com	Upper West
Tisungtaaba / East Mamprusi Co	East Mamprusi Box 11 Gambaga	0208163744	laduayire@yahoo.com	Northern East
Tizaa Rural Bank Limited	Nk Gushegu P.O.Box 477 Tamale	0501576037 - 8	tizaarbl@yahoo.com	Northern
Toende Rural Bank	Market P.O.Box 5,Zebilla	0244436380; 024260712	toendesabil2004@yahoo.com	Upper East
Zabzugu Rural Bank Limited	Zabzugu P. O. Box Zb 29. Zabzugu	0372091343, 0203077482; 0242271350		Northern

As expected, RCBs are mainly focused on the provision of savings, loans and nonfinancial products to their clients to stimulate the rural economies where they operate. The various types of deposit products offered by RCBs include:

Current (checking) accounts,

Susu accounts,

Term deposits, cash collateral (compulsory savings) accounts, and

Savings accounts.

As of March 2021, RCBs reported total deposits of GHS 5.573 billion, rising from GHS 5.322 billion in March 2020 (ARB Apex Bank, 2021).

On the asset side, RCBs transform the deposits of their clients into loans and advances to meet the financing needs of businesses and individuals in the communities in which they operate. RCBs offer different types of local currency loans and advances reflecting the demands of their unique locations. Generally, loan products include the following:

- individual loans,
- group loans,
- agribusiness loans,
- business loans,
- education loans,
- salary loans among others.

The ARB Apex Bank reports that total loan portfolio of RCBs reached GHS 1.966 billion as of March 2021 (from GHS 1.842 billion in March 2020), concentrated on individuals (65.72%) who are mostly into trading (37.47%). In view of the fact that RCBs do not operate branches in other communities (i.e., RCBs are unit banks), the performance of their loan products reflect the dominance of specific economic activities in their respective communities. These economic activities are categorized into the following sectors as reported by ARP Apex bank as of March 2021:

- Agriculture: 7.12%,
- Cottage industries: 1.87%,
- Transportation: 4.42%,
- Trading: 37.47%, and
- Others: 49.12%.

The quality of loans and advances continue to pose a challenge, compounded by the effects of the covid-19 pandemic. Nonetheless, RCBs appear to have a higher portfolio quality than commercial banks. Non-Performing Loans (NPLs) slightly increased from 11.13% as at December 2020 to 11.23% in March 2021. Past due of 14.28% was within the prudential benchmark but Loss/NPL of 62.25% was far above the 20% maximum benchmark. These were however superior to the performance of commercial banks which recorded NPL ratio of 15.49% (14.82% in the previous quarter), past due of 22.49% and Loss/NPL ratio of 61.9%. This could be due to a closer monitoring by the RCBs of their clients.

RCBs are frequently engaged in nonfinancial services such as financial literacy trainings, trainings on Good Agriculture Practices (GAP), health education and other interventions, usually as part of their corporate social responsibilities.

To ensure the resilience of RCBs, the ARB Apex Bank Limited consistently tracks the performances of all rural banks. Using its quarterly rankings, RCBs are classified into Strong, Satisfactory, Fair and Marginal. The assessment for these ratings covers RCBs' capital, assets (including asset quality), profitability and liquidity. Out of the 70 RCBs within the middle and northern belts, 66 RCBs were rated as of December 2020 with 9 RCBs emerging Strong and 22 emerging Satisfactory. The remaining 35 RCBs were rated Fair or Marginal. 4 of the 9 strong RCBs in the middle and northern belts (representing 44.4%) are located in the Ashanti Region while Bono East and Upper East contributed 2 strong RCBs each (22.2%) and Upper West Region contributed 1 RCB.

Rating of RCBs in the Middle & Northern Belts as of December 2020:

The list of the Strong RCBs within the northern and middle belts are as follows:

#	BANK	REGION	AVERAGE SCORE
1	Kintampo	Bono East	1.44
2	Yapra	Bono East	1.44
3	Atwima Kwanwoma	Ashanti	1.25
4	Otuasekan	Ashanti	1.38
5	Amansie West	Ashanti	1.44
6	Juaben	Ashanti	1.50
7	Builsa	Upper East	1.25
8	Maltaaba	Upper East	1.44
9	Sonzele	Upper West	1.13

With their average scores between 1.50 and 2.50 points, the following RCBs were ranked Satisfactory as of December 2020:

#	BANK	REGION	AVERAGE SCORE
1	Amantin & Kasei	Bono East	1.75
2	Kumawuman	Ashanti	1.63
3	Tepaman	Ashanti	1.63
4	Ahafo Ano	Ashanti	1.63
5	Odotorobi	Ashanti	1.88
6	Bosomtwe	Ashanti	1.94
7	Adansi	Ashanti	1.94
8	Sekyere	Ashanti	2.00
9	Atwima Mponua	Ashanti	2.00
10	Asante Akyem	Ashanti	2.00
11	Asokore	Ashanti	2.06
12	Offinso	Ashanti	2.06
13	Okomfo Anokye	Ashanti	2.13
14	Nwabiagya	Ashanti	2.25
15	Yaa Asantewaa	Ashanti	2.38
16	Asokore Mampong	Ashanti	2.38
17	Ahafo Community	Ahafo	1.75
18	Asutifi	Ahafo	2.38
19	Bonzali	Northern	1.94
20	Tizaa	Northern	2.50
21	Toende	Upper East	1.88
22	Naara	Upper East	2.50

Ashanti Region alone contributed 15 of the 22 RCBs which are ranked Satisfactory (68.2%) while Upper East, Northern and Ahafo regions contributed 2 RCBs each in the same category.

Savings and Loans Companies (S&L)

The emergence of S&Ls and MFIs in Ghana resulted from the gap that existed between the outreach of formal commercial banks and the demand for financial services. Individual savings collectors known all over West Africa as Susu, made small, short term and sometimes interest-free advances to their regular clients. The widespread operations of the Susu led many analysts to start proposing that combining the capital of formal banks with the intrinsic advantages of the informal agents (Susu operators) could result in solving the financial gap problems. The idea led to the conceptual development of the Savings & Loans sector in the financial system of Ghana.

Savings & Loans companies in Ghana are noted to create access to productive capital for the poor, together with human capital, which is empowered through education and training, and social capital incentives achieved through local organization building. The BoG have overall supervisory and regulatory authority in all matters relating to S&Ls as in banks and other nonbank financial institutions in Ghana with the purpose to achieve a sound, efficient banking system in the interest of depositors and other customers and the economy as a whole, pursuant to the Banks and Specialised Deposit-taking Institutions Act, 2016 (Act 930).

Like RCBs, S&Ls are authorised to provide savings, loans and nonfinancial products to their target customers. With a minimum capital requirement of GHS15 million, S&Ls are authorised to operate branches in various parts of the country, thereby enhancing their capacity for outreach and diversification.

There are currently 25 licensed S&Ls which have their operations in various parts of Ghana, with prominence within the southern belt and Kumasi:

#	Savings and Loan Name	Location
1	ABii National	Cantonments, Accra
2	Adehyeman	Accra-Ghana
3	Advans Ghana	Accra – North
4	Asa	Mamprobi Accra
5	Assurance	Accra
6	Bayport	Accra North
7	Best Point	Cantonments, Accra
8	Bond	Tema
9	Direct	Cantonments, Accra
10	Equity	Cantonments, Accra
11	Golden Link	Accra
12	Golden Pride	Accra
13	Izwe	Accra
14	Jins	Accra
15	Letshego	Accra
16	Multi Credit	Kumasi – Ashanti
17	Opportunity International	Accra
18	Pacific.	Kumasi - Ashanti
19	Pan - African	Cantonments, Accra
20	Progress	Accra
21	Services Integrity	Accra
22	SIC Life	Adabraka - Accra
23	Sinapi Aba	Nhyiaso, Kumasi
24	The Seed Funds	Cantonments - Accra
25	Utrak	Kumasi

S&L companies, like their commercial banking counterparts, tend to shy away from financing agribusinesses particularly at the production level due to the perceived high risks in the sector. As a result, most of them have specialised in consumption loans to government workers and business loans to traders.

The performance of selected S&Ls as of December 2020 is presented below

Table 2: Financial performance of selected S&L

Financial Performance of Key S&Ls									
Name of S&L	Profit	Cash/Investment	Loans portfolio	Total assets	Customer Deposits	Net worth	Liquidity	ROA	ROE
ASA	69,172,500	92,989,591	254,536,921	354,151,737	159,559,734	158,597,220	58%	20%	44%
LETSHEGO	32,613,870	69,105,279	552,484,130	684,837,998	169,662,923	89,038,449	41%	5%	37%
JINS	1,284,484	4,856,059	22,579,246	31,669,289	14,757,430	15,347,843	33%	4%	8%
BEST POINT	11,525,280	25,172,740	34,007,077	342,743,062	303,173,836	33,270,716	8%	3%	35%
OISL	9,427,960	27,957,065	152,356,924	312,551,525	227,968,269	46,038,990	12%	3%	20%
ABII NATIONAL	3,202,041	11,477,084	20,270,652	121,974,510	112,099,602	6,643,534	10%	3%	48%
SISL	4,409,707	37,804,503	134,988,859	184,945,949	24,260,763	81,150,901	156%	2%	5%
BAYPORT	17,842,427	21,965,372	675,781,352	801,324,717	104,470,260	143,322,231	21%	2%	12%
SINAPI ABA	3,615,051	47,337,290	144,896,090	213,025,201	141,784,196	16,967,606	33%	2%	21%
PACIFIC	386,734	14,813,642	11,479,044	32,488,855	24,023,723	6,546,071	62%	1%	6%
DIRECT	442,134	28,947,818	38,546,744	63,403,156	26,139,901	19,448,523	111%	1%	2%
BOND	644,672	76,722,912	280,224,256	384,205,196	166,801,926	82,130,495	46%	0%	1%
PROGRESS	41,595	56,423,753	5,336,713	69,458,931	51,705,135	16,529,220	109%	0%	0%
PAN-AFRICAN	(246,858)	41,050,080	58,320,432	118,071,820	90,173,014	15,917,512	46%	0%	-2%
GOLDEN PRIDE	(710,913)	27,689,606	11,006,702	60,277,302	57,780,724	(834,399)	48%	-1%	-85%
ADVANS	(2,705,713)	12,169,941	118,915,978	164,664,454	62,985,767	29,860,942	19%	-2%	-9%
MCSL	(8,051,896)	139,354,337	77,819,401	301,225,423	278,373,106	19,499,555	50%	-3%	-41%
EQUITY	(2,289,460)	4,174,622	8,169,631	81,703,367	61,196,360	14,932,631	7%	-3%	-15%
GOLDEN LINK	(8,879,601)	5,881,737	11,873,479	47,259,045	40,782,235	(5,811,452)	14%	-19%	-153%
UTRAK	(7,314,718)	9,530,770	20,666,450	36,795,598	32,606,095	1,739,475	29%	-20%	-421%

Based on author's construct

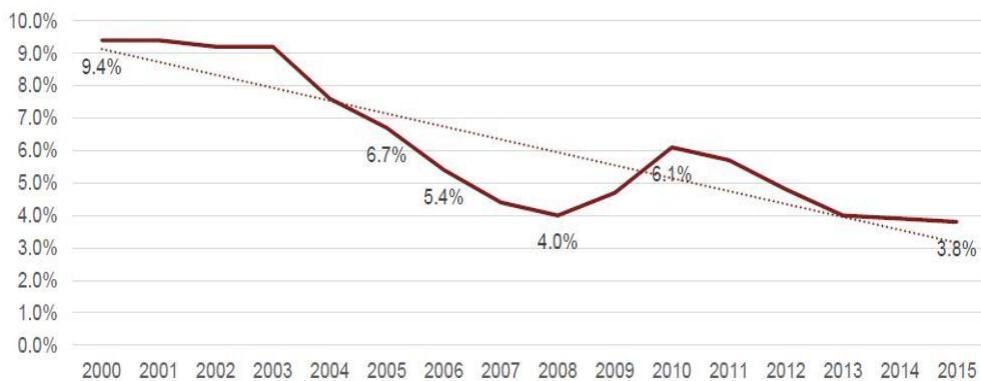
Opportunity International S&Ls (OISL) is a subsidiary of Opportunity International, a global institution dedicated to helping clients transform out of poverty. It operates in 23 countries across the globe serving nearly 10 million clients with micro loans, savings, micro insurance and non-financial services. The global office is based in Chicago, USA. As of December 2020, OISL had 579,448 clients of which 40,797 were loan clients. Loan portfolio was GHS 152.3 million and client deposit balances were GHS 228 million. With a total asset of GHS 312.5 million and shareholders net worth of GHS 46 million, this makes OISL one of the biggest savings and loans company in Ghana.

With branches scattered within the middle and northern belts, it has demonstrated absolute commitment towards agricultural financing over the years. OISL currently serves over 22,800 agribusiness loan clients who are mostly located within the northern and middle belts with a total agriculture loan portfolio of GH 39 million. During the 10-year period of introducing the agriculture loan product, OISL has disbursed over GHS 200 million in loans to farmers for production.

Access to financing in Ghana's agriculture sector

Over a period of 25 years, bank lending to agriculture in Ghana has been on the general decline in spite of the various agro-financing mechanisms implemented. The share of agriculture in total commercial bank lending in Ghana is illustrated below.

Figure 1: Agriculture as a percentage of commercial bank lending in Ghana (PWC, 2017)



Lending dropped from their double-digit figures in the mid-1990s to under 4% of total bank credit in 2015. The low participation in lending to the agricultural sector is characterized by the following features:

- Eight commercial banks accounted for 88.5% of the amount of loans granted,
- ADB alone was responsible for nearly 40%,
- Three banks (ADB, EBG, and SB) provided more than two-thirds of the loans,
- Local banks accounted for 57.3%,
- 15 commercial banks had less than 1% of their loans in the agricultural sector.

The financing of agriculture by commercial banks in the country is largely dominated by a few ones, indicating the low risk appetite that commercial banks, generally, have for the sector. As a proxy for private sector investment, bank lending to the agriculture sector is mimicking the downward slide in the public sector. The public sector contribution to agriculture sector remains low, resulting in slower agricultural sector growth rate in Ghana over the last two decades. The government's budget allocation needs to increase to stimulate better growth. Despite expressed commitment to the Comprehensive Africa Agriculture Development Programme (CAADP) since 2003, the funding allocation made by the Government of Ghana from its Budget Statement and Economic Policies indicate an underinvestment in the sector. Between 2013 and 2016, only a tenth of the target amount planned for the sector was actually disbursed. Furthermore, the allocated amounts tend to fund recurrent expenditure, which leaves a disproportionately small amount for investments.

The RCBs also lend only 7.12% to agriculture. As a result of this, the RCBs perceive agriculture as very risky, and are very reluctant in lending to agriculture. A few RCBs lend more significantly to agriculture (like for example Builsa Community Bank that lends 34%⁶⁶) because they are operating in areas where agriculture is the main economic activity of the population. PROSPER will have to plan to do a more thorough assessment of the RCBs such as Builsa in order to understand their business model, and how they manage to run sustainable operations while dealing primarily with agricultural customers, with the view to seeing if lessons could be shared and replicated across different financial institutions.

With growing pressure on governmental resources and emerging priorities, much is expected from the private sector to step in the gap, especially in the non-infrastructure space, and to drive growth inducing investments in the agricultural sector. There will also be the need for a deliberate increase in government's budgetary contribution to the agricultural sector targeting relevant infrastructure in particular. This should help to crowd in the participation of the private sector, using various vehicles / models, not least via public private partnerships.

Prominent constraints to accelerated lending by financial institutions include the low availability of risk mitigating instruments, the weak capacities of both lenders and borrowers, and a general lack of incentives. Below are presented a more comprehensive list of key constraints to agricultural lending in Ghana.

Table 3: key constraints to agricultural lending and implications for PROSPER

Aspect	Description	Implications for PROSPER
Weak capacity of borrowers	Weak capacities of borrowers in terms of management, HR, financial management, risks associated with agricultural businesses undermine their ability to repay their loans.	The Project should include capacity building for the borrowers.

⁶⁶ <http://www.bucobank.com.gh/>

Weak capacity of lenders	It has been determined that banks have weak capacities when it comes to lending to agriculture and to the business activities of all value chain actors. Low understanding of the technical issues of agriculture, and relating to the risks they present, tends to affect effective lending. Lenders also have weak capacity to design products, as well as for structuring deals relating to agriculture.	The Project should include market assessment and capacity building for the FIs.
Limited distribution channels	The benefits relating to setting up branches in rural areas, where a lot of the agricultural activities is low.	The Project should support the RCBs in expanding their footprint in rural areas through new technologies.
Inadequate incentives for agricultural lenders & borrowers	Low incentives exist to promote increased appetite for lending to the agricultural sector. This is in addition to interest rates being high and market access for borrowers being generally weak. Operational costs are high, because of limited infrastructure, and cost of capital is also high (because they depend on deposits of their clients, where they provide higher interest rate).	Financial subsidies (on interest rate) should be provided to the RCBs. Technical Assistance and training to be more efficient and do better assessment of the clients.
Mismatch of the duration of the liabilities and the assets.	Most of the liabilities of the financial institutions are short term, coming mainly from deposits from the customers – while the agricultural customers usually require longer term loans, to financing their operations over several agricultural seasons.	The loan terms provided to the financial institution should have a duration that is significantly longer than the current financing options available in the market.
Low risk mitigating instruments	Agricultural insurance is rather new and weak against a backdrop of risks such as inadequate rainfall, diseases and pests, low yield and markets being present and high.	Support should be provided to the partner agricultural company in leveraging on lessons learned from the AGRIFIN program in other countries.
Inadequate credit risk enhancing instruments	Agriculture in Ghana is largely undertaken by smallholder farmers who produce most of the food. These farmers usually have no collateral to secure their borrowings. Apart from Exim Guaranty Company Ltd., all other credit risk guarantee instruments have been short-term project based. Examples include AGRA/Stanbic Bank First Loss Guarantee, DANIDA/AGRA Stanbic/UT Bank/Sinapi Aba S&Ls risks sharing instrument. Exim Guaranty's exposure to the agricultural sector is also rather low. (see sections below)	Help design a sustainable mechanism that will remain operational and develop after programme closure.

Challenges for women in accessing finance

Access to finance is not gender neutral, with men having better access to finance than women. The analysis of firms' perception of access to finance by world regions and firm ownership indicates that many African women MSMEs perceive access to finance to be a major obstacle (44%), more than in any other developing region, including when disaggregated by gender. On average more women than men across the developing world consider access to finance to be a significant barrier (except for Central Asia and Eastern Europe). This finding is in line with economic literature and the available research on gender access to finance issues.

The total financing gap for women in Africa is estimated at USD 42 billion and the financing gap for women in Agriculture is estimated at \$15.6 billion. The highest credit gap for women across the continent was found in the Central and North regions, followed by the Southern, West and finally East regions. The Central and North regions alone make up more than half of the total credit gap. The gap difference among regions can on average be as wide as near USD 70,000 per enterprise. Moroccan women business owners appear to have the highest average credit value gap.

African women entrepreneurs face specific access to finance disadvantages as compared to their male counterparts. Women account for only 20% of the banked population as compared to 27% for men in the region. Nonfinancial barriers often restrain women from accessing financial services. These include: (i) the broader business and legal environment that may differentially affect women and men in businesses; (ii) personal characteristics of the entrepreneurs (such as differences in educational attainment and skills); (iii) characteristics of the firm (size, area of specialization, location, formal/informal sector); and (iv) constraints within financial institutions (little familiarity with women entrepreneurs).

High amount of collateral and high interest rates are often found to be impeding women's financial access. Women's low level of financial literacy limits their knowledge of available funds and financial products that they could have availed otherwise. Various national governments and policy makers have embraced an agenda for greater financial inclusion of women/ youth entrepreneurs, but the existing gender finance programs are typically of limited scale or still at infancy stage. In Ghana, a number of banks offer tailored products for women and youth in business, but the country surveys suggest this does not typically represent a major share of their portfolio.

Environment for access to credit among female entrepreneurs in Ghana: demand side
Women are usually more cautious about taking on debt they cannot responsibly service, while men are (for better or worse) bolder in terms of the values of loans requested. Female staple foods traders trade in heavy volumes, and many are cash rich but are unsophisticated in terms of planning business growth. In terms of service needs, the perception is that female customers entrepreneurs are more handholding, more business growth, and more financial management advice than male-led entrepreneurs.

Female entrepreneurs need more and different levels of technical assistance to access financing than their male counterparts. Located upstream in the value chains, female entrepreneurs in the target chains require more intensive levels of service and lower amounts of financing than their male peers. Given their size (primarily micro and small), the financing needs required most often fall below the "missing middle" target (\$25,000 – \$500,000), and in segments of the value chain where margins are lowest.

Demand for finance among women and youth along the value chain remains highly unsatisfied, and the nature of demand in each segment is different. Given their location in the value chains, the nature of demand is different among female and male actors within each segment. Credit is mainly available to the small and medium female actors downstream in the rice, soy, and maize value chains who wish

it, however the scale of financing and terms offered (e.g., interest rate, collateral requirements) by private financial institutions (PFI) to these actors do not meet their businesses' needs. The same is true for micro traders in the target value chains, who also are largely able to access credit from formal financial institutions and also from the buyers they source product for, but not in amounts sufficient, or for the length of time, most favourable for their businesses to grow. Formal credit is tightest for the smallholder farmers in each value chain.

Women in Ghana's north are largely ignored by both formal and informal lenders as potential customers for credit for a variety of reasons, both economic and cultural. Most women smallholder farmers work on rice, maize, or soya farms with their husbands, and are likely to be illiterate and innumerate, and often defer to their husbands in farm matters, in particular when it comes to accessing input loans. Men in northern Ghana are therefore the primary recipients of smallholder input credit. Many aggregators and traders, including female traders, prefer not to lend to women smallholder farmers in Ghana's north, as the perception is that they don't control the farm or household resources. Other female smallholder farmers in different geographic regions, such as rice farmers in Kumasi in the Ashanti region, are able to access inputs (seeds) from buyers and processors, but report that they cannot afford formal financing at prevailing interest rates given the size of plots they manage, even if they could access required collateral.

In general, at current productivity levels and plot sizes (90% of smallholder farmers operate on holdings of less than 2 ha), and even if they are bundled into groups (making them more attractive and less risky customers for PFIs), smallholder farmers throughout the country may be unlikely to generate sufficient revenue to successfully repay input loans to formal PFIs at prevailing interest rates.

Environment for access to credit among female entrepreneurs in Ghana: supply side
On the supply side, a number of PFIs are strategically entering the financial services for women market with new products and networking platforms. Some of the larger banks (Ecobank, Barclays) are also engaged in heavy competition to dominate market share in agribusiness lending. However, the concept of serving men and women differently within the agribusiness sector remains foreign to even these forward-thinking, innovative PFIs, and none, including the PFIs with large female clientele, have seriously mapped the financial services demand within these specific value chains (maize, rice, soy) by gender.

In addition to streamlining approvals for new agribusiness clients, Ecobank is expanding its lending to rural community banks and microfinance institutions as a strategy to enlarge access to finance among women and underserved sectors. RCBs are seen by Ecobank as more suitable actors to reach upstream clients, such as women, in the target value chains.

Fidelity studied the agribusiness and SME markets intensively, and recently acquired ProCredit to serve the "missing middle" in the SME sector. Fidelity reports that the SME sector represents a reported 92% of all businesses in the country, and that 40% of the country's GDP is generated by SMEs; it has targeted agribusiness and microfinance institutions as key segments of the SME market it will focus on. Until now, Fidelity had not considered further segmenting the SMEs in terms of male and female markets. However, it has strong board and management commitment to undertake a large-scale financial inclusion expansion campaign targeting women that includes agent identification and expansion, mobile banking expansion, "smart accounts" for individuals and group lending through the village savings and lending association (VSLA) model in collaboration with NGOs. Fidelity has invested heavily in this line of business, conducting international visits to witness best practices in financial inclusion and hiring experts in this field to lead the bank's efforts. Fidelity created 400 new agents in the last years and has opened 250,000 smart accounts since this product was unveiled.

Fidelity intends to make Village Saving and Loan Groups totally cashless through a new mobile banking application, as soon as it can fine-tune its software application.

Access Bank is keen to enter the agribusiness lending space. It is looking at agro processing and exporting as key sectors for expansion. It has launched the W Initiative, a bundling of banking products for women, segmented into young professionals (savings, salary advance, debit card, local transaction link card), businesswomen (corporate account, m-power account, staff salary account, credit cards, savings products for children, insurance, and instant savings), families (current account, target savings account, single savings account, early savings accounts for children, accounts for youth, accounts for elderly, savings for dependents and domestics), and maternal health financial products (such as fertility treatment loans). Access Bank is looking at women as an entirely new sector, and believes it is the only bank to approach women in this manner in Ghana. Access Bank's managing director believes, this is a smart move to improve its value proposition to the Ghanaian customer and satisfy the interest of its capital providers. Access Bank conducted a thorough analysis of the small and medium-sized enterprises (SME) market, and as part of this study, surveyed the needs of women, although not women in the agribusiness sector, as the bank has "run away from this sector" given the bank's unfamiliarity with agribusiness lending in general. As part of the W Initiative, Access Bank supports networking among its female clients, and holds trainings and "power briefs" for its members on different subjects to improve their capacity as businesswomen.

An estimated 80% of the overall lending portfolio of Sinapi Aba Savings and Loans Ltd. (SASL) is to women, and 40% of its agricultural customers are women. This is less a PFI strategy than a natural occurrence, as SASL began as a microfinance institution, and small loans "naturally attract" more women than men. It is concerned about the interest rate charged to women clients, and would also welcome assistance to obtain concessional capital, however SASL has a board resolution barring it from borrowing in international currencies. The bank currently lends to an estimated 12,000 female agribusiness clients, primarily smallholder farmers, rice millers, aggregators, and market processors of soya beans. SASL has recently piloted a new loan product among 1,600 female rice producers that triangulated the financial institution, women rice producers, and a buyer. SASL provided input loans for the smallholder farmers and a purchase price was negotiated between producers and the buyer. SASL's repayment rate among smallholder farmers for input loans in this pilot was an impressive 98.7% (far above the estimated 21% rate of non-performing agribusiness loans on the whole in Ghana). However, SASL found that many women ended up side-selling their rice to other buyers offering better prices.

The Government of Ghana is not seen by PFIs to be taking an active role in expanding agricultural finance. According to a 2014 study commissioned by Making Finance Work for Africa and the German government, agricultural finance (other than for the cocoa sector) has not been articulated by the GOG as a strategic priority.

Derisking instruments in Ghana

Agricultural insurance

Ghana's agricultural insurance market is currently very basic and underdeveloped. There is no legislation in place. Unlike in Nigeria, there is no central government sponsorship, and supply-side interest seems low. There is no legal framework for the provision of agricultural insurance in the country since the Insurance Law of 2006, Act 724 has no provisions for agricultural insurance. There was a draft amendment bill relating to insurance, which has not yet received the approval of Cabinet.

According to the National Insurance Commission (NIC), there is a marketing agreement among all the key stakeholders of the insurance industry for the operation of the Ghana Agricultural Insurance Pool (GAIP). GAIP is the only entity providing agricultural insurance in the country at present and it

represents 17 pool members. These are private sector insurance companies under the membership of the Ghana Insurance Association (GIA).

The Ghana Agricultural Insurance Pool provides agricultural insurance products for the following:

- Drought Index Insurance targeting smallholder farmers through aggregators,
- Multi-Peril Crop Insurance targeting commercial farmers and agribusiness (minimum farm size should be 20 hectares) for both cereals (food crops) and forestry or tree crops,
- Poultry Insurance targeting poultry farmers,
- Livestock Insurance (for cattle) targeting smallholder cattle farmers. This is yet to be piloted.

However, there is no subsidy on agricultural insurance and that makes it unaffordable to the small producers who demand insurance products. The other actors of the agricultural value chain require traditional insurance, which is readily available. There is availability of both Direct Insurers and Reinsurers for the provision of the traditional insurance products to satisfy any value chain.

Only Ghana Reinsurance Company has a treaty with GAIP for its Drought Index Insurance, while the other lines of business are reinsured with a foreign reinsurer, i.e., Swiss Re. The other reinsurance companies do not participate in the agricultural insurance market in Ghana.

Key issues are reported to be:

- The industry does not have adequate agricultural insurance products to satisfy the demands of the market,
- GAIP has capacity challenges which need to be addressed,
- The local reinsurance capacity is a challenge which needs to be addressed.

Introduction to GIRSAL

Ghana's experience with credit risk guarantee funds has been limited over the years. Over the last decade, the main credit guarantee scheme has been the Exim Company Guaranty Company, which was set up by the Bank of Ghana to provide credit guarantee to financial institutions who seek to enhance their credit risk cover.

The Ghana Incentive-based Risk Sharing Scheme for Agricultural Lending (GIRSAL) is aimed at encouraging lending by financial institutions to agriculture to help accelerate growth, spur agribusiness development, and reduce capital constraints that limit competitiveness in agriculture. GIRSAL is rooted in the incentive-based risk sharing scheme conceived by Alliance for a Green Revolution in Africa (AGRA) to leverage lending by private financial institutions into agriculture.

Nigeria was the first African country to implement this scheme in what is called Nigeria Incentive-based Risk Sharing Scheme for Agricultural Lending (NIRSA), and the program was built on the following five pillars:

Risk sharing facility	USD 300 million
Insurance facility	USD 30 million
Technical assistance facility	USD 60 million
Bank rating mechanism	USD 10 million
Bank incentive mechanism	USD 100 million

GIRSAL has been conceptualized very much like NIRSA with a sixth pillar added to take full account of the potential contribution that advances in digital finance could benefit agriculture in Ghana. The six pillars are:

Risk sharing facility: to support development of risk sharing instruments to reduce the risks of banks through credit risks enhancements,

Insurance facility: to support development and deployment of insurance products for agriculture to lower risks faced by smallholder farmers and agribusinesses,

Technical assistance facility: to strengthen the institutional capacity of banks and intermediaries to support new lending into agriculture, develop new platforms to support delivery of loans to rural areas, as well as provide technical assistance to farmer groups and agribusinesses,

Bank rating scheme: to rate banks in Ghana based on their lending to agriculture, with the aim of creating extra incentives for banks that are achieving impacts in agricultural lending,

Bank incentive mechanism: to develop incentives to reward banks that are lending to the agriculture sector, based on the volume of lending, effectiveness of lending, and impacts,

Digital finance: to significantly increase the low-cost distribution and administration of financial services particularly in rural areas using mobile phones and other digital distribution channels.

Together, these six pillars are aimed at de-risking agricultural value chains, building long term capacity and institutionalizing incentives for agricultural lending. The risk sharing- and insurance facilities contribute to de-risking agriculture finance value chains. The technical assistance facility enables building long-term capacity by means of training and information to farmers, institutions and private entities, and the development of a common platform for communication. Bank incentive mechanisms and the agricultural bank rating scheme institutionalize incentives for agriculture lending through enhancing the visibility of ‘beneficial partners’ and by establishing mechanisms that increase the attractiveness of agriculture lending to banks. Lastly, digital finance services have the capability to increase access to financing by leveraging on existing technologies and hence enhances the outreach to farming communities (accessibility) concerning the products, and the product itself (access).

GIRSAL’s multiplier effect for insurance could serve as a catalytic factor for transforming, at an accelerated pace, the agricultural insurance industry in Ghana, leveraging examples elsewhere in Africa, including from NIRSAL. Agricultural insurance is well patronized when bundled with what farmers need (especially with the smallholder farmers who are in the majority in African agricultural production space). In Kenya it was bundled with seeds; in Malawi under the World Bank project, it was bundled with agricultural lending; while in Zambia, NWK bundled it with inputs for farmers. The Weather Index Insurance is also becoming economical to distribute to large smallholder farmers and it covers what the Private Insurance Providers are not willing to put on the market.

The opportunity with GIRSAL: GIRSAL intends to promote risk sharing among the key stakeholders in the agricultural financing environment. Agricultural insurance is one of the risk mitigation tools that will be required to de-risk agricultural lending. This comes with the opportunity of creating a large market for the providers of agricultural insurance in the insurance industry.

The financial institutions and agricultural insurance providers will be working in the same space. This could result in collaboration with one another; as financial institutions use life insurance products as a requirement for granting personal loans, similarly, FIs could demand agricultural insurance from customers before facilities are granted or approved.

There should be a legislation or regulation that will provide the necessary legal framework for the operations of agricultural insurance in the country. Furthermore, the legislation could accommodate a comprehensive agricultural policy which will include, among other things, the agricultural lending and provision of agricultural insurance, etc.

Annex 10. Capacity building of rural institutions, enterprises and households

The strategic focus of PROSPER is on the smallholder farmers to make them more competitive by increasing their capacity to respond to market demand in terms of quality, price, time and volume as well as making them more resilient to climate change. To achieve this, there is the need to provide capacity building to Farmer Based Organizations (FBOs) within the PROSPER clusters in the various stages of the value chain.

In order to build resilience of value chain stakeholder to negative impacts of climate change, one of the subcomponents of PROSPER (i.e. subcomponent 1.3) is dedicated to climate change resilience. This is aimed at mainstreaming climate change resilience across the selected agricultural value chains. Financed with the Adaptation for Smallholder Agriculture Programme (ASAP) grant during the first cycle of implementation of PROSPER, this subcomponent is targeted for the implementation of activities in the Northern part of Ghana to address the challenges of increasing dry spells, drought occurrence and the issues of land degradation and low soil fertility. This subcomponent has three main focus areas: (i) commercially valid adaptive trials and demonstrations of modern conservation agriculture (CA) practices (ii) demonstrations of efficient water-use techniques within new and existing irrigation systems, and (iii) institutional capacity building and enhanced public awareness of private and public value chain actors in the field of climate change resilience.

PROSPER also targets to achieve 50% participation of women and 30% youth. PROSPER also aims at making sure that women and youth actively participate in the development of new and existing value chains in their communities. Women and youth can participate in value chain development at different levels of the chain which includes aggregations, processing, cleaning and sorting, marketing, preservation and storage among others. To achieve this, there is the need to provide capacity building to women and youth within the PROSPER clusters in the various stages of the value chain to enhance women and youth economic

The TAMA North District has been selected as one of the beneficiaries, with details of selected communities and sites outlined in the appendix.

OBJECTIVES OF THE ASSIGNMENT

The objectives of the assignment are:

to facilitate the adoption and upscale of Conservation Agriculture and other climate-smart agriculture (CSA) practices by smallholder farmers

to contribute to climate change adaptation and mitigation efforts by training selected community members in nursery establishment, seedling production and alley cropping.

to build the capacity of households to be able to add value to agricultural products for home consumption and for marketing

Promote women economic empowerment through media campaigns, access to financial services including savings and credit, improved nutrition and enterprise development

SCOPE OF THE ASSIGNMENT

The specific activities to be undertaken by the Service Provider include but are not limited to the following:

Climate Smart Agricultural Demonstration

- i. Identify new self-motivated smallholder farmers that have had some experience with Conservation Agriculture (CA) and other Climate Smart Agricultural (CSA) technologies to be supported with seeds, inputs and crop protective products to establish up to 2-acre CA field.
- ii. Organize radio sensitization and awareness creation on Conservation Agriculture, environmental safeguards and other Climate Smart Agricultural technologies among AEAs and the community members based on the CA manual training and experience from the PROSPER demonstration over the past years.
- iii. Allocate Extension Agent(s) responsible for each of the communities to provide technical advice/backstopping (planting, NPK and Urea application, crop relay and harvesting) to the smallholder farmers supported on Conservation Agriculture (CA), Climate Smart Agricultural (CSA) technologies, and other related climate change activities in the operational area.
- iv. Organize field days for farmers on CA and CSA technologies and 4 cross-farmer-visits (thus, visiting farmer-fields with all farmers) of the participating farmers in each of the selected communities on CA and CSA technologies.
- v. Undertake regular monitoring and supervision visits to the demonstration sites (during irrigation and rain-fed periods) and supported farmer-fields to assess field performance and provide technical advice to farmers, where needed.
- vi. Undertake crop cutting to report on yields from the CA demonstration sites and farmer-fields.
- vii. Provide training in post-harvest handling and field management and report on the training.
- viii. Facilitate the operation of group activities and linking them to market, Value Chain Drivers and financial institutions.

Note: In terms of farmer selection, it is expected that 20 self-motivated farmers in already existing PROSPER supported communities will be identified from registered and functional FBOs. Districts to be supported under this intervention for the first time, 40 self-motivated farmers are to be selected from two registered and functional FBOs. Consult PROSPER for criterion for the selection of these farmers.

Value Chain Development- Women and youth focused trainings

- Designate a WIAD officers to participate in TOT for cascading training on Selection, Planning and Management (SPM) of Income Generating Activities (IGAs)
- Promote good food and nutrition practices among 150 households:
- Organize cooking demonstrations to show appropriate food combination for healthy leaving
- Facilitate Peer to peer education on nutrition and food safety: gender champions would be identified and trained on various topics including food and nutrition. These champions would be giving printed Nutrition sensitization and training materials to facilitate their delivery of the education or campaign contents across all geographic locations identified
- Identify and mobilize Mother to mother support groups; This would be done in collaboration with the WIAD and community nutrition officers within the districts. They would identify or form these groups where they do not exist and educate them on good nutrition in feeding the family. These officers would also visit group meetings and community meetings to sensitize them on family nutrition and the right behavior toward feeding young children. Counselling posters would be printed for use for this purpose.
- Cooking demonstrations to provide practical sessions on how foods are to be combined to create a balance meal.
- Train 150 women and youth on agro-based processing and enterprise development:
- Identify agro processing and enterprise development capacity need specific to the District (preservation and handling of high horticultural crops, home based gardening, nutrition education, agro processing of fruits, soybeans, rice, cassava etc.).
- Assess, identify and recruit participants based on the needs assessment to be trained on the specific areas identified.

- mobilize the participants to a training venue and train them on identified capacity areas
- Document the training and write reports on each training including pictures and attendance sheet.
- Carry out radio sensitization and campaigns on women empowerment in agriculture:
- The topics for the radio sensitization and campaigns include:
 - Women and youth control of decisions about agricultural production
 - Women and youth access to and decision-making power about productive resources
 - Women and youth Control of use of income earned
 - Women and youth participation in Leadership in the community
 - Time allocation to daily activities for women and youth
 - Make follow ups to monitor the application of knowledge and report results
 - Support trainees to start managing new livelihood enterprises among women and youth
 - Facilitate Entrepreneurs linkage to financial services
 - Support entrepreneurs to register their businesses with the registrar general department

Consult PROSPER Value Chain Officers and other interest groups for the criterion for the selection Indicators to be updated quarterly

INDICATOR	TARGET	MEASUREMENT (ACTIVITIES) SOURCES
Outcome: Value chain stakeholders and local production systems increase their resilience to climate change		
> Land under climate-resilient practices		Area (ha) under CA demo farms
		Area (ha) of fields of CA FBO members of demo farms
		Area (ha) Fields of farmer under CA upscale
		Land under VC demo
		Area (ha) of land under Agroforestry
Total (area - hectare)		
> Irrigated land using efficient technology		Area (ha) under solar-powered borehole intervention
		Area (ha) under efficient water use demo
		Area (ha) under bunding
Total (area - hectare)		
> Yield from conservation farming for maize	3	Yield ($T \text{ ha}^{-1}$) of maize from demo field
	3	Yield ($T \text{ ha}^{-1}$) of maize from CA upscale farmer fields
Total (ton/hectare)	3	
> Direct beneficiaries having improved water management practices (ASAP)		Members (no.) of FBO under CA demos benefiting from borehole
		2. Members (no.) of FBO provided with bunding
		3. Members (no.) of FBO under PROSPER supported WUA
		4. Members (no.) of FBO under Efficient Water Use demonstration
Total (number of people)		
> Yield from conservation farming for soya	2	Yield ($T \text{ ha}^{-1}$) of soya from demo field
	2	Yield ($T \text{ ha}^{-1}$) of soya from CA upscale farmer fields
Total (ton/hectare)	2	
> 1.1.2 Farmland under water-related infrastructure constructed/rehabilitated		Land area (ha) under CA demos benefiting from borehole
		Land area (ha) under WUA demo and farmer fields
		Land area (ha) under bunding
Total (area - hectare)		

INDICATOR	TARGET	MEASUREMENT (ACTIVITIES) SOURCES
> Households (HH) supported with increased water availability or efficiency		Number of HH members of beneficiaries under CA demos provided with boreholes
		Number of HH members of beneficiaries of efficient water use (EWU) demo
		Number of HH members of beneficiaries supported with bunding
Total (household)		
> Production and processing facilities supported with increased water availability and efficiency		1. Number of boreholes provided for demo fields
		2. Number of boreholes provided in other FBOs
		3. Number of demo facilities under efficient water use (EWU)
Total (number)		
Output 1: Adaptative trials and demonstrations of modern conservation agriculture and water-efficient irrigation techniques are undertaken		
> Demonstrations undertaken (ASAP)		Count of all demonstration supported by PROSPER-ASAP
		Count of demonstrations established after ASAP CSA training
Total (number)		
> WUAs trained/supported		Count of WUAs formed/supported
Total (number)		
> Individuals engaged in NRM and climate risk management activities		Number of individuals under CA Demo FBOs
		Number of individuals under CA upscale
		Number of individuals under Agroforestry training
		Number of individuals under WUAs FBO
		Number of Climate Champions in the Department
		Number of individuals under other PROSPER supported demo
		Number of individuals and other partners receiving daily weather information
Total (number of people)		
Women (number of people)		
Output 2: Climate change resilient production technologies and practices are promoted among rural producers		
> CI 3.1.1: Number of groups supported to sustainably manage natural resources and climate-related risks		Number of FBOs/groups practicing CA Number of FBOs/groups supported under Agroforestry training
		Number of WUAs formed/supported
		Number of FBOs/groups supported under Efficient Water Use
		Number of groups supported to manage climate-related risks
Total (number)		
> CI 1.1.4: Number of persons trained in production practices and/or technologies <1.1.4 Persons trained in production practices and/or technologies (crop) [Number of persons trained in Climate Change Resilience, ASAP]>		1. Number of persons trained under the CA FBOs
		2. Number of persons trained under Agroforestry
		3. Number of persons trained under WUA
		4. Number of persons trained under EWU
		5. Number of Climate change champions
		6. Number of persons trained supported with other Climate Change resilience practices

INDICATOR	TARGET	MEASUREMENT (ACTIVITIES) SOURCES
Gender based training and capacity development for women empowerment in agriculture		
Number of HHs provided with targeted support to improve their nutrition		Number of household members trained on good nutrition practices
		Number of mothers counselled on good nutrition
		Number of cooking demonstrations carried out
Total (household)		
Number of persons receiving training in different capacity areas		Number of women and youth trained on selection planning and management of Income generating activities
		Number of women and youth trained on agro-based processing
Total (number of people)		
Women Empowerment in Agriculture supported		Number of women in leadership position in various community-based organisations (FBOs, Village Saving and Loan Groups. And other groups)
		Number of women accessing production resources (land, inputs, credit)
		Number of women involved in Village Saving and Loan Groups and other saving s groups and
		Number of women and youth establishing and managing income generating enterprises
Total (number of people)		

Duration of the Assignment

The Service Provider shall commence the services within five (5) calendar days of the effective date of the contract or such time as the parties may agree in writing. The duration of the assignment is 12 calendar months from the effective date.

Expected Outputs of the Assignment

The expected outputs are as follows:

- Climate resilience and adaptation
- Capacity of smallholder farmers built in climate change resilient production technologies and practices promoted among rural producers
- Three quarterly report with updates on number of farmers supported by PROSPER (by age and gender), sensitization processes and feedback from farmers, general outputs and recommendations
- End of year report indicating a narrative on key accomplishments in 2021, successes, challenges, lessons learnt, exit strategy and sustainability plan.

Under the Value Chain Development- Women and youth focused trainings

At least one hundred and fifty (150) women including youth trained on gender-based topics including agro-processing, nutrition education and enterprise skills development

At least 150 women including youth have gone through hands on skills training on agro processing and skills development including homebased gardening.

A total of 150 women and youth trained on Business enterprise development and management

At least 50 entrepreneurs supported to register their businesses

Three quarterly report with updates on all trainings well documented and on each training include pictures and attendance sheet.

With the support of PCU and supervision from the District Agricultural Development Unit help monitor and provide report on the applications of the training by the participated FBOs.

Annex 11a. Sample MOU between PROSPER and District Assembly

MINISTRY OF FOOD AND AGRICULTURE

PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE
(PROSPER)

MOFA/IFAD GRANT No: wwwwww

LOAN No: XXXXXX

IMPLEMENTATION AGREEMENT

BETWEEN

PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE
(PROSPER)

AND

DEPARTMENT OF AGRICULTURE-, TAMALE NORTH DISTRICT

ON

BACKSTOPPING, MONITORING AND SUPERVISORY SERVICES FOR CONSERVATION AGRICULTURE
DEMONSTRATION PLOTS AND FARMERS FIELDS AND TRAINING AND SUPPORTING WOMEN AND YOUTH
EMPOWERMENT
WITHIN THE PROSPER PROJECT

Preamble:

This IMPLEMENTATION AGREEMENT is made on thisday of..... 2021 between the
PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE

(PROSPER) (hereinafter called the Client), represented by its National Programme Coordinator (which shall include the person or persons for the time being performing the duties of that office), on one part

AND

The Department of Agriculture, TAMAWE North District (hereinafter called the Service Provider) represented by the Director (which shall include the person or persons for the time being performing the duties of that office) on the other part.

WHEREAS, the Government of Ghana through the Ministry of Food and Agriculture (MOFA) has received a loan from the International Fund for Agricultural Development (IFAD) towards the implementation of the PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE (PROSPER) with the overall goal to enhance incomes and food security in order to improve the livelihoods of the rural poor in Ghana.

WHEREAS, PROSPER has requested the Service Provider to perform the tasks required (herein called 'the services'), the Service Provider, undertakes to perform the services in accordance with the terms and conditions of this agreement.

AND WHEREAS, the client and provider (hereinafter referred to as the Parties) wish to establish a link to foster collaboration.

NOW, therefore, the Parties have decided to enter into this Agreement (herein referred to as the Implementation Agreement) which defines the framework for the collaboration of the two parties.

The following have been agreed between both parties:

General Provisions

Notices

All notices, requests or demands under this Agreement shall be in writing in English and shall be given by delivery to the premises of the Parties or by registered mail, telex, facsimile, or electronic mail. All notices shall be effective when received by the receiving Party at the following address:

For the PROSPER:

P. O. Box M37, Accra,
Greater Accra Region
Tel. +233-3220-33159.
email: info@PROSPER.org

For the Department of Agriculture,
TAMAWE NORTH DISTRICT
UPPER EAST REGION

Each Party agrees to nominate the following representatives as the primary point of contact for the accomplishment of the objectives of this agreement.

PROSPER
Mr. K K
National Programme Coordinator
PROSPER
P. O. Box M37
Accra
Tel: 0244339768
E-mail: k.k@PROSPER.org

Department of Agriculture,
James Langbon
Director
TAMALE North District Dept of Agriculture
Upper East Region
Tel.: 0244035453
E-mail: jl@yahoo.com

Objective of the Agreement

The objective of this IMPLEMENTATION AGREEMENT is to provide a non-binding legal framework for the cooperation and to set forth the terms and conditions under which the Parties hereto will cooperate in carrying out activities as referred to in the obligations below.

Obligations of the Client and the Service Provider

THE SERVICE PROVIDER SHALL:

The Service Provider shall undertake the following tasks in accordance with the General Conditions and Terms of Reference attached to this agreement:

The specific activities to be undertaken by the Service Provider include but are not limited to the following:

Climate Smart Agricultural Demonstration

- i. Identify new self-motivated smallholder farmers that have had some experience with Conservation Agriculture (CA) and other Climate Smart Agricultural (CSA) technologies to be supported with seeds, inputs and crop protective products to establish up to 2-acre CA field.
- ii. Organize radio sensitization and awareness creation on Conservation Agriculture, environmental safeguards and other Climate Smart Agricultural technologies among AEAs and the community members based on the CA manual training and experience from the PROSPER demonstration over the past years.
- iii. Allocate Extension Agent(s) responsible for each of the communities to provide technical advice/backstopping (planting, NPK and Urea application, crop relay and harvesting) to the smallholder farmers supported on Conservation Agriculture (CA), Climate Smart Agricultural (CSA) technologies, and other related climate change activities in the operational area.
- iv. Organize field days for farmers on CA and CSA technologies and 4 cross-farmer-visits (thus, visiting farmer-fields with all farmers) of the participating farmers in each of the selected communities on CA and CSA technologies.

- v. Undertake regular monitoring and supervision visits to the demonstration sites (during irrigation and rain-fed periods) and supported farmer-fields to assess field performance and provide technical advice to farmers, where needed.
- vi. Undertake crop cutting to report on yields from the CA demonstration sites and farmer-fields.
- vii. Provide training in post-harvest handling and field management and report on the training.
- viii. Facilitate the operation of group activities and linking them to market, Value Chain Drivers and financial institutions.

Note: In terms of farmer selection, it is expected that 20 self-motivated farmers in already existing PROSPER supported communities will be identified from registered and functional FBOs. Districts to be supported under this intervention for the first time, 40 self-motivated farmers are to be selected from two registered and functional FBOs. Consult PROSPER for criterion for the selection of these farmers.

Value Chain Development- Women and youth focused trainings

Designate a WIAD officers to participate in TOT for cascading training on Selection, Planning and Management (SPM) of Income Generating Activities (IGAs)

Promote good food and nutrition practices among 150 households:

- Organize cooking demonstrations to show appropriate food combination for healthy leaving
- Facilitate Peer to peer education on nutrition and food safety; gender champions would be identified and trained on various topics including food and nutrition. These champions would be giving printed Nutrition sensitization and training materials to facilitate their delivery of the education or campaign contents across all geographic locations identified

Identify and mobilize Mother to mother support groups; This would be done in collaboration with the WIAD and community nutrition officers within the districts. They would identify or form these groups where they do not exist and educate them on good nutrition in feeding the family. These officers would also visit group meetings and community meetings to sensitize them on family nutrition and the right behavior toward feeding young children. Counselling posters would be printed for use for this purpose. Cooking demonstrations to provide practical sessions on how foods are to be combined to create a balance meal.

Train 150 women and youth on agro-based processing and enterprise development:

- Identify agro processing and enterprise development capacity need specific to the District (preservation and handling of high horticultural crops, home based gardening, nutrition education, agro processing of fruits, soybeans, rice, cassava etc.).
- Assess, identify and recruit participants based on the needs assessment to be trained on the specific areas identified.
- mobilize the participants to a training venue and train them on identified capacity areas
- Document the training and write reports on each training including pictures and attendance sheet.
- Carry out radio sensitization and campaigns on women empowerment in agriculture:
- The topics for the radio sensitization and campaigns include:
- Women and youth control of decisions about agricultural production
- Women and youth access to and decision-making power about productive resources
- Women and youth Control of use of income earned from
- Women and youth participation in Leadership in the community

- Time allocation to daily activities for women and youth
- Make follow ups to monitor the application of knowledge and report results
- Support trainees to start managing new livelihood enterprises among women and youth
- Facilitate Entrepreneurs linkage to financial services
- Support entrepreneurs to register their businesses with the registrar general department

Consult PROSPER Value Chain Officers and other interest groups for the criterion for the selection

With the support of PCU and supervision from the Regional Agricultural Development Unit (RADU), help monitor and provide report on the applications of the training by the participated women.

THE CLIENT SHALL:

- Provide funds for the implementation of the activities indicated above as Obligations for the service provider. The Client will provide the funds based on the agreed scope and budget prior to the implementation of any of the above activities.
- Conduct TOT training on Selection, Planning and management of income Generating activities (IGAs)
- Conduct orientation for participating staff on details of implementation of each activity
- Develop selection criteria in collaboration with relevant stakeholders and institution to identify beneficiaries where required
- Coordinate, monitor and supervise the training at community level

Termination of Agreement

Termination by Client

The Client may terminate this agreement in formal writing to the Service Provider at any time during the execution of the project.

The Client may terminate the agreement for the following reasons:

- When it has been mutually agreed that the Service Provider has not fulfilled its obligations mentioned under this Agreement in which case 30-day notice will be given the Service Provider before termination;
- When it has been mutually agreed that funds of the Agreement are misused or used for other purposes than the objective mentioned;
- When the Service Provider ceases operations, or undergoes a change in management which causes a considerable reduction in the Implementing Partner's implementation capacity;
- For other reasons, not mentioned above, but which severely undermine the projected benefits of this agreement.

Termination by the Service Provider

- The Service Provider may terminate this agreement in formal writing to the Client at any time during the execution of the project providing the reasons and prior notice of the termination.
- In such case, the Service Provider shall be responsible for its action and reimburse all funds advanced by the Client which have not yet been spent following the implementation programme.
- The Service Provider may terminate the agreement when the Service Provider and the Client mutually determine a breach in terms of this Agreement by Client to adversely affect the capacity of the Service Provider to deliver effectively.
- For other reasons not mentioned above, but which severely undermines the projected benefits of this agreement to the Service Provider or both parties.

Termination Procedures

Any party terminating the agreement shall give a twelve (12) days' notice of its intention in writing to the other party. The parties shall attempt to resolve any disputes or differences of any kind arising between the parties in connection with the interpretation of the IMPLEMENTATION AGREEMENT.

Any disagreement between the Client and the Service Provider relating to the interpretation or implementation of the IMPLEMENTATION AGREEMENT, which cannot be resolved by mutual agreement between the parties may be submitted by either party, on giving twelve [12] days' notice to the other party, to a Board of Arbitration. Such Board shall comprise three members; one of whom shall be appointed by the Head of Civil Service, the second by Department of Agriculture. The decision of such a Board shall be final and binding upon the two parties.

Independence of Parties

Neither Party shall be considered a joint venture of the other, nor can either Party act as an agent for the other for any purposes whatsoever other than for the purposes of this Agreement. No Party has the authority, either expressed or implied, to enter into any agreement, incur any obligations on behalf or commit the other Party in any manner whatsoever except as may be provided in this Agreement and as may be agreed upon from time to time in writing.

Confidentiality

Any non-public information received or learned by either party relating to the other Party's business and/or products shall be kept in confidence by the receiving or learning Party and shall neither be used by such receiving or learning Party nor disclosed to any other person for any purpose outside the IMPLEMENTATION AGREEMENT.

Intellectual Property

The Parties recognize the importance of intellectual property as a component of PROSPER. Both parties own all rights, titles and interest in the data and works they create under this IMPLEMENTATION AGREEMENT. Both parties acknowledge that knowledge, data and know-how gained under the agreement will be available for humanitarian purposes, and the benefits of any intellectual property

developed as part of the agreement will be made accessible to the public throughout the developing countries of the world (“Global Access”).

The exchange of materials for research under this IMPLEMENTATION AGREEMENT will be carried out following the Material Transfer Agreement, if applicable. All intellectual properties generated outside collaborative research belong solely to the party conducting such research. In all such cases as mentioned above due cognizance will be to the Intellectual Property law of the land.

Publication

Any publication from the collaboration shall give due recognition to the roles played by both parties to determine the authorship. With the consent of the other party, one party can publish these findings with due recognition of the contributions of the other party. The manuscript review process prior to publication shall follow the internal processes of both institutions. The fund provider shall be appropriately acknowledged. In all such cases as mentioned above due cognizance will be made to the intellectual property law of the land.

Indemnification and Liabilities

- Subject to other provisions in this Agreement, each Party shall indemnify and hold harmless the other Party's employees, representatives, and executive officers from and against any liability, damages costs or expenses, or any claim, action, suit or other proceeding arising out of the execution or implementation of this Agreement except to the extent that
- Such liability, damages, claim, action suit or other proceeding is caused willfully by the Party being held liable or
- Such liability, damages, claim, action suit or other proceeding is caused by or results from negligence on the part of such a Party.
- Force Majeure

If either party is temporarily unable by reasons of force majeure to meet any of its obligations under this IMPLEMENTATION AGREEMENT, and if such party gives written notice of the event within twelve (12) days after its occurrence, such obligations of the party as it is unable to perform by reason of the event shall be suspended for as long as the inability continues.

Neither party shall be liable to the other party arising from any event referred in item 3 below or delays arising from such event.

The term Force Majeure as used herein shall mean acts of God, strikes, lockouts or other industrial disturbances, acts of public enemy, war, blockades, insurrection, riots, epidemics, lightening, floods, washouts, civil disturbances, explosion and other similar events not within the control of either party and which by the existence of due diligence neither party is able to overcome.

Effectiveness

This agreement shall become effective on the day of its signature by both parties and expire by After Eight (8) weeks thereafter unless extended by an amendment to this Agreement or unless terminated as provided under section 5.o of this Agreement.

Amendment of Agreement

The terms of this agreement can be amended with the agreement of both parties by means of exchange of letters through the authorized officials at each institution. Either party may initiate the exchange of letters.

IN WITNESS whereof the said parties hereto have executed this deed the day and year first above written. In the interest of implementing a programme of technical cooperation of mutual benefit to the contracting parties, two (2) original copies of this IMPLEMENTATION AGREEMENT are signed by the respective officers on the day, month and year indicated below:

FOR AND ON BEHALF OF
DEPARTMENT OF AGRICULTURE
TAMALE NORTH DISTRICT

Name: Mr. James Lanbong

Designation: Director

Signature.....

Witness

Name

Signature.....

FOR AND ON BEHALF OF PROSPER

Name: Mr. K. K

Designation: National Programme Coordinator

Signature.....

Witness

Name.....

Signature.....

APPENDIX 1. GENERAL CONDITIONS

1. Services

The Department of Agriculture, TAMA LE North District shall follow the Terms of Reference and subsequent further definitions of Terms of Reference agreed by both parties. The Client in consultation with the TAMA LE North District Department of Agriculture- may make amendments to the Terms of Reference, without by doing so, changing the nature of purpose of the services if, as a consequence hereof the scope of the service is widened or narrowed, the total remuneration shall be adjusted accordingly and the contract period shall be revised.

2. Information

Each party shall promptly inform the other party of any event or situation, which may necessitate an agreement between the Parties on a modification in the scope, character or execution of the services or in other aspects of the agreement. The Department of Agriculture-, TAMA LE North District shall furnish the Client with such information concerning the services as stipulated in the Terms of Reference.

3. Sub-Contracts

The Client or the Service Provider may not assign or subcontract any part of the services to be performed without the written approval of the other party.

4. Reporting

The Terms of Reference and/or the Work Plan and Budget will set forth the nature and timing of reports to be prepared in the context of the services.

4. Total Sum

The budget for the activities to be carried out under the agreement for the year is Twenty-Eight Thousand Two hundred and Forty -Three Cedis (GH¢ 28,243.00) The details of items and costs are summarized in Table 1 and 2below.

SUMMARY OF ESTIMATED COST

Table 1: Budget for Climate Change Activities-Climate Smart Agricultural Demonstration

ITEM	DESCRIPTION	AMOUNT (GH CEDIS)
1	Fuel for backstopping by AEAs	
2	Fuel for field monitoring, supervision and reporting	
3	Refreshment for field days and CA sensitization	
	Total Cost	

Table 2: Value Chain Development- Women and youth focused trainings

ITEM	DESCRIPTION	AMOUNT (GH CEDIS)
1	Fuel for monitoring	
2	Resource persons for demonstration and training	
3	Ingredient, airtime and snack	
	Total Cost	

6. Disbursements

Disbursement of funds shall be based on quarterly advance upon submission of relevant reports of activities within that quarter and satisfactory retirement of all previous imprest/advance (where applicable) issued for the purpose of this agreement and furnishing of due reports.

7. Retirements

The Programme Coordination Unit (PCU) shall ensure that Programme's funds disbursed for the purpose of the Programme's eligible expenditures are accounted for through expenditure returns. Expenditure Returns to be submitted to PROSPER shall not be later than fourteen (14) days after the expiry of the period for which such imprest was issued.

Retirement of imprest shall include (but not limited) to:

Statement of receipts and payments (indicate total amount received, total payments under each expenditure headings, and undisbursed balance);

Payment vouchers and all relevant attachments;

Expenditure analysis form (analysed into cost categories and Programme components); and

Trial balance, bank statement, and bank reconciliation statement.

S/N	Description of Specific Activities Carried out	IG#	Amount Spent (GHC)	Analysis of Expenditure			
				DSA	Fuel	T & T	Others
	Total (GHC)						

Table 3: Imprest Retirement Format

Summary

Total Amount Received/Advanced: GHC.....

Less Total Amount Spent: GHC.....

Balance To Be Paid/Received: GHC

8. Ownership of Work

Reports and all relevant data compiled or prepared in the course of the Services shall be the property of the Client unless otherwise decided by the Client. Such material shall be sorted and indexed by the Implementing Agency prior to delivery to the Client. The Implementing Agency may retain a copy thereof, provided, however, that such material shall not be used by the Implementing Agency for purposes unrelated to the agreement without prior written approval of the Client.

9. Periodic Monitoring

The Client will carry out independent monitoring of the progress of work periodically. The Client may also engage an independent Service Provider to evaluate the work.

APPENDIX 2 TERMS OF REFERENCE

PROJECT DESCRIPTION

The PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE (PROSPER) is a Government of Ghana (GoG) programme designed to provide a framework for a long-term financing arrangement for private sector-led, pro-poor agricultural value chain development in Ghana. It's being financed by the International Fund for International Development (IFAD) and the Government of Ghana (GoG). The Ministry of Food and Agriculture (MoFA) is the lead implementing Ministry. The overall goal of PROSPER is to contribute to sustainable poverty reduction in rural Ghana through the pursuit of specific Programme Development Objective of "agribusinesses – including smallholders – increase their profitability and resilience to climate change".

To achieve its objectives, PROSPER is designed along four strategic axis: (i) linking smallholder farmers to agribusinesses to enhance pro-poor growth; (ii) nationwide scaling up of successful value chain investment approach; (iii) promoting and mainstreaming climate change resilience approaches in Ghana, in particular in the Northern Regions financed under the Adaptation for Smallholder Agriculture Programme (ASAP); and (iv) knowledge management, harmonization of intervention approaches and policy support.

The primary focus of PROSPER are smallholder farmers and resource-poor rural households, in particular women, youth (15-24 years) and young adults (25-34 years). Intermediate beneficiaries are agribusinesses, input dealers, financial institutions and commercial farmers, Ghanaian and international investors – of varying scale who invest in new or expand business opportunities in the appropriate value chains. Business models or value chain clusters must be inclusive – i.e., they should provide opportunities for strengthening market linkages of small-holder producers and must also offer business opportunities for both men and women.

Justification

The strategic focus of PROSPER is on the smallholder farmers to make them more competitive by increasing their capacity to respond to market demand in terms of quality, price, time and volume as well as making them more resilient to climate change. To achieve this, there is the need to provide capacity building to Farmer Based Organizations (FBOs) within the PROSPER clusters in the various stages of the value chain.

In order to build resilience of value chain stakeholder to negative impacts of climate change, one of the subcomponents of PROSPER (i.e. subcomponent 1.3) is dedicated to climate change resilience. This is aimed at mainstreaming climate change resilience across the selected agricultural value chains. Financed with the Adaptation for Smallholder Agriculture Programme (ASAP) grant during the first cycle of implementation of PROSPER, this subcomponent is targeted for the implementation of activities in the Northern part of Ghana to address the challenges of increasing dry spells, drought occurrence and the issues of land degradation and low soil fertility. This subcomponent has three main focus areas: (i) commercially valid adaptive trials and demonstrations of modern conservation agriculture (CA) practices (ii) demonstrations of efficient water-use techniques within new and existing irrigation systems, and (iii) institutional capacity building and enhanced public awareness of private and public value chain actors in the field of climate change resilience.

PROSPER also targets to achieve 40% participation of women and 30% youth. PROSPER also aims at making sure that women and youth actively participate in the development of new and existing value chains in their communities. Women and youth can participate in value chain development at different levels of the chain which includes aggregations, processing, cleaning and sorting, marketing, preservation and storage among others. To achieve this, there is the need to provide capacity building to women and youth within the PROSPER clusters in the various stages of the value chain to enhance women and youth economic.

The TAMALE North District has been selected as one of the beneficiaries, with details of selected communities and sites outlined in the appendix.

OBJECTIVES OF THE ASSIGNMENT

The objectives of the assignment are:

- to facilitate the adoption and upscale of Conservation Agriculture and other climate-smart agriculture (CSA) practices by smallholder farmers
- to contribute to climate change adaptation and mitigation efforts by training selected community members in nursery establishment, seedling production and alley cropping.
- to build the capacity of households to be able to add value to agricultural products for home consumption and for marketing.
- Promote women economic empowerment through media campaigns, access to financial services including savings and credit, improved nutrition and enterprise development.

SCOPE OF THE ASSIGNMENT

The specific activities to be undertaken by the Service Provider include but are not limited to the following:

Climate Smart Agricultural Demonstration

- i. Identify new self-motivated smallholder farmers that have had some experience with Conservation Agriculture (CA) and other Climate Smart Agricultural (CSA) technologies to be supported with seeds, inputs and crop protective products to establish up to 2-acre CA field.
- ii. Organize radio sensitization and awareness creation on Conservation Agriculture, environmental safeguards and other Climate Smart Agricultural technologies among AEAs and the community members based on the CA manual training and experience from the PROSPER demonstration over the past years.
- iii. Allocate Extension Agent(s) responsible for each of the communities to provide technical advice/backstopping (planting, NPK and Urea application, crop relay and harvesting) to the smallholder farmers supported on Conservation Agriculture (CA), Climate Smart Agricultural (CSA) technologies, and other related climate change activities in the operational area.
- iv. Organize field days for farmers on CA and CSA technologies and 4 cross-farmer-visits (thus, visiting farmer-fields with all farmers) of the participating farmers in each of the selected communities on CA and CSA technologies.
- v. Undertake regular monitoring and supervision visits to the demonstration sites (during irrigation and rain-fed periods) and supported farmer-fields to assess field performance and provide technical advice to farmers, where needed.
- vi. Undertake crop cutting to report on yields from the CA demonstration sites and farmer-fields.
- vii. Provide training in post-harvest handling and field management and report on the training.
- viii. Facilitate the operation of group activities and linking them to market, Value Chain Drivers and financial institutions.

Note: In terms of farmer selection, it is expected that 20 self-motivated farmers in already existing PROSPER supported communities will be identified from registered and functional FBOs. Districts to be supported under this intervention for the first time, 40 self-motivated farmers are to be selected from two registered and functional FBOs. Consult PROSPER for criterion for the selection of these farmers.

Value Chain Development- Women and youth focused trainings

Designate a WIAD officers to participate in TOT for cascading training on Selection, Planning and Management (SPM) of Income Generating Activities (IGAs)

Promote good food and nutrition practices among 150 households:

Organize cooking demonstrations to show appropriate food combination for healthy leaving

Facilitate Peer to peer education on nutrition and food safety: gender champions would be identified and trained on various topics including food and nutrition. These champions would be giving printed Nutrition sensitization and training materials to facilitate their delivery of the education or campaign contents across all geographic locations identified

Identify and mobilize Mother to mother support groups; This would be done in collaboration with the WIAD and community nutrition officers within the districts. They would identify or form these groups where they do not exist and educate them on good nutrition in feeding the family. These officers would also visit group meetings and community meetings to sensitize them on family nutrition and the right behavior toward feeding young children. Counselling posters would be printed for use for this purpose. Cooking demonstrations to provide practical sessions on how foods are to be combined to create a balance meal.

Train 150 women and youth on agro-based processing and enterprise development:

Identify agro processing and enterprise development capacity need specific to the District (preservation and handling of high horticultural crops, home based gardening, nutrition education, agro processing of fruits, soybeans, rice, cassava etc.).

Assess, identify and recruit participants based on the needs assessment to be trained on the specific areas identified.

mobilize the participants to a training venue and train them on identified capacity areas

Document the training and write reports on each training including pictures and attendance sheet.

Carry out radio sensitization and campaigns on women empowerment in agriculture:

The topics for the radio sensitization and campaigns include:

Women and youth control of decisions about agricultural production

Women and youth access to and decision-making power about productive resources

Women and youth Control of use of income earned

Women and youth participation in Leadership in the community

Time allocation to daily activities for women and youth

Make follow ups to monitor the application of knowledge and report results

Support trainees to start managing new livelihood enterprises among women and youth

Facilitate Entrepreneurs linkage to financial services

Support entrepreneurs to register their businesses with the registrar general department

Consult PROSPER Value Chain Officers and other interest groups for the criterion for the selection

Indicators to be updated quarterly

INDICATOR	TARGET	MEASUREMENT (ACTIVITIES) SOURCES
Outcome: Value chain stakeholders and local production systems increase their resilience to climate change		
> Land under climate-resilient practices		Area (ha) under CA demo farms
		Area (ha) of fields of CA FBO members of demo farms

INDICATOR	TARGET	MEASUREMENT (ACTIVITIES) SOURCES
		Area (ha) Fields of farmer under CA upscale
		Land under VC demo
		Area (ha) of land under Agroforestry
Total (area - hectare)		
> Irrigated land using efficient technology		Area (ha) under solar-powered borehole intervention
		Area (ha) under efficient water use demo
		Area (ha) under bunding
Total (area - hectare)		
> Yield from conservation farming for maize	3	Yield ($T\ ha^{-1}$) of maize from demo field
	3	Yield ($T\ ha^{-1}$) of maize from CA upscale farmer fields
Total (ton/hectare)	3	
> Direct beneficiaries having improved water management practices (ASAP)		Members (no.) of FBO under CA demos benefiting from borehole
		2. Members (no.) of FBO provided with bunding
		3. Members (no.) of FBO under PROSPER supported WUA
		4. Members (no.) of FBO under Efficient Water Use demonstration
Total (number of people)		
> Yield from conservation farming for soya	2	Yield ($T\ ha^{-1}$) of soya from demo field
	2	Yield ($T\ ha^{-1}$) of soya from CA upscale farmer fields
Total (ton/hectare)	2	
> 1.1.2 Farmland under water-related infrastructure constructed/rehabilitated		Land area (ha) under CA demos benefiting from borehole
		Land area (ha) under WUA demo and farmer fields
		Land area (ha) under bunding
Total (area - hectare)		
> Households (HH) supported with increased water availability or efficiency		Number of HH members of beneficiaries under CA demos provided with boreholes
		Number of HH members of beneficiaries of efficient water use (EWU) demo
		Number of HH members of beneficiaries supported with bunding
Total (household)		
> Production and processing facilities supported with increased water availability and efficiency		1. Number of boreholes provided for demo fields
		2. Number of boreholes provided in other FBOs
		3. Number of demo facilities under efficient water use (EWU)
Total (number)		
Output 1: Adaptative trials and demonstrations of modern conservation agriculture and water-efficient irrigation techniques are undertaken		
> Demonstrations undertaken (ASAP)		Count of all demonstration supported by PROSPER-ASAP

INDICATOR	TARGET	MEASUREMENT (ACTIVITIES) SOURCES
		Count of demonstrations established after ASAP CSA training
Total (number)		
> WUAs trained/supported		Count of WUAs formed/supported
Total (number)		
> Individuals engaged in NRM and climate risk management activities		Number of individuals under CA Demo FBOs Number of individuals under CA upscale Number of individuals under Agroforestry training Number of individuals under WUAs FBO Number of Climate Champions in the Department Number of individuals under other PROSPER supported demo Number of individuals and other partners receiving daily weather information
Total (number of people)		
Women (number of people)		
Output 2: Climate change resilient production technologies and practices are promoted among rural producers		
> CI 3.1.1: Number of groups supported to sustainably manage natural resources and climate-related risks		Number of FBOs/groups practicing CA Number of FBOs/groups supported under Agroforestry training Number of WUAs formed/supported Number of FBOs/groups supported under Efficient Water Use Number of groups supported to manage climate-related risks
Total (number)		
> CI 1.1.4: Number of persons trained in production practices and/or technologies <1.1.4 Persons trained in production practices and/or technologies (crop) [Number of persons trained in Climate Change Resilience, ASAP]>		1. Number of persons trained under the CA FBOs 2. Number of persons trained under Agroforestry 3. Number of persons trained under WUA 4. Number of persons trained under EWU 5. Number of Climate change champions 6. Number of persons trained supported with other Climate Change resilience practices
Gender based training and capacity development for women empowerment in agriculture		
Number of HHs provided with targeted support to improve their nutrition		Number of household members trained on good nutrition practices Number of mothers counselled on good nutrition Number of cooking demonstrations carried out
Total (household)		
Number of persons receiving training in different capacity areas		Number of women and youth trained on selection planning and management of Income generating activities Number of women and youth trained on agro-based processing
Total (number of people)		

INDICATOR	TARGET	MEASUREMENT (ACTIVITIES) SOURCES
Women Empowerment in Agriculture supported		Number of women in leadership position in various community-based organisations (FBOs, Village Saving and Loan Groups. And other groups)
		Number of women accessing production resources (land, inputs, credit)
		Number of women involved in Village Saving and Loan Groups and other saving s groups and
		Number of women and youth establishing and managing income generating enterprises
Total (number of people)		

Duration of the Assignment

The Service Provider shall commence the services within five (5) calendar days of the effective date of the contract or such time as the parties may agree in writing. The duration of the assignment is 12 calendar months from the effective date.

Expected Outputs of the Assignment

The expected outputs are as follows:

- Climate resilience and adaptation
- Capacity of smallholder farmers built in climate change resilient production technologies and practices promoted among rural producers
- Three quarterly report with updates on number of farmers supported by PROSPER (by age and gender), sensitization processes and feedback from farmers, general outputs and recommendations
- End of year report indicating a narrative on key accomplishments in 2021, successes, challenges, lessons learnt, exit strategy and sustainability plan.

Under the Value Chain Development- Women and youth focused trainings:

- At least one hundred and fifty (150) women including youth trained on gender-based topics including agro-processing, nutrition education and enterprise skills development
- At least 150 women including youth have gone through hands on skills training on agro processing and skills development including homebased gardening.
- A total of 150 women and youth trained on Business enterprise development and management
- At least 50 entrepreneurs supported to register their businesses
- Three quarterly report with updates on all trainings well documented and on each training include pictures and attendance sheet.
- With the support of PCU and supervision from the District Agricultural Development Unit help monitor and provide report on the applications of the training by the participated FBOs.

Workplan for implementation

No.	Activity	Month – 2021/2022												
		March	April	May	June	July	August	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	March
1	Selection of beneficiary Farmer Based Organization(s)													
2	Supply of inputs and equipment													
	Provision of technical backstopping by the Districts/Municipals:													
3	a. Planting													
	b. Fertilizer application													
	c. Urea application													
	d. Cover crop relay													
	e. Harvesting													
	f. Post harvesting activities													
4	Nutrition education													
5	Cooking demonstrations													
6	Selection planning and management of income generating activities													
7	Facilitate the registration of existing and new enterprises													
8	Mentor and monitor the adoption of trainings among households													

4.0 IMPLEMENTATION OF THE CONSULTANCY ASSIGNMENT

Department of Agriculture, TAMALE North District (AEAs and WIAD especially) shall be resourced to carry out the services described above by PROSPER on behalf of MoFA.

The offices of MMDAs and decentralized MOFA offices shall be involved in monitoring of the project while the project shall be managed by PROSPER Zonal Offices under the guidance of the Climate Change Adaptation Manager and Value Chain Officer.

5.0 DURATION OF ASSIGNMENT

Department of Agriculture, TAMALE North District shall commence the services within five (5) calendar days of the effective date of the contract or such time as the parties may agree in writing. The duration of the assignment is shall be twelve (12) calendar months from the Commencement date.

6.0 PREPARATION AND SUBMISSION OF REPORTS

Department of Agriculture, TAMALE North District shall report to the National Coordinator, of PROSPER, the Contracting Authority, or his representative for all activities and consultations. All reports and relevant data compiled or prepared in the course of the services shall be the sole property of PROSPER and shall not be shared without prior permission from PROSPER.

Detailed Report – DEPARTMENT OF AGRICULTURE, TAMALE North District shall submit a detailed Report for all tasks executed detailing location, date, number of participant's outcomes and recommendations for any activity undertaken (monitoring, field days etc.). All reports shall be submitted in English.

7.0 Outputs on monitoring and reporting

The expected outputs which are the detailed reports shall include the following:

- Name of community, date of visit, number of farmers interacted with (by age and sex)
- If field monitoring and supervision, the observations made
- If field days, the type of technology introduced/demonstrated to farmers
- General outputs and recommendations
- Details of the training, methodology and outcomes
- Sessions conducted with videos, pictures and attendance sheets.
- An evaluation report of the training, indicating General outputs and recommendations
- Plans for backstopping the AEAs in the training of the FBOs.

8.0 IMPLEMENTING AGENCY'S INPUTS

For the proper execution of the assignment, Department of Agriculture, TAMALE North District shall provide

- Personnel
- Equipment (camera, laptop, GPS etc.)
- Vehicles and/or motorbikes for the execution of the assignment
- Other logistics such as stationary for the implementation of the project.

10.0 SERVICES AND FACILITIES TO BE PROVIDED BY PROSPER

Upon written request by the Department of Agriculture, TAMALE North District, to PROSPER, funds will be released by PROSPER based on the agreed scope of work at any period within the Implementation Agreement.

NOTE:

- a) Payments will be made directly to the Department of Agriculture, TAMALE North District
- b) Department of Agriculture, TAMALE North District will be responsible for the disbursement and retirement of funds.
- c) Request for replenishment will be made by the Department of Agriculture, TAMALE North District through the Director.

APPENDIX 3. DETAILED BUDGET

Climate Smart Agricultural Demonstration

No.	Description	Unit of Measurement	Quantity	Frequency	Unit Cost/GHC	Total Cost/GHC	Remarks
1	Fuel for backstopping by AEAs to FBOs and other PROSPER climate change activities	Litres	100	8			Frequency includes 6 field-day organization and 2 cross-farmer-visits
2	Fuel for field monitoring, supervision and reporting (Crop Officers, MIS and Accountants) on PROSPER climate change activities	Litres	100	6			Frequency includes 6 farmer-field-day monitoring visits
3	Fuel for quarterly field monitoring and supervision by District Director on PROSPER climate change activities	Litres	100	4			Quarterly monitoring visiting by the Directors
4	Radio sensitization and awareness creation on Conservation Agriculture, environmental safeguards and other Climate Smart Agricultural technologies			4			1 radio sensitization every quarter of the year
5	Signage for new group field	Number	2				
SUB TOTAL							

Table 2: Value Chain Development- Women and youth focused trainings

Name of district	TAMALE North
No. of training sessions in the district	10
No. Farmers per district	300
Number of traning modules	5
No. of Communities	5
No. Liters per trip * 2	45

No.	Description	Unit of Measurement	Quantity	Frequency	Unit Cost/GHC	Total Cost/GHC	Remarks
	Training of AEAs						
1	Fuel for DDA Directors monitoring	Litres	45	3			Monitoring visit once every quarter
2	Monitoring and reporting (MIS & Acct)	No. of sessions	10	1			

3	Resource persons (WIAD) for cooking demonstrations	sessions	1	5			Five sessions with 5 different topics
4	Resource Persons (WIAD) for SPM training	No. of FBO	1	5			5 sessions per FBO
5	Resource persons for Radio discussions on WEA		2	5			
6	Resource person from Ghana Health Service (GHS)	persons	1	10			Collaborate with GHS for nutrition education
7	Ingredients for cooking demonstrations	sessions	1	5			collaborate with nutrition GHS
8	Airtime for Radio discussions	air time	2	5			2 sessions per topic discussed (1 repeat)
9	Snacks	persons	70	5			
	Total						

APPENDIX 4. TEMPLATE FOR REPORTING

Cover Page:

Insert a picture from the field.

PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE
(PROSPER)
XXXXXXX QUARTER PROGRESS REPORT 2022

Region	
Name of MMDA	
Name of Director	
Signature of Director	

Executive summary

*Half a page

Brief Introduction

*Half a page

Period of Reporting

Activities carried out

Report on results

Table 2: Programme Retirement Sheet

PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE (PROSPER) MINISTRY OF FOOD AND AGRICULTURE NAME OF IMPLEMENTING PARTNER.....				CHEQUE No.....		
ACTIVITY DESCRIPTION.....						
PROGRAMME RETIREMENT SHEET						
SN	DESCRIPTION OF SPECIFIC ACTIVITIES CARRIED OUT	PV No	AMOUNT SPENT (GHS)	ACTIVITY ANALYSIS		
				PLOUGHING COST	BUDING COST	FUEL COST
TOTALS						
SUMMARY						
	TOTAL AMOUNT RECEIVED					
	LESS TOTAL AMOUNT SPENT					
	BALANCE/REFUND					
Prepared by:				Approved by:		
Name.....		Name.....				
Designation.....		Designation.....				
Signature.....		Signature.....				
Date.....		Date.....				

Table 3: Attendance Sheet

PROMOTING RURAL OPPORTUNITIES, SUSTAINABLE PROFITS AND ENVIRONMENTAL RESILIENCE (PROSPER) -PROSPER MINISTRY OF FOOD AND AGRICULTURE						
Name of Districts Assembly Community Activity MOFA Responsible Officer Attendance list			Date:			
S/N	NAME	SEX	POSITION	SIGNATURE/TUMB PRINT	CONTANCT	DATE

Analysis

Table 4: Beneficiary Information

Value chain	Total	By Sex		By Age		
		Male	Female	Youth (15-24)	Youth (25-34)	≥35

Analysis

3.0 Monitoring and Supervisory Activities

3.1 Observations

3.2 Findings

3.3 Follow up Action Recommended

Analysis

Overall Implementation:

4.1 Status of Implementation

4.2 Significant Achievements (Expected and Unexpected)

Budget Implementation

Table 5: Budget, Releases and Expenditure

Budget	Amount Released	Total expenditure	Variance (+/-)	Remarks

Analysis

List Problems/principal Constraints and steps towards mitigation:

6.1 Constraints Encountered

6.2 Steps taken to reduce the impact

7.0 Planned Activities for Next Reporting Period

8.0 Report Template for Capacity Building Activities

For all FBOs/Farmer Capacity Building activities, an Excel Reporting Template containing the following fields will be sent to each AEAs for PROSPER reporting purposes.

DATE/PERIOD OF TRAINING	
ID NUMBER	
FIRST NAME	
LAST NAME	
FULL NAME	
SEX	
AGE	
AGE BRACKET	
PHONE NUMBER	
NAME OF TRAINEE ORGANIZATION (FBO, MOFA UNIT, VCD)	
REGION	
DISTRICT	
COMMUNITY	
VENUE OF TRAINING	
TYPE OF TRAINING	
TRAINING MODULE	
START DATE	
END DATE	
NAME OF TRAINER 1	
PHONE OF TRAINER 1	
EMAIL OF TRAINER 1	
DATA COLLECTED BY	
DATA REVIEWED BY	
DATA ENTERED BY	
REMARKS	

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Annex 12. Sample MOU with APEX BANK

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Running the business

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- Equipment

Managing operational risks

- Finance
- Profit and loss forecasts
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Managing financial risk

Annex 14. Targeting - Regional Information

Belt/Zone	Region	Districts	Climate Change Vulnerability status and what areas are more vulnerable within the region	incidence of poverty incidence of poverty, percentage of poor people and where in the region	Food and nutrition insecurity incidence of food and nutrition insecurity and where in the region	importance of maize value chain percentage of areas cultivated and where (Ashanti for example has concentration in the north)	importance of rice chain percentage of areas cultivated and where (ashante for example has concentration in the north)	importance of soy chain percentage of areas cultivated and where in the region	importance of poultry value chain percentage of areas cultivated and where	importance of shea value chain percentage of areas cultivated and where	importance of cashew value chain percentage of areas cultivated and where	importance of vegetables value chain percentage of areas cultivated and where
	PROSPER	Metrop	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Northern	Upper West	0 [general data on separate sheet]	77.3% of HH are poor	22.8% of HH are food insecure	67,058.76 Ha. (average yield 1.7 Mt/Ha. - 4 Districts concentrate 56% of production area: Sissala East, Sissala West, Wa East, Nadawli)	5,497 Ha. (average yield 1.5 Mt/Ha. - 3 Districts concentrate 57% of production area: Wa West, Wa East, Irapa)	14,385 Ha. (average yield 1.2 Mt/Ha. - 2 Districts concentrate 53% of production area: Wa West, Wa East)				Plantain: -- Groundnut: 157,426 Ha. - Cowpea: 65,104 Ha.	
Northern	Upper East	0 [general data on separate sheet]	81% of HH	48.7% of HH	52,688 Ha. (average yield 1.7 Mt/Ha. - 3 districts concentrate 61% of production area: Garu Tempape, Binduri, Nandom Municipal)	43,350 Ha. (average yield 2.5 Mt/Ha. - 4 districts concentrate 57% of production area: Bulsa North, Bawku West, Garu Tempape, Kassena Nankana Municipal)	16,320 Ha. (average yield 0.9 Mt/Ha. - 2 districts concentrate 55% of production area: Bawku West, Pusiga)				Plantain: -- Groundnut: 39,192 Ha. - Cowpea: 24,436 Ha.	
Northern	North East	0 [general data on separate sheet]	81.5% of HH	33% of HH	21,400 Ha. (average yield 1.7 Mt/Ha. - 2 districts concentrate 61% of production area: West Mamprusi, Mamprusi Municipal)	10,888 Ha. (average yield 1.7 Mt/Ha. - The West Mamprusi district concentrates 54% of production area)	15,838 Ha. (average yield 1.8 Mt/Ha. - 2 districts concentrate 55% of production area: East Mamprusi, West Mamprusi)				Plantain: -- Groundnut: 25,746 Ha. - Cowpea: 16,167 Ha.	
Northern	Savannah	0 [general data on separate sheet]	70% of HH	22.7% of HH	27,646 Ha. (average yield 2 Mt/Ha. - 2 districts concentrate 51% of production area: Sawla/Tuna/Kalba, Bole)	10,552 Ha. (average yield 2.4 Mt/Ha. - 2 districts concentrate 69% of production area: East Gonja, Central Gonja)	6,314 Ha. (average yield 1.5 Mt/Ha. - 2 districts concentrate 69% of production area: East Gonja, West Gonja)				Plantain: -- Groundnut: 22,366 Ha. - Cowpea: 8,633 Ha.	
Northern	Northern	1 [general data on separate sheet]	66.4% of HH	30.7% of HH	94,188 Ha. (average yield 1.6 Mt/Ha. - 7 districts concentrate 63% of production area: Nanumba South, Savelugu, Nanton, Tolon, Tamale, Nanumba North, Karaga)	54,540 Ha. (average yield 2.3 Mt/Ha. - 5 districts concentrate 50% of production area: Tamale, Tolon, Savelugu, Nanton, Yendi)	45,389 Ha. (average yield 2 Mt/Ha. - 5 districts concentrate 66% of production area: Mion, Yendi, Nanumba North, Gushiegu, Kpandai)				Plantain: -- Groundnut: 50,330 Ha. - Cowpea: 31,179 Ha.	
Middle	Bono East	0 [general data on separate sheet]	53.1% of HH	16.7% of HH	98,069 Ha. (average yield 2 Mt/Ha. - 2 districts concentrate 50% of production area: Nandom North, Nkoranza North)	54,540 Ha. (average yield 1.7 Mt/Ha., Sene East concentrates 50% of production area, including 2nd, Sene West, they account for 80% of area)	2,605 Ha. (average yield 1.7 Mt/Ha., Sene East concentrates 50% of production area, including 2nd, Sene West, they account for 80% of area)	N/A			Plantain: 3,005 Ha - Groundnut: 15,287 Ha. - Cowpea: 7,357 Ha.	
Middle	Bono	0 [general data on separate sheet]	34.7% of HH	12.2% of HH	98,960 Ha. (average yield 1.9 Mt/Ha. - 4 districts concentrate 49% of production area: Sunyani, Sunyani West, Berekum East, West)	1,134 Ha. (average yield 1.5 Mt/Ha. - 2 districts concentrate 100% of production area: Dormaa West & Dormaa)		N/A			Plantain: 29,598 Ha. - Groundnut: 2,663 Ha. - Cowpea: 1,593 Ha.	
Middle	Ahafo	0 [general data on separate sheet]	42.5% of HH	17.3% of HH	27,407 Ha. (average yield 2 Mt/Ha. - 3 districts concentrate the 46% of production area: Tano North, Asuano North)	939 Ha. (average yield 1.6 Mt/Ha. - 3 districts concentrate the 62% of production area: Asutifi North, Asutifi South, Tano North)		N/A			Plantain: 54,574 Ha. - Groundnut: -- Cowpea: --	
Middle	Ashanti	1 [general data on separate sheet]	28.2% of HH	6.2% of HH	127,410 Ha. - (average yield 1.76 Mt/Ha. - 5 districts concentrate 50% of production area: Ejura Sekyedumase; Offinso North; Asante Akim North, Mampong Municipal, Ejura Sekyedumase; Ahafo Ano North ; Ahafo Ano South)	13,337 Ha. - (average yield 2.7 Mt/Ha. - 3 Districts concentrate 51% of production area: Ejura Sekyedumase, Adansi South, Atwima Mponua)		N/A			Plantain: 112,563 Ha. - Groundnut: 6,101 Ha. - Cowpea: 8,101 Ha.	
Middle	Oti	0 [general data on separate sheet]	58.6% of HH	8% of HH	22,103 Ha. - (average yield 1.9 Mt/Ha. - 3 Districts concentrate 51% of production area: Kadjebi, Nkwanta North, Nkwanta South)	23,261 Ha. - (average yield 4.6 Mt/Ha. - 3 Districts concentrate 53% of production area: Jasikan, Biakoye, Kadjebi)		N/A			Plantain: 8,268 Ha. - Groundnut: 3,352 Ha. - Cowpea: 1,852 Ha.	

Notes:

See sheet on C. Change and COVID shocks

Percentage of total households per region which are poor, by wealth

proportion of the poor amongst rural respondents (55.82%) is higher than their urban (19.8%) counterparts

Source: 2020 Comprehensive Food Security and Vulnerability Assessment (CFSVA) Survey. April, 2021

(Survey completed, Key Findings doc still in progress)

Percentage of total households per region which are food insecure.

Source: 2020 Comprehensive Food Security and Vulnerability Assessment (CFSVA) Survey. April, 2021 - (Survey completed, Key Findings doc still in progress)

Upper East has 5 out of the 10 worse-off districts in terms of food insecure HH nationwide

Northern has 3 out of the 10 worse-off districts...

Upper West & North East complete the 10 worse-off districts nationwide, with 1 district each in the list.

The 2020 survey covered all 260 administrative districts in the 16 regions in Ghana

98.2% of rural households participated in the survey, and 96% of urban HH.

Data for 2017 - Source: Ghana Open Data Initiative (<https://data.gov.gh/>)

Data for 2017 - Source: Ghana Open Data Initiative (<https://data.gov.gh/>)

Data for 2017 - Source: Ghana Open Data Initiative (<https://data.gov.gh/>)

Data for 2019 - Source: Statistics, Research and Info. Directorate (SRID), Min. of Food & Agric.- May, 2020.

Annex 15. Environmental and Social Management Framework (ESMF)



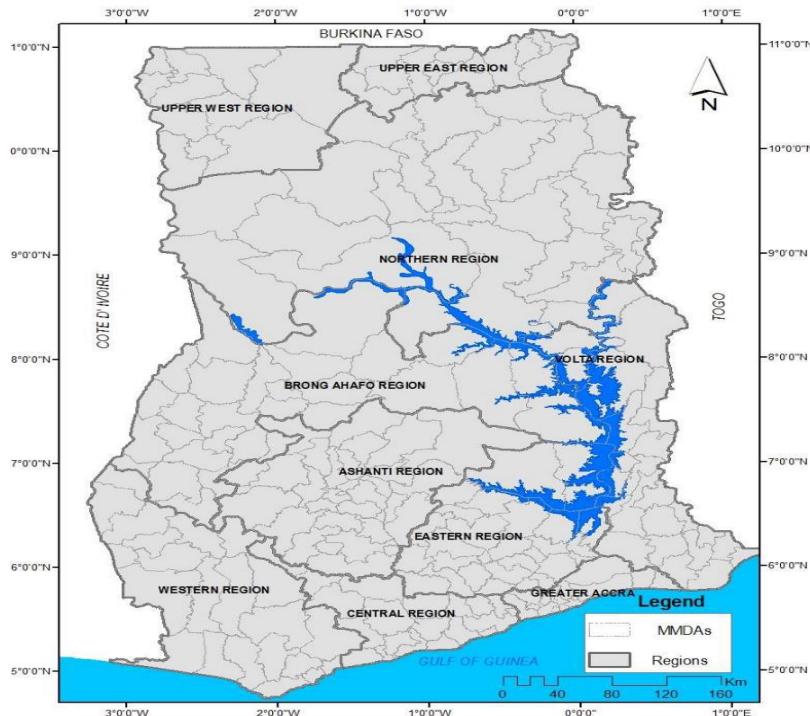
REPUBLIC OF GHANA

PROMOTING RURAL OPPORTUNITIES SUSTAINABLE PROFITS AND
ENVIRONMENTAL RESILIENCE – PROSPER

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK - ESMF

Figure 0. Administrative Map of Ghana

-- DRAFT REPORT --
September 2021



PREFACE

This **Environmental and Social Management Framework (ESMF)** for the Government of Ghana will be applied to all activities financed by the International Fund for Agriculture Development (IFAD) through the leadership of the Government of Ghana, more precisely the Ministry of Food and Agriculture (MOFA) for technical and/or financial support to the “**Promoting Rural Opportunities Sustainable Profits and Environmental Resilience - PROSPER**”.

PROSPER Project Coordination Unit (PCU), supported, both financially and technically by IFAD will, at the request of the MOFA be hosted at the national level in the field, most likely in Tamale, and responsible for the overall coordination of project activities, with field-based environmental, climate, and social safeguards compliance, as well as gender and social inclusion works directly led by the respective locally recruited **Senior Safeguards and Climate Specialists - SSCS**, and **Senior Gender and Social Inclusion Specialist - SGSIS** to ensure good compliance on safeguards, as well as on Gender and Social Inclusion mainstreaming so to foster and sustain an overall satisfactory project safeguards performance throughout its lifespan. They will frequently liaise with **District level hired Focal Points (DFP)** as part of the MOU with Local Authorities (DDAs) supported by Ghanaian Environmental Protection Agency (EPA) on all safeguards-related issues, consistently with both applicable national legislations, and IFAD SECAP procedures. The same goes also with regards to financial intermediaries aimed at supporting local farmers to access to fundings. APEX Bank, the designated entity, will also have a Safeguards and climate coordination unit at their level. An Environmental, Social, Climate Specialist and a Gender and Social Inclusion Specialists will be hired to ensure all funding proposal are screened and in full compliance prior to their funding.

Until the physical footprints of proposed project activities are clearly defined by/after project approval⁶⁷, this document will remain a living document and thus subject to subsequent modifications and changes in line with the evolving situation or scope of the project activities. As an iterative process, therefore, much closer participatory consultation with the IFAD, GoG, and formal clearance and public disclosure of this ESMF will be necessary.

⁶⁷ - This is also function of the variation of the current **Project Development Objective (PDO)**, which is susceptible to variation before/by the Appraisal stage. Until then, the ESMF remains flexible and adaptable based on any changes that occur.

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ABBREVIATIONS

Acronyms	Meaning
1D1F	One District One Factory
AAFORD	Affordable Agricultural Financing for Resilient Rural Development Project
ABP	Advanced Business Plan
ASWG	Agricultural Sector Working Group
AU	African Union
BAC	Business Advisory Centre
BBP	Basic Business Plan
BoG	Bank of Ghana
BP	Business Plan
BRC	Business Resource Centre
CSA	Climate-Smart Agriculture
COP	Conference of the Parties to the United-Nations Framework Convention on Climate Change
DA	District Assembly
DAES	Directorate of Agricultural Extension Services
DDA	District Department of Agriculture
DSF	District Stakeholder Forum
DDWS	District Department of Water and Sanitation
DNA	Designated National Authority
EA	Environmental Assessment
EIA	Environmental Impact Assessment
ESA	Environmental and Social Assessment/Audit
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESRF	Emergency Support to Rural Livelihoods and Food Systems Exposed to COVID-19
ESIA	Environmental and Social Impact Assessment
ESS	Environmental and Social Safeguards
FARA	Agribusiness Learning Alliance
FAO	Food and Agriculture Organization of the United-Nations
FMA	Financial Management Assessment
FNS	Food and Nutrition Security
GADP	Ghana Agricultural Development Plan
GAIP	Ghana Agricultural Investment Programme
GASIP	Ghana Agricultural Sector Investment Programme
GBV	Gender based violence
GCF	Green Climate Fund
GCX	Ghana Commodities Exchange
GEA	Ghana Enterprises Agency
GEWE	Gender Equality and Women's Empowerment
GFD	Ghana Federation of the Disabled
GHG	Greenhouse Gas
GIRSL	Ghana Incentive Based Risk Sharing Agricultural Lending
GJSP	Ghana Jobs and Skills Project
GoG	Government of Ghana
GRM	Grievance Redress Mechanism
GSI	Gender and Social Inclusion

GSICS	Gender and Social Inclusion Specialist
GVS	Gender and Vulnerability Specialist
ICO	IFAD Country Office
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFR	Interim Financial Report
IGA	Income Generation Activities
IGREENFIN	Inclusive Green Financing Initiative
IPM	Integrated Pest Management
IPRM	Integrated Project Risk Matrix
IWRM	Integrated Water Resources Management
KAP	Knowledge Attitude Practice
LFM	Logical Framework Matrix
LULUCF	Land Use, Land-Use Change and Forestry
MDDW	Minimum Dietary Diversity for Women
MESTI	Ministry of Environment, Science, Technology and Innovation
MIYCN	Maternal, infant, and young child nutrition
MLGRD	Ministry of Local Government and Rural Development
MNDPF	Medium-Term National Development Policy Framework
MoF	Ministry of Finance
MoFA	Ministry of Food and Agriculture
MoGCSP	Ministry of Gender, Children and Social Protection
MoTI	Ministry of Trade and Industry
MPI	Multidimensional Poverty Index
MSME	Micro-, Small- and Medium-Enterprise
MSP	multi-stakeholder platform
NCD	Non-communicable disease
NDC	Nationally Determined Contribution
NFIDS	National Financial Inclusion and Development Strategy
NNP	National Nutrition Policy
NOTUS	No Objection Tracking and Utilities System
NRGP	Northern Rural Growth Programme
NRM	Natural Resources Management
PERD	Planting for Export and Rural Development
PFI	Participating Financial Institutions
PFJ	Planting for Foods and Jobs
PRM	Procurement Risk Matrix
PROSPER	Promoting Rural Opportunities, Sustainable Profits and Environmental Resilience
PWD	Person with Disability
PLWD	Person Living with Disability
RAFIP	Rural and Agricultural Finance Programme
RCB	Rural Commercial Bank or Rural Community Bank
RAMSAR	Ramsar Convention on Wetlands of International Importance
REP	Rural Enterprises Programme
RFSP	Rural Financial Services Project
RI	Rural Institution
RTIMP	Roots and Tubers Improvement & Marketing Programme
SBCC	Social Behaviour Change Communication
SC	Steering Committee

SCGV	Safeguards, Climate, Gender and Vulnerability
SCS	Safeguards and Climate Specialist
SDG	Sustainable Development Goals
SSCS	Senior Safeguards and Climate Specialist
SGSIS	Senior Gender and Social Inclusion Specialist
UNSDP	UN Sustainable Development Partnership
WEF	World Economic Forum
WSMT	Water and Sanitation Management Team

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EXECUTIVE SUMMARY

Ghana is a lower-middle-income country with an estimated per capita GDP (i.e., \$2,221 (2019), 6.5% one of the highest rates in the world). Ghana's economy is heavily dependent on the export of specific commodities (i.e., gold, cocoa and oil), and remains vulnerable to commodity price shocks. Ghana is a country in a dynamic transition trend from extreme fragility to greater resilience to external and climate-induced shocks, but many development challenges remain despite the tangible sustainable development efforts initiated by both the current and previous Government authorities/regimes. In this challenging environment and context, Government is addressing the main drivers of country fragility, namely high rates of population growth and outmigration, limited access to resources, regional instability, unsustainable fiscal deficits, the limited capacity of the public administration, and structural vulnerabilities and shocks such as climate change and environmental degradation. These drivers of the country fragility are resulting in intensely negative socio-economic and environmental effects particularly in the agricultural sector. At present there are insufficient financial resources and technical capacity to build the resilience of organizations for transformative smallholder agriculture.

While several reforms lead to a more conducive business environment, Ghana's rank in the 2020 Doing Business Report was 118 among 190 economies. The impact of COVID-19, still ongoing, has resulted in economic slowdown and socioeconomic challenges that are detailed below. 23% of Ghana's population are monetary poor and 8.2% live in extreme poverty. When it comes to multidimensional poverty (across three dimensions: education, health, and living standards). The highest concentration of extreme poor (36%) lives in the Savannah region.⁶⁸ Poverty, in the Middle Belt and other areas is lower than in the North. Agriculture accounts for 21% of Ghana's total GDP, 71% of employment in rural areas, over 40% of export earnings. Factors contributing to rural poverty include underdeveloped agricultural technologies, poor access to financial services (especially among women), lack of secured market linkages, inadequate marketing infrastructure, post-harvest losses, lack of advisory services, and cumulative environmental degradation. Most of Northern Ghana falls within the Guinea Savannah Ecological Zone. Here smallholders grow mainly soya, maize, sorghum, rice, millet and vegetables. The challenges affecting agricultural development are compounded by the negative effects of climate change, such as increasing dry spells and rising temperatures, and degradation of arable land and critical infrastructure.

The Promoting Rural Opportunities, Sustainable Profits and Environmental Resilience Project (PROSPER) aims to strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority VCs in the Northern and Middle Ecological Belts of Ghana taking advantage of the increased demand created by the national agro-processing strategy. PROSPER aims to provide a framework for the long-term engagement with and financing for private sector-led, pro-poor agricultural VC development tailored to the specific needs and potential of small-scale producers and operators in targeted regions of Ghana.

PROSPER is aligned with the development strategies set out in the Medium-Term National Development Policy Framework (MNDPF 2018-2021) and priorities set by MoF in the National Financial Inclusion and Development Strategy (NFIDS 2017-23). MoFA's Ghana Agriculture Investment Plan (2018-2021) – Investing for Food and Jobs, Gender and Agricultural Development Strategy (2015), is aligned with the international development

⁶⁸ Ghana Living Standards Survey, 2018.

framework including the UN 2030 SDGs (2015), AU CAADP-Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods (2014) and the ECOWAS Vision 2050 (2021). PROSPER aligns with the MoGCSP's National Gender Policy (2015), the Agenda for Jobs (2018-21) policy framework, National Youth Policy (2010) and Nutrition Policy (2014), while taking into account changes in the socioeconomic landscape of the country and recent developments at the international level.

The geographical targeting strategy of PROSPER considers (i) high rural population, (ii) high poverty prevalence, (iii) high rate of food and nutrition insecurity, (iv) strong concentration of female and male youth and (v) presence of economic opportunities relevant to the project in each district, combined with indicators of climate vulnerability and the level of cumulative degradation of the productive NR base (particularly soil, water and trees).

The geographic area of intervention extends to eight regions in the above-mentioned Belts. All five regions in the Northern Belt, (Upper West, Upper East, North-East, Savannah and Northern), have a high poverty head count, the highest 92% (Wa West District, Upper West). The three neighbouring regions in the Middle Belt (Bono East, Bono and Oti) are relatively less poverty stricken on average than those in the Northern Belt but contain pockets with a markedly high poverty head count peaking at 78% Kintampo South District, Bono East. The number of regions has risen from five at Independence to the present 16, but the administrative divisions do not coincide with the environmental and socioeconomic conditions. Broadly, poverty is progressively deeper from South to North with the drier climate and increasingly challenging setting for agriculture with the negative impact of climate change. The poverty analysis underpinning the geographical targeting of PROSPER is presented in the PIM.

Selection criteria will be developed and validated with communities. These criteria include: (i) poverty and food insecurity; (ii) community interest and demand; (iii) synergies with other donor-supported projects; (iv) site potential (including downstream effects, physical cultural resources, hydrogeological potential and saline-water intrusion dynamics in rice production schemes);(v) proximity to weekly rural markets and linkages with off-takers, and; (vi) land size of group members (not exceeding five hectares of land under rice/vegetables). The project targeting strategy, including gender equality and women's empowerment.

Key environmental, climate and social risk category classification and issues:

In line with IFAD's Social, Environmental and Climate Change Assessment Procedures (SECAP), PROSPER is classified as a **Category B operation** and equally falls under **category B** of Ghana's Environmental and Social Impact Assessment (ESIA) Guidelines and Procedures, implying that PROSPER is likely to cause limited environmental and social impacts which are mostly small in size, mostly site-specific and thus can be successfully managed by appropriate preventive actions and/or mitigation measures provided in this ESMF. Key risks, impacts and opportunities to environmental and social management are: poor governance and lack of institutional, technical and organizational capacity, implementation capacity by service providers for foreseen socioeconomic infrastructures; which will be addressed through the effective implementation of the ESMF/ESMP. As stated in component 1 (precisely subcomponent 1.2) community-driven socioeconomic infrastructure will be subject to feasibility studies/ESIA and approval by EPA. The project will not result in involuntary resettlement, or impact on physical cultural resources.

From a Climate Change Risk Assessment standpoint, the project is classified as **High**. The target communities are substantially dependent on climate-sensitive natural resources, especially rainfed agricultural plots and tree crops such as shea and cashew. Large parts of the project area are increasingly exposed to droughts and flash-flooding. GHG emissions through increased production and processing and climate variability, including unexpected dry spells, unpredictable rainfall and low/high temperatures, can affect the project risks, impacts, sustainability and returns on investments. However, the project has the potential to integrate climate resilience measures, such as improved techniques of growing and processing of tree crops (cashew and shea) and in the fight against deforestation through the systematic use of integrated agroforestry systems, solar panels and/or biogas using efficient and usable friendly biodigesters, as well as the usage of biofertilizer. Systematic climate risk analysis will be undertaken by the project throughout implementation to ensure adequate and timely monitoring and management of climate change risks.

Environmental management and monitoring plans

Pertinent national legal, institutional, and regulatory frameworks were carefully reviewed to set in context the Environmental and Social Management Framework (ESMF) for PROSPER. The environmental, climate and social context and present challenges for the targeted eight regions were reviewed. Some of the mitigation and adaptation plans recommended in the ESMF include, amongst others:

- ✓ capacity building of multiple actors in technical, management and governance aspects, and strengthening of women's and youth farmers organizations,
- ✓ At household level, upgrading of vegetable gardens but also water infrastructure with solar or biogas powered irrigation pumping systems, intercropping, systematically introducing nutrient and vitamin-rich crops particularly for the selected VCs (rice, maize, soybean), agroforestry, promotion of sustainable land and water management practices and youth training support/youth incubation including on sustainable management of natural resources.
- ✓ Infrastructure investments (feeder, track roads, causeways, culvert, small connecting bridges) will be subject to screening, feasibility studies and license approval by the relevant institutions to ensure that there is minimal social and environment impact but also the infrastructures withstand to climate change impacts (floods, salinity, wildfire, etc....).
- ✓ Ecosystem preservation activities as the rehabilitation of thousands of hectares of mangroves and community forests.
- ✓ creation of solution-oriented inclusive platforms for high-level policy dialogue between private operators, FBO/RIs and public authorities and access to land and credit/loans .
- ✓ support climate resilient and smart infrastructure in the targeted areas to expand arable land and water management productivity and reduce poor people's vulnerability to natural hazards, food insecurity and nutrition, the nature of risks and exposure to climate change.
- ✓ Sustainable land use and forest ecosystems will contribute to reducing GHG emissions. Climate resilient infrastructure (land and water development) and upgraded household-level vegetable gardens will lead to secure production and reduce the risk of low yields while contributing to expanding the period of production from the 3 months of the rainy season to 6 to 9 months within the dry season.

- ✓ Good climate resilient/smart agricultural practices in rice, maize, soybean, Shea and Cashew, and household-oriented horticulture will be promoted to address drought, flooding, salinization, locusts effects and harsh environments (land degradation).
- ✓ Development of a capacity building strategy, the project will address the limited knowledge of climate change impacts on smallholder agricultural value chains and landscapes and effective adoption and implementation of adaptation interventions.
- ✓ development of new modules on climate resilient agriculture, waste management and renewable energy for solar-operated boreholes/water pumps and other warehouses/workshop centers.
- ✓ Improve collaboration with Ghana National Meteorological Agency to ensure production and dissemination of key agro-climatic information to farmers at regular intervals.
- ✓ As much as is possible, discourage cultivation in areas that are very close to the major river systems to minimize overflow during normal flow seasons
- ✓ Improve collaboration with research institutes to introduce early maturing/short duration and flood resistant rice varieties to the farmers to reduce flood impacts
- ✓ Support and strengthen Seed Labs/silos/warehouses to be able to carry out rigorous tests on seeds to ensure that only genuine foundation seeds are used by farmers
- ✓ If any usage is foreseen, timely collaborate with regulating agencies to ensure that agrochemicals, soil fertility systems meet the approved FAO/WHO standards; training and certification of ‘spraying gangs’ to eliminate agrochemical misapplication; public health and safety concerns and soil and water pollution
- ✓ Support Value Chain actors in conversion of rice wastes into briquettes and vegetable stalk to animal feeds
- ✓ Improve community security arrangements by supporting dialogue and understanding between farmers and pastoralists to reduce resource conflicts. Support to strengthening existing informal and formal existing grievance redress mechanisms proposed in the ESMF/ESMP and establishing new ones where they don’t exist. Such systems will address concerns that may be raised associated with other project activities.
- ✓ Avoid farming along recognized grazing routes and demarcated grazing reserves, transhumance corridors or cattle ranches;
- ✓ Support promotion of land governance and efficient land management as adaptation measures
- ✓ Contractors will be required to comply with national and state regulations governing the environment, public health and safety and labor practice.

Estimated Costs for Environmental and Social monitoring plans

A total of **\$3 million USD** has been estimated for the environmental and social monitoring for PROSPER. About **\$2,080,000** is expected to be expended at the base 3 years while the rest is spread across the 4th to 8th year. The fund covers environmental and social monitoring plans including:

- Site specific studies for socio-infrastructure rehabilitation and new infrastructure (including roads, causeways, markets infrastructures, etc.), will be conducted
- Training including ‘spraying gangs’, draining of rice paddies, and construction of water harvesting structure for dry season irrigation ;
- Support for conflict resolution including stakeholders’ dialogue on conflict management and land governance
- Health and Safety including Health insurance for agro-entrepreneurs.

A successful mainstreaming of ESMF into implementation of the PROSPER project also requires adequate sensitization and the strengthening of institutional capacities through capacity building programs. The sums of **\$920,000** and **\$2,080,000** respectively have been estimated for additional capacity building activities and the hiring of Focal points at local Government level in all the **85 districts** of project areas. In total, both the Environmental and Social Monitoring costs and capacity building cost, and the cost of hiring key specialists account for **\$3,000,000** to enhance environmental, climate and social opportunities as well as and address any potential adverse impacts.

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1- INTRODUCTION

To support its sustainable development strategy and program, particularly towards alleviating rural poverty of the most fragile and vulnerable populations by the end of 2035, the Government of Ghana has requested and obtained the support of the **International Food and Agriculture Development (IFAD)** with the development of the "*Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)*" project⁶⁹.

This ESMF has been prepared in support to the PROSPER project. The project has been screened against IFAD's Social, Environmental and Climate Assessment Procedures (SECAP) and deemed a **Moderate Risk** project for Social and Environmental safeguards, and **High Risk** thereby requiring appropriate avoidance and mitigation measures in place to ensure that all activities are carried out consistently with the SECAP and applicable national regulation and core requirements.

This ESMF has been prepared in such a way as to set out the basic principles, rules, guidelines, and procedures for screening, assessing, and managing the likely potential social, environmental and climate risks and impacts of those proposed outputs and activities already been defined, as well as yet undefined interventions. It contains measures and plans to avoid, and where avoidance is not possible, to reduce, mitigate and/or offset adverse risks and impacts. The ESMF specifies the most likely applicable social and environmental policies, standards, protocols, and requirements and how those requirements will be met through procedures for the screening, assessment, approval, mitigation, and the robust monitoring and reporting of social, environmental and climate risks and impacts associated with the activities to be supported under PROSPER.

For the project outputs that have been defined with a reasonable degree of certainty, this ESMF includes indicative provisions outlining the management plans required to addressing likely social, environmental and climate change related risks and impacts, as well as several of the requirements of applicable policies, standards, procedures, including the applicable national regulations. The preparation of the ESMF was consultative enough and inclusive of women, youth, and vulnerable groups and many other key stakeholders met during the field consultations, namely the Ministry of Agriculture (both in Accra and in Tamale and Kumasi) - District Directorates of Agriculture (DDA), the Ministry of Environment and forestry, The Environmental Protection Agency, the Ministry of Water, the District Directorate of Water Agencies (DDW), the local government, Municipalities/Mayors, Academia and Research centers, local Farmer-based Organization/FBO, farmers cooperatives, Women and/or Youth Associations, Private sectors active in the Agricultural field, local Banks, other government/donor funded operations, etc. Once completed, and consistently with IFAD requirements, the ESMF will be publicly disclosed both in-country and on the IFAD website, prior to the project approval to ensure project stakeholders and any other interested party has a free access to the documents. Both the Government of Ghana and IFAD will ensure all approved documents are available on their respective website to enable whoever is interested to freely and publicly access these documents and provide any inputs they found necessary. Since stakeholders' consultation and engagement is an iterative process, this process will be continued and randomly monitored to ensure systematic consistency and transparency throughout the project lifecycle.

⁶⁹ - Moving forward and for simplification purpose, we will be most often using the term "The Project" in lieu and place of the full denomination of the "*Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)*" project.

1.1. Country and Project Context and Rationale

A. National context and rationale for IFAD involvement

a. National Context

Economic context. Ghana is a lower-middle-income country with an estimated per capita GDP of USD 2,221 (2019). In 2019, GDP grew by 6.5%, up from 6.3% in 2018 – one of the highest rates in the world. Ghana’s economy is dependent on the export of a limited number of commodities such as gold, cocoa and oil, and remains vulnerable to commodity price shocks. In 2020, the inflation rate was 9.2%, unemployment at 4.53%, and national debt at 78% of GDP (64% in 2019).⁷⁰ While several reforms lead to a more conducive business environment, Ghana’s rank in the 2020 Doing Business Report was 118 among 190 economies. The impact of COVID-19 has resulted in economic slowdown and socioeconomic challenges that are detailed below.

Poverty and food insecurity. 23% of Ghana’s population are monetary poor and 8.2% live in extreme poverty.⁷¹ When it comes to multidimensional poverty (across three dimensions: education, health, and living standards), the proportion increases to 45.6%, especially in rural areas, where it is far higher (64.6%) than urban areas (27.0%).⁷² Wealth distribution is biased towards men: 62% of female-headed households fall into the two poorest quintiles – compared to 39% of male-headed households. The regions of the Northern Belt have the highest prevalence of poverty, up to 62% in the rural areas. The highest concentration of extreme poor (36%) lives in the Savannah region.⁷³ Poverty, in the Middle Belt and other areas is lower than in the North. While some of the regions have lower poverty levels overall, there are persistent pockets of poverty, food insecurity, undernourishment and malnutrition. *Persons with disabilities (PWD)* represent 3% of the total population.⁷⁴ More than half living in rural areas are concentrated in the Middle Belt and almost a quarter in the Northern Belt. Ghana has a prevalence of undernourishment of 7%, while moderate or severe food insecurity in the population stands at 49.6%.

Agricultural and rural development context. Agriculture accounts for 21% of Ghana’s total GDP, 71% of employment in rural areas, over 40% of export earnings. Agricultural imports are substantial, mainly wheat, rice, chicken (frozen), milk and fish. Rain fed agriculture prevails in 96% of arable land. Around 85% of farming households own less than 10 ha of land and more than two-thirds own less than 2 ha cultivable land. Factors contributing to rural poverty include underdeveloped agricultural technologies, poor access to financial services (especially among women), lack of secured market linkages, inadequate marketing infrastructure, post-harvest losses, lack of advisory services, and cumulative environmental degradation. Only 37% of the rural population has access to accounts in formal financial Institutions (FIs). Furthermore, rural institutions are generally weak with limited capacity to support small-scale producers. The challenges affecting agricultural development are compounded by the negative effects of climate change, such as increasing dry spells and rising temperatures, and degradation of arable land and critical infrastructure. Most of Northern Ghana falls within the Guinea Savannah Ecological Zone. Here smallholders grow mainly soya, maize, sorghum, rice, millet and vegetables. Rice cultivation in the valley bottoms has great potential to reduce poverty levels. Dry season vegetable

⁷⁰ Statista, 2021.

⁷¹ Ghana Living Standards Survey, 2018.

⁷² Ghana’s Multidimensional Poverty Index (MPI) Report, UNDP, 2020. The indicators that contribute most to multidimensional poverty in Ghana are lack of health insurance coverage, undernutrition, school lag and households with members without any educational qualification.

⁷³ Ghana Living Standards Survey, 2018.

⁷⁴ 2010 Population and Household Census.

production is significant at irrigation sites. The productivity for these crops remains below potential, due in part to lack of access to inputs, mechanization and extension outreach. Shea trees cover around 77,670 square kilometres in the Northern zone and support the livelihood of approximately 900,000 rural women. Trade in shea butter has been rising with strong export demand.

The *Middle Belt* falls within the transition ecological zone. Here smallholders grow mainly cassava, plantain, maize, yam and soya, with rice cultivation in valley bottoms. The cashew value chain (VC) generates income for about 350,000 smallholder farmers. Cashews can grow on even marginal lands and can stabilize the soil in which it grows while serving as carbon sinks. However, production is affected by (less than 50% of potential) factors such as difficulty in accessing good planting materials and improved farm inputs, inadequate extension services, access to credit, weak RIs and lack of effective pricing and marketing mechanisms, pest infestations, incidences of bush fire, loss of soil nutrients and inadequate soil moisture.

Vegetables such as tomato, pepper, okra, garden eggs and cabbage are grown mostly under rainfed conditions as backyard production for subsistence and commercial purposes in both the Northern and Middle Belts. Availability is highly seasonal, peaking June-September. Productivity is usually less than 50% of attainable potential due to traditional cultivation practices, the lack of irrigation systems, limited use of improved inputs and high post-harvest losses.

The *livestock* sector is an important component of Ghana's agriculture. In 2019, the sector contributed about 13.3% of agricultural GDP in direct products and had a growth rate of 5.4%, (SRID, 2020). Most rural households (41.5%) keep some form of livestock, livestock as an adjunct to crop farming. Small and large ruminants are kept as a form of security and not as a source of protein, so the direct contribution to household food and nutrition security is low.

The **COVID-19** pandemic resulted in a GDP growth of 1.1% in 2020 down from the pre-pandemic levels of 4.8% in 2020. Petroleum receipts, import duties and other tax revenues were negatively affected, reducing the fiscal space for the GoG. 77.4% of households in Ghana have experienced declines in income. Reduced remittances to rural areas contributed to food insecurity. The country's average monthly food inflation recorded an increase from 8.4% in March 2020 to 13.7% in July 2020. While food prices continued to rise into 2021, the overall economic crisis eased and growth is projected to increase to 4.0% in 2021 and 4.1% in 2022.

To mitigate the socioeconomic impact of COVID-19, the GoG took several measures, including: the establishment of the Coronavirus Alleviation Programme (CAP), starting with a USD 219 million contribution from the Ministry of Finance (MoF); a reduction in the inter-bank policy rate from 15.5% to 14% by the Central Bank of Ghana; lowering reserve requirements from 10% to 8% to increase credit availability and affordability. The Ministry of Food and Agriculture (MoFA) launched an Agricultural Response Plan increasing the supply of subsidized seeds and fertilizers to poor smallholders; IFAD's Emergency Support to Rural Livelihoods and Food Systems Exposed to COVID 19 (ESRF) supported the GoG efforts in this area.

Ghana's economy showed signs of recovery in the second half of 2020 and is projected to grow by 4.2% in 2021 and 5.3% in 2022. However, volatile commodity prices and lingering uncertainty over the COVID-19 pandemic still present key downside risks.⁷⁵

National strategies, policies, and lead institutions. The Medium-Term National Development Policy Framework (MNDPF 2018-2021) recognizes the growth of agriculture

⁷⁵ <https://www.worldbank.org/en/country/ghana/overview>.

as the main driving force for rural development and transformation. The Ghana Agricultural Development Plan (GADP) focuses on the development of the agricultural sector from 2018 to 2021 through modernization and transformation. MoFA has increased support to the production of field crops through the Planting for Foods and Jobs (PFJ) initiative for farmers in the Northern and Middle Belts with 2-3 acres land to access improved seeds and fertilizers, with a 50% subsidy, extension services and marketing opportunities. GoG is implementing the PERD (2019-2023) programme for job creation and export diversification through tree-crops and has established the Tree Crops Development Authority. To ensure coordination and policy dialogue, MoFA chairs the Agricultural Sector Working Group (ASWG) established between the GoG and development partners including IFAD.

The One District One Factory (1D1F) programme led by the Ministry of Trade and Industry (MoTI) aims at establishing at least one medium-to-large-scale industrial enterprise in every district to create quality jobs and achieve a balanced spread of industries. The programme established 104 companies so far, of which 68 were existing companies and 36 newly built, employing 150,975 people) As part of 1D1F, the IFAD-supported Rural Enterprises Programme (REP) established 58 ENABLE Youth factories as a vehicle for employment creation for tertiary level graduates. In 2020, an MSME and Entrepreneurship Policy was approved, which led to the transformation of the NBSSI into the Ghana Enterprises Agency (GEA). A network of 166 Business Advisory Centres (BACs) and 57 Business Resource Centres (BRCs) has been established across the country under an arrangement between REP, GEA and participating District Assemblies, to provide high-value business development services to the business community.

b. Rationale for IFAD involvement

The development challenge and prognosis. The underlying issue flagged is the persistence of intractable poverty in many rural communities dependent on agriculture in the drier Northern parts of the country. The prevailing low input-low output rainfed farming systems in the north and middle zones are suboptimal and neither financially nor environmentally sustainable. Additionally, with a long history of over-exploitation, the economic carrying capacity of the heavily depleted productive NR base is declining whilst the number of dependents increasing. The negative effects of rapid climate change are making bad conditions worse. The remedy is to uplift rural economies by transforming the bedrock of small-scale farming from predominantly subsistence to financially and environmentally sustainable systems tied into functioning markets. This rationale focuses on both the supply side – the scale and technical transformation of production – and a marked increase in the real demand for the produce, whilst ensuring that the most vulnerable people are not left behind in poverty.

For the producers, individually and in groups, the imperative is the technical and organisational skills needed to progress to “farming as a profitable business” and to transition to agricultural and land management practices that reverse the depletion in the NR base, both on- and off-farm, crucially soil, water and trees. A key mindset change is to engage proactively with other private sector operators to build collaborations that are mutually beneficial and with balanced bargaining power. To this end, the critical linkage in the VC is the first, between producers and agribusinesses.

On the demand side, the agricultural market prospects in the North and Middle Belts are promising, with strong global demand for maize, shea and cashew and rapidly increasing domestic demand and import substitution possibilities for rice, soya and poultry. GoG is investing heavily in the scale and capacity of “upstream” VC actors through 1D1F and other programmes. However, the mass of rural producers is not able to capitalise on the growth in demand, being effectively outside the mainstream economy. The development challenge for

PROSPER is to broaden, deepen and extend the reach of these commodity VCs to engage with significant numbers of primary producer groups. The resulting “demand pull” is much stronger than “supply push” in driving local medium-term economic growth. The increased volume of business is expected to create opportunities for enterprises in agro-processing and value addition at all scales, fuel employment and incomes within local economies through a multiplier effect, and thereby raise the food security and nutrition security of whole communities.

IFAD's comparative advantage. The Fund has a wealth of technical expertise to partner countries in addressing rural poverty combined with the capacity to mobilise resources at a scale that can make a lasting impact on the lives of vulnerable people. IFAD has a strong record in Ghana in working with poor rural communities in the food and agriculture sector in the Northern and Middle Belts. A portfolio of projects has focused on various closely related aspects directly relevant to the design of PROSPER. *Roots and Tubers Improvement & Marketing Programme* (RTIMP) took an integrated commodity chain approach. *Northern Rural Growth Programme* (NRGP) combined commodity chain and rural infrastructure development with access to financial services. *Rural and Agricultural Finance Programme* (RAFIP) followed by *Rural Financial Services Project* (RFSP) have built up the microfinance subsector. *Ghana Agricultural Sector Investment Programme* (GASIP) is concentrated on agribusiness linkages and VC development, with measures to promote climate change resilience. *Rural Enterprises Programme* (REP) seeks to promote rural business, many of which are based on agriculture and NRs. Most recently, *Affordable Agricultural Financing for Resilient Rural Development Project* (AAFORD) is focused on smallholder access to formal credit. *Emergency Support to Rural Livelihoods and Food Systems exposed to COVID 19* (ESRF) was a rapid response to support smallholders coping with the pandemic.

PROSPER will scale up and build on this broad and deep experience, lessons learned, fruitful partnerships and cumulative development achievements of the above discussed IFAD projects in Ghana. Corporate knowledge of areas of direct relevance to the new initiative include: capacity, membership and sustainability of RIs and MSMEs; resilience building and the sustainable use of NRs; capacity of extension services to support VC producers and actors; creation of market linkages; capacity of BACs and BRCs to provide training to RIs and MSMEs; affordable loans in a market segment where FIs do not operate; partnerships with Apex Bank and other FIs to promote inclusive rural financial services; innovative cashless credit model⁷⁶; and one-time Matching Grants (MGs) for beneficiary groups ensuring subsequent access to affordable credit to sustain their marketing partnerships

1.2 Project Environmental, Climate and Social Risk Rating and Category

1.2.1 Environment and social category

The initial screening of proposed PROSPER activities reveals that the potential environmental and social risks rating is medium/moderate to low. The main risks relate to (i) value chains activities (rainfed and/or irrigated agriculture, cashew and shea trees cultivation, harvesting and processing, horticulture, rain/stormwater harvesting, nutrition, health and income generation related poultry: and (ii) basic socioeconomic infrastructure including NRM remediation works, feeder road rehabilitation and farm access tracks, and shared social infrastructure including human water supply systems, green energy and sanitation facilities. Most of these impacts are small in scale, very limited, mostly site-

⁷⁶ Eligible farmers receive inputs and services from vendors and providers; rural banks pay the sellers; after harvest and sale of the produce, farmers repay the loan.

specific and readily avoidable if not considerably reduced with appropriate mitigation plans (ESMP), as stated in the project's ESMF.

From a social safeguards standpoint, because all agricultural lands are community owned there will be no new land acquisition aside from those land left as fallows so the project will not have any foreseen negative social and environmental impacts such as the involuntary taking of lands or restriction on access to and/or use of assets resulting in the physical and/or economic displacement of project affected persons (PAP). PROSPER is not foreseen to affect negatively local pastoral communities or sites of historic, religious or cultural significance, land development beyond 100 ha⁷⁷, feeder roads with a length of lesser than 10 km linking communities or farm tracks. PROSPER is rated as a 'Category B' project and its social and environmental risks is assessed to be Medium/Moderate to Low.

As a **Category B** operation⁷⁸, a formal Environmental and Social Impact Assessment (ESIA) is required during project implementation. Sub-project screening will then reveal the depth of the site-specific instrument to prepare for compliance purpose. Further analysis of the conflict dimensions and site-specific Environmental and Social Management Plans (ESMP) will be mainstreamed throughout PROSPER implementation lifecycle. Moreover, to ensure safeguards compliance and project sustainability, a Safeguards and Climate Change Specialist and a Gender, social inclusion and Vulnerability Specialist (GBV/EASH/VAC) will be part of the PCU. Quarterly safeguards and climate compliance reports summarizing the level of compliance and performance of project activities implementation will be prepared and shared to inform IFAD and stakeholders.

1.2.2 Climate Risk classification

From a Climate Change Risk Assessment standpoint, the project is classified as **High**. The target communities are substantially dependent on climate-sensitive natural resources, especially rainfed agricultural plots and tree crops such as shea and cashew. Large parts of the project area are increasingly exposed to droughts and flash-flooding. GHG emissions through increased production and processing and climate variability, including unexpected dry spells, unpredictable rainfall and low/high temperatures, can affect the project risks, impacts, sustainability and returns on investments. However, as part of its Business Plans under Component 2.1 the project has the potential to integrate climate resilience measures, such as improved techniques of growing and processing of tree crops (cashew and shea) and in the fight against deforestation through the systematic use of integrated agroforestry systems, solar panels and/or biogas using efficient and usable friendly biodigesters, as well as the usage of biofertilizer. Such mitigation measure will be introduced through awareness raising campaigns and capacity building programmes in climate smart agricultural strategies, climate finance and strong collaboration with extension services, weather, and climate monitoring agencies to receive regular and timely agro-climatic information, and the adoption of appropriate unmechanized cultivation technologies, crops varieties, and climate resilient and low emissions practices. Systematic climate risk analysis will be undertaken by the project throughout implementation to ensure adequate and timely monitoring and management of climate change risks.

1.3 Special aspects relating to IFAD's corporate mainstreaming priorities

Gender. Women constitute 58% of the rural labour force. Despite Ghana ranking second in the ECOWAS Gender Inequality Index, the country is ranked 117 out of 156 countries in the

⁷⁷ The project will not invest on land development beyond 100 ha contiguous. Most of the beneficiaries have on average less than 2 ha and even combined per site, it is less than 50 ha contiguous.

⁷⁸ The project will not invest in any **category A** subproject activities.

WEF Global Gender Gap Report. Traditional culture and entrenched gender inequality limit women's access to education, healthcare, good nutrition, credit, extension services, new technologies, inputs and output markets participation in the public sphere and community decision-making. Female-headed households have less access to land for farming and are more likely to be smallholders (87% compared with 60% of male-headed households). The GoG adopted the National Gender Policy (2015) to mainstream gender, women's empowerment and social protection concerns into national development processes, NRs and agriculture. A Gender and Agricultural Development Strategy (GAD II) was developed in 2015 by the MoFA Women in Agriculture Directorate to support mainstreaming gender.

Youth. The country has a youth bulge (15-35 years of age⁷⁹) with 57% of the total population being below the age of 25. The rural community consists of 56% youth, compared to 44% in urban contexts. Youth contribute to family labour for agricultural production and engage in other activities such as processing, warehousing and transportation but are unable to pursue farming independently due to limited access to land, credit, quality inputs and sustainable profitable output markets. Due to limited access to jobs, inadequate training and illiteracy, youth unemployment and underemployment in Ghana reached 12% and 50% respectively⁸⁰ resulting in growing youth migration from rural areas to urban centres.

Initiatives to provide jobs, building capacities and opportunities for youth include the Medium-term National Development Policy Framework (2018-2021); the PFJ in agriculture and related sectors, the Initiative for Sustainability, Stability and Security (3S) under the IFAD managed Rural Resilience Trust fund and focusing on the Northern Belt; the IFAD-supported REP; and the Youth Agripreneurship Development Programme, jointly run by AGRA and Nestle. Despite these initiatives from GoG and development partners, the outreach to youth from semi-subsistence smallholder families remains limited.

People Living with Disabilities (PLWD). Statistically, people with disabilities make up 3% of the population. Disability in Ghana is considered both a human rights concern and a developmental issue due to its strong links to exclusion, discrimination and poverty. In 2006, the Parliament of Ghana passed the Persons leaving with Disability Act, 2006 (Act 715). The Act protects the rights of PLWDs and makes specific provisions to guarantee the right to education, healthcare, employment and movement of PLWDs. The Act also established the National Council on Persons with Disability. The Council is charged with the responsibility of proposing and evolving policies and strategies to enable PLWDs to integrate and participate fully in national development.

However, despite efforts being made educating the public, PWDs are still stigmatized, discriminated against and socially excluded. There is strong correlation between disability and poverty. Poor health, limited schooling and employment opportunities are impacting negatively on the socioeconomic status of affected households. Households with disabled members may be vulnerable to poverty due to extra costs of living with a disability.

Nutrition. Ghana is 'on course' to meet two targets for maternal, infant, and young child nutrition (MIYCN) reducing anaemia among women of reproductive age (46.4% of women aged 15 to 49 years still affected) and achieving the low-birth-weight target (14.2% of infants having a low weight at birth). No progress has been made towards achieving the exclusive breastfeeding target, with 42.9% of infants aged 0 to 5 months exclusively breastfed. Ghana is 'on course' to meet the target for stunting (chronic undernutrition), with 17.5% of children under 5 years of age affected but rises to 33% in the Northern Region. Some progress has been made towards achieving the target for wasting (acute undernutrition) but 6.8% of

⁷⁹ The National Youth Policy in Ghana (2010).

⁸⁰ Youth Employment Programmes in Ghana: Options for Effective Policy Making and Implementation, World Bank, 2020.

children under 5 years of age are still affected. The prevalence of overweight children under 5 years of age is 1.4% and the country is 'on course' to prevent the figure from increasing.⁸¹ Ghana has shown limited progress towards achieving the diet-related non-communicable disease (NCD) targets. The country has shown no progress towards achieving the target for obesity, with an estimated 16.6% of adult women and 4.5% of adult men living with obesity. Diabetes is estimated to affect 6.6% of adult women and 6.4% of adult men. The diet mainly relies on starchy roots, fruit and cereals. The diversity of diets remains low with limited intake of protein and a general reluctance to consume fruits and vegetables, causing stunting in preschool-aged children and anaemia amongst pregnant women. A long-term Food and Nutrition Security (FNS) Strategy has been developed which was used to review the National Nutrition Policy (NNP).

The NNP aims to address nutrition related challenges of feeding practices for infants and young children and nutrition among women of reproductive age, as well as the promotion of nutritionally adequate safe diets among other nutrition services. Ghana joined the Scaling Up Nutrition (SUN) Movement in 2011 and has established national, regional and district level multi-sectoral nutrition coordination mechanisms. Ghana's multi-stakeholder platform (MSP), the Nutrition Cross-Sectoral Planning Group (CSPG), continues to expand, bringing together ten sectors today. The five northern regions have regional nutrition MSPs.

Climate and environment. Climate change is projected to affect vital water resources, energy supplies, crop production and food security, with the Northern zone the most vulnerable. Ghana is already experiencing increased extreme weather conditions with higher incidences and prolonged periods of flooding and droughts. The country's dependence on the production of crops that are sensitive to climate change (cassava, cocoa, and shea) and lack of agricultural diversification exacerbate Ghana's vulnerability. Energy production meets demand, but rural communities continue to rely on fuelwood, resulting in forest depletion estimated at a 2% loss per annum.

Agriculture is estimated to be the second largest contributor (10.05 MtCO₂e) to Ghana's greenhouse gas emissions after the energy sector (15.02 MtCO₂e). Ghana is committed to implementing its National Climate Adaptation Policy, as highlighted in the National Climate Change Communication to the United Nations Framework Convention on Climate Change (UNFCCC) and its Nationally Determined Contribution (NDC) to the Paris Agreement.

In line with IFAD11 mainstreaming commitments, PROSPER qualifies as:

- ☒ *Climate finance:* PROSPER will integrate adaptation and mitigation measures in the value chain packages, supported by special financial mechanisms adopted by the project.
- ☒ *Nutrition sensitive:* PROSPER will select nutrition sensitive value chains, increase production of highly nutritious crops and animal sourced foods, promote food conservation, post-harvest processing and value addition, and promote better dietary patterns by providing nutrition education and Social Behaviour Change Communication (SBCC).
- ☒ *Youth sensitive:* PROSPER will target male and female youth (50% each), adding their access to land as a precondition for community participation in the project. PROSPER will support the establishment of youth group-led enterprises along the selected value chains and will provide targeted financial inclusion, skills development, and capacity building.

1.4 Rationale and Objectives of the ESMF

Like its neighbouring countries, especially from the northern and southern (east and west) parts, Ghana is one of the world's most vulnerable countries to adverse climate change impact, ranking 109th out of 181 countries according to the 2020 ND-GAIN index. Ghana is facing pronounced risks of higher temperatures, lower and more erratic rainfall, increased

⁸¹ <https://globalnutritionreport.org/resources/nutrition-profiles/africa/western-africa/ghana/>.

frequency of droughts and floods, significant loss of soil fertility and potential for submersion of large land areas given rising sea levels on its whole costal area. Land degradation, salinization, coastal erosion, land quality reduction, and low agricultural productivity are serious threats to national food security. Mean annual temperature has increased by 1.0°C since 1960. Linear trends indicate that wet season rainfall has decreased significantly between 1960 and 2006. Climate change projections predict an increase by 1.1 to 3.1°C by the 2060s, and 1.8 to 5.0°C by the 2090s (UNFCCC,2016). The country is likely to experience increased incidence of drought and lengthened dry spells, particularly in the northern belt region (*Upper West & Upper East*). Combined, these factors are serious threats to agricultural productivity and national food security. By its nature, the project will contribute to meeting IFAD's corporate commitment on mainstreaming areas which are environment and climate (25% of investment climate focused); nutrition (50% PLG nutrition sensitive), gender (25% gender sensitive), youth (50% youth focused).

In line with IFAD's Social, Environmental and Climate Change Assessment Procedures (SECAP), PROSPER is classified as a Category B Program and fall under category B and with 'High' Climate Risk. The most vulnerable areas from a climate change perspective will be the Northern region of the country where rain shortage and droughts are seriously affecting communities' productivity and self-sufficiency on freshwater, the balance of which is determined by rainfall conditions and, increasingly, sea level rise from the southern region that will have tangible effect on watercourses in the middle and northern belt regions.

The PDR and SECAP note have classified PROSPER as an environmental and social **Category 'B'** operation based on the adverse environmental and social effects, small in scale, mostly site specific and thus readily manageable by appropriate mitigation measures; and a 'High' Climate risk classification indicating the need for an in-depth climate risk analysis to be conducted during and throughout project implementation stages. The SECAP noted environmental and social risks mainly from: productive infrastructures and socioeconomic infrastructure, conflict and lack of ownership, unsustainable agricultural practices, land development. The SECAP recommended an ESMF be developed to inform the design of PROSPER.

The main objectives of the ESMF, as per the terms of reference of this study, are to define the principles, rules, guidelines, and procedures to develop the Environment and Social Management Framework (ESMF, inclusive of an ESMP) with adequate budgets to satisfactorily guide PROSPER implementation team.

The objectives of this ESMF are:

- To establish clear procedures and methodologies for the E&S and climate planning, review, approval, and implementation of sub-projects to be financed under the loan facility;
- To specify appropriate roles and responsibilities and outline the necessary reporting procedures, for managing and monitoring E&S and climate concerns related to sub-projects;
- To provide practical resources for implementing the ESMF, including general guidance on the development of E&S Management Plans (ESMPs) and their implementation

1.5 Stakeholders Consultation Approach and Methodology:

This ESMF builds on the Social Environment and Climate Assessment Procedure (SECAP) note prepared for the concept note stage of the project and field work during design stage with the objectives to: evaluate the impact of current and future trends of climate change and

environment on the programme's objective to reduce rural poverty and build the resilience of target groups; and propose adaptation/mitigation options for climate and natural resources management (NRM) issues with positive outcomes on project targeted groups in the northern and middle belt regions.

In terms of the technical scope, the ESMF reviewed environmental, climate and social impacts, focusing on unsustainable agricultural practices, land development, likely impacts from land development (including irrigation infrastructure) climate change, and human conflicts and insecurity issues. It also reviewed several institutional, legal and policy documents and frameworks related to agriculture, environment, climate, access to land, and gender issues in Ghana. The IFAD's Social, Environment and Climate Assessment Procedures (SECAP), IFAD's new environment and climate strategy 2019-2025, the Gender Equality and Women's Empowerment, Targeting and Sexual Exploitation and Abuse policies were also consulted in developing this ESMF document. Consultations were made with stakeholders in the project targeted 2 regions/zones of the country during the design of the project. The field visit targeted the Northern and Upper East Regions, as well as in the middle Belt and Kumasi region, from **10th to 15th August 2021**. The purpose of the field visit is to consult with stakeholders to collect relevant data and information to support the design of PROSPER. The consultations were participatory, inclusive, and proactive as they involved a broad range of stakeholders, farmers, RIs/CBO, academia, research institutes, GoG agencies (*MOFA, DDA, EPA, MOW, MOI, ...*) as well as private sector (RCB, SMEs, FIs).

1.6 Information and Public Disclosure of ESMF

IFAD's Policy on the public Disclosure of Documents (2010) requires full disclosure to the public and includes information notes on projects being developed for Board presentation, agreements for approved loans and grants, and project/program design documents. This ESMF will therefore be publicly disclosed on both IFAD's official website (<http://www.ifad.org>) and on the Government of Ghana's website.

1.7 Outline of the ESMF Report

The ESMF report is structured as follows:

- Introduction
- Project Description
- Environmental, Climate and Socioeconomic Profile of the PROSPER Project Targeted Areas
- Political, Strategic, Legal, and Institutional Framework Governing Environmental, Social and Climate Risk, Impacts and Opportunity Management
- Identification and Assessment of Potential Environmental, Social and Climate Risks, Impacts and Opportunities of PROSPER
- Environmental and Social Management Plan (ESMP)
- Stakeholders Consultation, Participation and Engagement
- Grievance Redress Mechanism
- Conclusion
- Bibliography
- Annexes

2- PROJECT DESCRIPTION

2.1 Project Development Objectives

The PROSPER Project Development Objective is: *Strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority VCs in the Northern and Middle Ecological Belts taking advantage of the increased demand created by the national agro-processing strategy.* PROSPER aims to provide a framework for the long-term engagement with and financing for private sector-led, pro-poor agricultural VC development tailored to the specific needs and potential of small-scale producers and operators in targeted regions of Ghana.

In line with IFAD11 mainstreaming commitments, PROSPER qualifies as:

- Climate finance:** PROSPER will integrate adaptation and mitigation measures in the value chain packages, supported by special financial mechanisms promoted by the project.
- Nutrition sensitive:** PROSPER will select nutrition sensitive VCs, increase production of highly nutritious crops and animal sourced foods, promote food conservation, post-harvest processing and value addition, and promote better dietary patterns by providing nutrition education and Social Behaviour Change Communication (SBCC).
- Youth sensitive:** PROSPER will target male and female youth (each group with a minimum of 50% eligible youth), adding their access to land as a precondition for community participation in the project. PROSPER will support the establishment of youth-led enterprises along the selected VCs and will provide targeted financial inclusion, skills development and capacity building.

Geographical targeting. The geographical targeting strategy of PROSPER considers (i) high rural population, (ii) high poverty prevalence, (iii) high rate of food and nutrition insecurity, (iv) strong concentration of female and male youth, (v) presence of economic opportunities relevant to the project, (vi) the level of cumulative degradation of the productive NR base (particularly soil, water and trees) and (vii) indicators of climate vulnerability including evidence on the historical and projected impact of changes in temperature and precipitation. The geographic area of intervention extends to eight regions in the North of the country. All five regions in the Northern Belt, (Upper West, Upper East, North East, Savannah and Northern), have a high poverty head count, the highest being 92% for Wa West District, Upper West. The three neighbouring regions in the Middle Belt (Bono East, Bono and Oti) are relatively less poverty stricken on average than those in the Northern Belt but contain pockets with a markedly high poverty head count peaking at 78% for Kintampo South District, Bono East. The number of regions in Ghana has risen from five at Independence to the present 16, but the administrative divisions do not coincide with the environmental and socioeconomic conditions. Broadly, poverty is progressively deeper from South to North given the drier climate and increasingly challenging setting for agriculture with the negative impact of climate change. The poverty analysis underpinning the geographical targeting of PROSPER is presented in the PIM.

Food insecurity prevalence as reported is not necessarily corresponding to the poverty head count. WFP food security and nutrition monitoring updates (June 2020) show high levels of moderate and severe food insecurity in the target regions, including the worst-off districts in the nation in terms of food insecure households. Main barriers to food security are food availability and accessibility. This affects access to micronutrients, especially for women and children.

There are significant regional disparities concerning nutrition security in Ghana. Northern Region is worst off when it comes to rural (extreme) poverty, rural child stunting (chronic undernutrition) and the prevalence of anaemia among women and children. The national child wasting (acute undernutrition) rate stands at 7%, with the highest prevalence reported

for Northern Region (10.9%). The presence of persons with disabilities also has marked regional differences. The Ghana Micronutrient Survey (2017) reports that the proportion of women (15 to 49 years) not meeting the Minimum Dietary Diversity for Women (MDDW) score ranged from 37.9% to 42.4% in the target regions, with a high national average of 40.2%⁸². The prevalence of PWDs by district ranges from 3.0% to 8.3% in the Northern Belt and from 7.3% to 12.4% in the Middle Belt.

This will be achieved through the implementation of three complementary components, two of them mutually supportive as described below.

2.2 Theory of Change

→ **Developmental challenges.** The main development challenges in the project area are high levels of rural poverty, youth and women unemployment, food insecurity, malnutrition in all forms, climate change and accelerating environmental degradation. Most poor farmers are engaged in low input-low output production in the small-scale rainfed field-crop sector, which is neither financially nor environmentally sustainable. In the absence of linkages to VCs, marketing tends to be haphazard even in good years. There are significant numbers of vulnerable people – women, youth, people with disabilities –excluded from the rural agricultural economy.

These challenges are compounded by accelerating NR scarcity and degradation exacerbated by climate change and a growing rural population. Traditional farming systems and diminishing access to energy in rural areas leads to soil erosion, deforestation and loss of command over water; the productive land becomes progressively less fertile, and yields decrease. These factors expose rural livelihoods to external shocks, limiting the ability of households to meet their basic needs. The lack of access to healthy and diversified diets leads to compromised diets, particularly for pregnant/lactating women and children under two years.

On the demand side, VCs are suboptimal with progressively less market offtake in remote areas. Farmers sell any surplus produce in local markets or to traders and middlemen straight after harvest when prices are low. In these circumstances, there are few opportunities for individual households and whole communities to accumulate the human, physical and financial resources needed to modernize production and progress from subsistence. Women and youth are most affected due to many factors including socio-cultural exclusion. The absence of public investment over many years has resulted in a lack of basic infrastructure, such as reliable potable water supplies, which places constraints on both livelihoods and living standards.

→ **Opportunities.** PROSPER will tackle these formidable challenges with a market approach. On the supply side, the project will invest not only in the technical capabilities of primary producers and processors but also in the organisational and business skills required to enter lasting commercial arrangements. Climate change has drawn attention to the cumulative depletion of the NR base, with much formerly productive land and forest already beyond the point of no return. The aim of the work with farmers will be to increase productivity and profitability rather than short-term production, in ways that slow and then reverse the rapid deterioration of the productive land, both on- and off-farm. Advice and demonstrations of climate-resilient farming practices such Conservation Agriculture will be supported by purposeful remediation works in the wider landscape after years of neglect. The key success factor in this regard is progress towards proactive NR management

⁸² Minimum Dietary Diversity for Women (MDDW) is an indicator for the adequacy of the diet in a household

arrangements, with acceptance of community responsibility for the fragile land.

Environmental sustainability is a necessary condition for successful “farming as a business”. Even limited additional profit coming into a poor community can trigger growth in the local economy, including opportunities for new enterprises to provide support services to the farmers. This requires access to rural climate finance to incentivize the sector to adopt best adaptation and mitigation practices.

The project recognises fully that stimulating field and tree crop production alone, however well the agronomy is adjusted to the environment, will not benefit the target population without a substantial increase in the real demand for the produce, in terms of volume, prices that at least cover production costs and access to the multi-step markets. The argument hinges on the efficacy of demand pull rather than supply push. PROSPER takes a VC approach for the selected commodities, in which the smallholders are linked into the existing private sector VCs. The key link for a primary producer group is a contract arrangement with an agribusiness or aggregator. PROSPER is oriented to facilitate such private sector arrangements by guiding and coaching the emergent RIs and MSMEs, developing business plans as appropriate for groups with differing levels of maturity, engaging with larger-scale VC actors (“drivers”) and arranging access to affordable financial services as needed. These mainstream business interventions are complemented with measures to include marginalised and vulnerable people and to invest in shared public socioeconomic infrastructure to improve the living conditions of whole communities.

Success with the growth in agricultural production in the framework of rapidly expanded value chains will drive up the incomes of the whole economy in the target rural communities and stimulate local demand for increased and additional support services both in the sector and in the wider population. It is this secondary demand that will provide opportunities for youth to escape from the under- and unemployment prevalent in the project area. PROSPER is designed to help youth along an authentic pathway from poverty by providing general training on running a business, helping to set up micro-enterprises of all types (related to the six PROSPER value chains) and linking the emergent MSMEs to affordable finance. The new enterprises then contribute themselves to the recovery of the local economy.

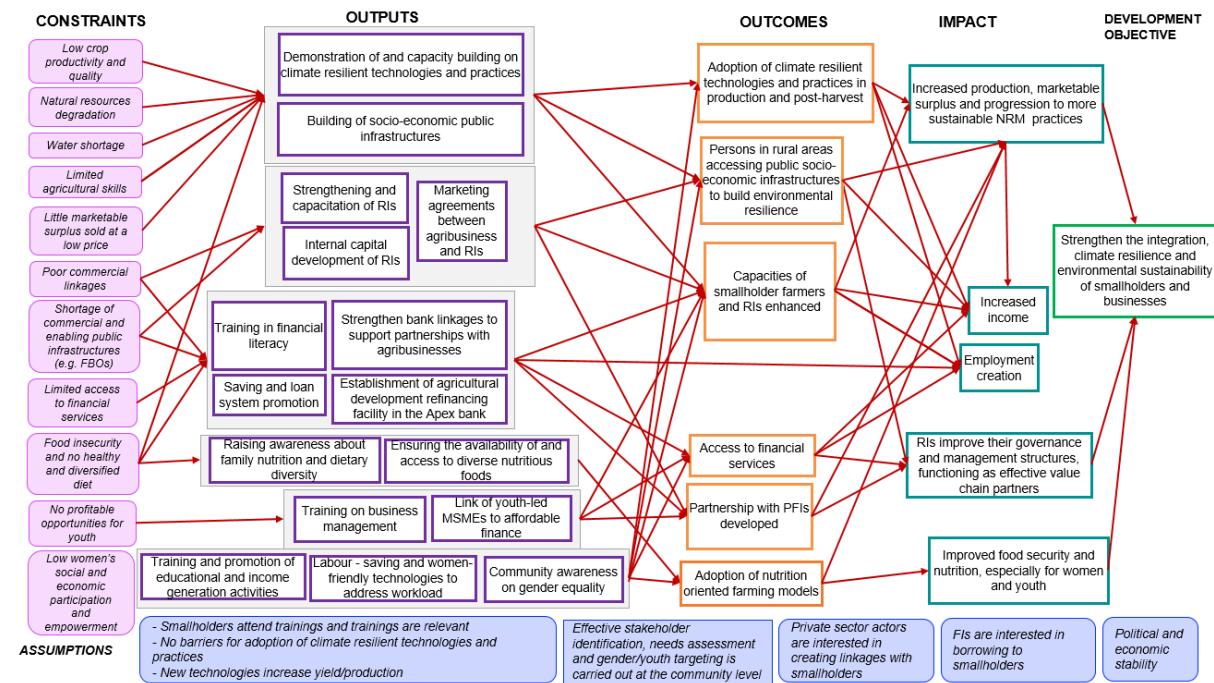
PROSPER will promote women’s participation and empowerment by addressing barriers prevalent in the geographical context of the project. Major constraints are represented by low level of education among poor women, already existing workload, and lack of willingness of spouses and other family members to support full participation of women in project activities. PROSPER will mitigate these constraints by increased participation in training (e.g. Financial Literacy) and promotion of educational and income generation activities; labour - saving and women-friendly technologies to address workload; community awareness on gender equality as a vehicle for prosperity and the introduction of GALS approach. PROSPER will advocate for different male role models by encouraging men to support women’s participation through guarantee of land and other resources required. Gender targeting in PROSPER will include the inclusion of young women (youth) and women with disabilities (PWDs).

Training and meetings with PWDs will be organized in close-by locations in the communities, in sensitive teaching and learning environments. To cater to the special needs of the PWDs with visual, hearing, physical and speech impairments, PROSPER will train them in braille, sign and audio languages.

In PROSPER nutrition and health will be promoted through several pathways, including selection of value chains that are nutrition- and climate sensitive or that will make a high contribution to nutrition; food conservation, post-harvest processing and value addition; promotion of vegetable gardens; and nutrition education. Specific trainings and a Social Behaviour Change Communication (SBCC) strategy will be developed to promote non-

discriminatory intra-household food distribution, adequate diets for adolescent girls, consumption of diversified diets, food hygiene and safety, and improved WASH practices as well as the discrimination of negative socio-cultural habits like teenage marriages and early pregnancies resulting in low-birth weight babies as major risk factors for malnutrition.

Figure 1: Theory of Change



The project recognises fully that stimulating field and tree crop production alone, however well the agronomy is adjusted to the environment, will not benefit the target population without a substantial increase in the real demand for the produce, in terms of volume, prices that at least cover production costs and access to the multi-step markets. The argument hinges on the efficacy of demand pull rather than supply push. PROSPER takes a value chain approach for the selected commodities, in which the smallholders are linked into the existing private sector VCs. The key link for a primary producer group is a contract arrangement with an agribusiness or aggregator. PROSPER is oriented to facilitate such private sector arrangements by guiding and coaching the emergent groups and enterprises, developing business plans as appropriate for groups with differing levels of maturity, engaging with larger-scale VC actors (“drivers”), and arranging access to affordable financial services as needed. These mainstream business interventions are complemented with measures to include marginalised and vulnerable people and to invest in shared public socioeconomic infrastructure to improve the living conditions of whole communities.

2.3 Project Components, Outcomes and Activities

PROSPER comprises two mutually supportive components concentrated on increasing the real demand for sustainably grown produce by significant numbers of people living in poor rural communities while enhancing their capacity to meet this demand through more efficient climate-resilient agricultural practices and natural resource management to mitigate the negative impact of climate change. The intended outcomes are increased incomes, greater food and nutrition security, and improved health status.

Component 1: Development of rural institutions and socioeconomic infrastructure.

The expected component outcome is: *Improved and sustainable livelihoods in target areas supported by strengthened rural institutions and improved socioeconomic infrastructures.*

These actions are concentrated on investing in “public goods” within and for the benefit of the targeted 100,000 beneficiaries in the project areas.

Subcomponent 1.1 Capacity building of rural institutions, enterprises and households comprises a range of institution-building and skills development activities to enable target communities to take ownership of and accountability for their own development initiatives, to promote sustainable community-based NR management, to strengthen their ability to implement modern sustainable and climate resilient farming, and to adopt healthier diets.

Community mobilisation, cluster identification and planning. The project will seek to secure community interest in PROSPER and the approaches it is promoting with a series of interactive workshops and consultations at regional and district levels, starting with three regions in the first phase. The list of districts for project engagement will be finalized in discussions with local and national authorities. In each selected district, the project will identify and form clusters of neighbouring communities through a screening of NRM and socioeconomic conditions and mobilisation meetings at village level.⁸³ Where interest is strong, the community leadership decides to commit to PROSPER and opportunities exist around the target value chains, a Cluster Committee will be established to interact with the project and manage implementation.

Cluster Planning. For each participating cluster, PROSPER will facilitate the collaborative development of a bespoke community-driven Cluster Plan (CP). Each CP will set out local priorities for communal socioeconomic investments and identify potential production and related business opportunities that may be realized by RIs and MSMEs under Component 2 and/or with community resources. The CP will inform the agenda for PROSPER action in each location, concentrating on investments responding directly to climate change mitigation and adaptation, and supplementing any existing development plans of local authorities or other development partners. The CP will underpin the local three-year PROSPER-community partnership and remain with the cluster leaders and Local Authorities as a live document to guide development planning during and after implementation.

Capacitation of rural institutions and enterprises. This action entails bolstering both the governance and management structures and the technical capacities of active rural bodies, (including farmer/producer-based organisations and other economic interest groups such as VSLAs and MSMEs), and thereby their capacity to function as effective VC partners. It is envisaged as a purposeful major investment in human resource capital to develop a more conducive environment for the economic activities of the rural population. Within this drive to grow the rural economies by expanding business activity for groups, the poverty focus of

⁸³ In this document, a “cluster” is a term for several neighbouring settlements sharing natural resources. It has no administrative significance but locates the combined population in the specific land area upon which they depend and provides the project with a convenient unit for planning and operational purposes. Each cluster will include various common economic interest groups, such as Farmer Based Organisations and VSLAs, alongside non-profit community structures. To avoid confusion and excessive use of acronyms, the term Rural Institution (RI) is used here for a production-related group and Micro-, Small- and Medium-Enterprise (MSME) for any business set up for other purposes.

PROSPER entails extending the group-based opportunities to substantial numbers of vulnerable and economically marginalised people.

The programme of training, skills development and related demonstrations will be delivered by district extension services backed up by MoFA technical departments and other line ministries as well as PROSPER technical assistance. In preparation for the work, the project will reinforce the technical skills of public service frontline field staff, reorientated to a modern business approach to farming including the adoption of climate-friendly agronomic practices and natural resource remediation. The action will be launched with an awareness-raising workshop in each district on opportunities for Youth in and around the smallholder agriculture sector and the PROSPER value chains. Cluster-level surveys will identify groups and MSMEs, both pre-existing and potential, interested in and likely to benefit from capacity building. The group identification process will be gender sensitive with a special focus on women, youth and PWD.

The District Department of Agriculture (DDA) will lead an extension campaign organised around group organisational skills, climate-smart demonstrations and practical training sessions on topics such as conservation agriculture, agronomical practices and “farming as a business” tailored to the local agroecological conditions and main VCs in the cluster.

Financial literacy, orderly record keeping and the basics of business conduct will be addressed to complement instruction on the technical aspects of sustainable production. Emphasis will be placed on the need for a marketing plan for every planting: “production with a purpose”. An estimated 4,500 RIs and 800 MSMEs will be trained over the life of PROSPER. Off-farm, the training will centre on the remediation and proper management of the depleted shared NRs which are key to the livelihoods of farming communities. Best practices in soil and water conservation, tree planting and NRM, (to be supported in many target clusters with remedial works under subcomponent 1.2 below), will be shown to be beneficial to all the present and future users of the landscape. The capacity-building campaign will extend to non-producer economic interest groups who will be given training on enterprise development, particularly value addition and support services. Many will be Youth-based and start-ups stimulated by the project.

Household nutrition and healthy diet. Alongside the measures to capacitate target groups to generate and sustain income and to manage and remediate their NRs, PROSPER will deliver an inclusive community-wide nutrition and healthy diet agenda to benefit all households, in synergy with the promotion of nutrition-sensitive farming and vegetable cultivation. This initiative serves as a counterbalance to the drive to produce food for sale, shifting attention to the nutritional value of the food consumed. The action will start with a Participatory Needs Assessment in each target community and entail training on household methodologies (HJM) and domestic financial literacy for up to 2,400 selected households. The Gender Action Learning System (GALS) as part of HJM will be introduced to enhance Gender Equality and Women’s Empowerment (GEWE) in PROSPER. GALS will create the togetherness in self-selected families to develop a vision and strategy to get themselves out of poverty. A Knowledge, Attitude and Practice (KAP) study will be conducted to understand better local issues around nutrition and diet, and to serve as a baseline for the Social Behaviour Change Communication (SBCC) strategy. At the centre of nutrition activities will be a household education programme delivered through care groups by peers comprising demonstration nutrition gardens for healthy diversified diets, dedicated training on post-harvest management, nutrition education and SBCC for communities.

Subcomponent 1.2 Development of socioeconomic infrastructure. This development activity seeks to realize some of the “public goods” investments prioritized and chosen by local communities through the Cluster Planning process. Three complementary types of climate-resilient infrastructure will be eligible: *Off-farm/watershed works and hazard*

mitigation measures; Feeder roads and farm tracks; and Communal social infrastructure.

These investments aim to improve the sustainability of NR-related livelihoods and to stimulate socioeconomic advancements in the participating clusters.

The NR remediation infrastructures may comprise soil and water conservation structures, such as contour bunds, reforestation and shelterbelts, bench terraces, tied ridges, water harvesting and storage ponds, as well as climate change mitigation measures in line with local conditions. The District Assembly will undertake all procedures as appropriate to acquire/lease any land needed for construction. PROSPER envisages expanding and rehabilitating strategic road networks (feeder roads and farm tracks, culverts and small bridges), as well as shared domestic water supply structures (boreholes with hand or solar pumps), sanitation facilities and waste management systems, and alternative/green energy schemes (including resource and energy recovery from waste).

Each capital investment plan will include appropriate management, operation, maintenance and ongoing financing arrangements, with overall responsibility resting with the community where relevant. In each case, agreement will be reached between the District Assembly and the community leadership on the post-construction asset management by various community gender-balanced committees, building on previous local norms and the organisational training delivered under Subcomponent 1.1. The off-farm/watershed works and hazard mitigation infrastructure and the Feeder roads/Farm tracks will be funded 100% by the project. For water supply, the current national practice is for communities to make a cash contribution equivalent to one-year facility maintenance costs that shall be deposited in a bank account to demonstrate commitment towards long-term sustainability of the installation. For household toilet systems, the project will pay for the core element of the facility, such as the concrete slab or digni-loo unit, while the beneficiaries excavate the pit and build the superstructure with their own resources.

Off-farm/watershed works and hazard mitigation infrastructure will be community-managed. The infrastructure for NR remediation and environmental protection will be maintained by a Natural Resources and Environmental Management Committee to be established under the project. Feeder roads and farm tracks will be maintained by the Department of Feeder Roads, who will be involved in implementation to enable them to take over post-construction maintenance. Water harvesting, water supply and waste systems will be managed by a Water and Sanitation Management Team (WSMT), a statutorily recognised body operating under the auspices of the District Assembly Works Department. Water will be sold at the tap and revenue raised used to maintain the supply systems. Sanitation and waste management systems will be maintained by the concerned households. Environmental sanitation and waste disposal and recovery systems will be coordinated by the WSMT and supervised by the District Assembly Works Department. An Environmental and Social Management Framework (ESMF), which is prepared as part of the PROSPER design, will identify potential impacts of the infrastructure elements under the subcomponent and will integrate measures for addressing them.

Component 2: Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains. The expected outcome is:

Smallholders and small businesses draw greater benefits from the increasing market outlets for agricultural produce through comprehensive financial, capacity and marketing support.⁸⁴ Whereas the first component will invest in the human, physical and natural resources of the target communities, the second component is concentrated on investing in the “private

⁸⁴ Small businesses comprise enterprises and organised groups engaged in income generating activities other than primary production. The members are drawn from the same population.

goods” of the population to bring about a sustained uplift in the earning capacity of agricultural producer groups and related enterprises. The aim is to expand business activity both within the target communities and in lasting agreements with other actors in the selected VCs. The project is realistic in recognising the differing prospects of the targeted beneficiary groups and the extent to which access to finance is the main constraint they face. In this context, the PROSPER emphasis on climate-friendly business development must be balanced with social and welfare considerations for the most-disadvantaged households.

The distinction between smallholders and small operators in this analysis is important. The project’s drive to modernise agriculture in and extend the reach of the key value chains to economically marginalised communities is centred on the small-scale farmers but intended to reduce the poverty of the whole population. Alongside the capacity building of smallholders, PROSPER is geared to promote real economic opportunities for the substantial numbers of underutilised people in the same population, particularly the youth, not all of whom want to be in farming anyway. PROSPER is not intended to create jobs directly, but it is capacitated to help entrepreneurs to set up enterprises and facilitate access to appropriate finance, providing regular income for the “small operators”, the growing number of rural people not directly dependent on primary production. The project will make existing smallholders better off but will create new jobs and enduring earning opportunities for presently unemployed youth.

Subcomponent 2.1 Sustainable marketing linkages and business development. This subcomponent comprises three activities. In the first, *Value chain analysis*, PROSPER will build on the preliminary value chain analysis conducted during project design. It will examine in depth the status and characteristics of each selected national value chain—soya, rice maize, cashew, shea and poultry – and map the VC actors located close to the target communities, particularly the first stage market linkages between producers and others in the chains. The general presumption is that most smallholder farmers and their groups in remote areas have no established marketing arrangements and interact opportunistically with buyers and middlemen only as and when they harvest a surplus. The number and location of private sector operators, including larger agribusinesses working with contracted outgrowers, is not well documented. PROSPER will commission a detailed structural examination of each VC, including an estimation of the value added at each link, to provide a sound platform for project interventions.

The practical and intensive developmental activity *Promotion of linkages between producers and value chain actors* is aimed at generating enduring partnerships between producers engaged in climate-resilient farming and larger-scale agribusinesses within locally appropriate forms of robust and equitable contract relationships in the private sector.

PROSPER itself will not enter business relations with the parties at any stage. This second activity will concentrate on those eligible RIs and MSMEs that demonstrated interest and potential in the Component 1 capacity building interventions. Group eligibility for PROSPER support centres on meeting membership criteria regarding the minimum proportion of specified disadvantaged groups: women, female and male youth, PWDs and landless or near-landless households. These criteria allow for and, for practical reasons, encourage a minority of non-eligible members with productive land holdings of up to 10 ha in each group.

With the support of the Business Advisory Centres (BACs)/Business Resource Centres (BRCs) and DDAs, the project will engage with VC actors in each participating district with an information-gathering and analysis exercise. An initial assessment will be conducted of the organisational status and maturity of the targeted groups (RIs and MSME), building on the cluster profiling at project inception, (Component 1.1). Groups will be evaluated in terms of their organisational proficiency, level of capitalization, acquired skills in financial management and potential to establish business agreements with VC actors such as traders

and processors. The producer groups will be categorized broadly into two streams going forward: those deemed ready to advance to formal business arrangements with larger VC actors and external financial services; and those needing more time and coaching to consolidate their organisational and financial capacity to engage in business. This objective evaluation will be instrumental in proper targeting and sequencing to access further project support and appropriate financial services.

It is expected that 50% of those disadvantaged individuals targeted under Component 1 (50,000 people) by PROSPER will qualify for assistance under this subcomponent. The marginalised, poorer and most vulnerable RIs (composed of more than 50% members with access to land of 1 ha or less and 40% women, 30% youth and 15% people with disability) and smaller MSMEs (fewer than 9 employees) progressing from Component 1 will be offered training sessions backed up by demonstrations and events at the cluster level on climate risk mitigation, resilience and integration into business plans and on VC linkages and green bankable propositions, with particular attention to potential MSMEs dedicated to women, youth and PWDs. Meetings will raise awareness, share information, bring together potential partners, and seek to conclude RI and MSME agreements with VC actors. These beneficiaries will be assisted in the preparation of a basic Business Plan (BP) to aid the consolidation of their income-generating activities and consideration for financing, (see below).

The relatively better-off RIs that: (i) have a larger proportion of well-off beneficiaries (less than 50% of the members have access to an area of 1 ha of land and no more than 10% have access to 5-10 ha of land) and a lesser proportion of vulnerable people (40% women, 30% youth and 5% PWDs); and (ii) meet the organisational and financial literacy requirements will be offered a more advanced version of the trainings and demonstrations leading towards the establishment of business partnerships in each target district. MSMEs (with up to 29 employees) will be engaged in the same developmental processes if their business can be shown to contribute to increasing the offtake from the primary target group and extending the reach of the VCs in remote locations. These beneficiaries will be assisted in the preparation of a more advanced version of an orthodox Business Plan to support an application for external commercial credit. Those poorer RIs and MSMEs that perform well in the entry level scheme are able and encouraged to progress to this advanced level activity.

The centrepiece of the third activity, *Development of business plans*, is the generation of a sound, achievable and fully costed plan appropriate to the resources and prospects of each concerned entity. For the less mature RIs and MSMEs referred to above, a simple but realistic BP will be prepared with the support of BRCs, BACs, DDAs and PFIs as available. The Cluster Committees from Component 1.1 will be strengthened and upgraded to include PFIs and other VC actors to participate in BP development and realisation. Each basic BP should include inputs, simple tools and equipment, and whatever other cost items are required, set against a realistic estimate of returns. It should be green in design and address effectively climate and NR degradation risks and impacts. BPs could be developed by individual or multiple RIs and standalone MSMEs with the prerequisites of potential formal market linkages (supported by the project or pre-existing), proper organisational skills and an adequate level of internal capital. The BPs will be evaluated by an independent agent/service provider (to avoid elite capture or any risk of political interference) and, if acceptable, used to support a request for financial support.

For stronger RIs and MSMEs, the project will provide the opportunity for professional support by technical assistance and the BACs/BRCs in close collaboration with the PFIs in preparing a fully fledged BP and facilitating access to affordable finance, (see

Subcomponent 2.2 below).⁸⁵ The strengthened Cluster Committees will participate in devising workable local collaborative arrangements to implement the BPs. The PFIs themselves will be receiving capacity building and mentoring support from PROSPER to extend their outreach and are expected to engage fully with their potential customers early in the business planning stage. An advanced BP may include working capital as well as capital items such as inputs, mills, machinery, vehicles, tools, equipment and minor infrastructure. Each BP should be green in design and address effectively the climate change adaptation and mitigation challenges and NR degradation risks.

For PROSPER, the imperative is to promote and expand businesses operating an aggregator-primary producer model that is prepared to engage with the IFAD target RIs and related enterprises to become their interface with the market. This VC chain development is key to moving the sector on from the failing unsustainable smallholder farming systems. Such businesses are likely to comprise a substantial VC actor led by an entrepreneur “driver” and multiple producer groups under contract, all active in the private sector. The project is also geared to preparing and facilitating the BPs of larger standalone MSMEs (up to 29 employees).

Subcomponent 2.2 Access to rural financial services. The objective is to promote a savings culture among PROSPER’s beneficiaries, facilitate realization of the cluster-level Business Plans and improve enduring access to suitable financial resources for the beneficiaries to engage in profitable agribusiness. *Expected outcomes:* farmers through RIs and related local MSMEs are integrated step-by-step into the formal financial system and have lasting access to adapted and affordable financial services to develop their agribusinesses, including green investments. Such access is a necessary though not sufficient condition for rapid sectoral development.

PROSPER financial services are structured around three instruments appropriate to the various situations prevailing in rural areas as regard capacities and professionalization: (1) *Saving and Loan Groups* (VSLA model) for sparking the saving habit within communities; (2) a *Matching Grants* fund for capitalizing emergent RIs to engage in commercial agriculture and smaller MSMEs around the selected VCs and supporting food and nutrition security promotion schemes for the most vulnerable groups; and (3) a *Blended Finance Facility* operated as a refinancing facility (RF) by PFIs to ensure sustainable access to financial services for growing FIs and MSMEs, (see details in respective sections below). These instruments form a global graduation process by which beneficiaries will be able to increase their access to financing solutions over time as they build their financial and management capacities and develop their business relationships with other VC actors.

Savings mobilisation/Saving and Loan Groups. Within the array of institution building activities under Component 1 concentrated on promoting income generating activities for RIs and MSMEs, the project will emphasise the need for savings mobilisation and internal capital formation by all beneficiary groups as a prerequisite for forming sustainable businesses and, as and when appropriate, accessing external financial services.

In that context, PROSPER will support the creation and strengthening of savings and credit groups, based on the VSLA model that various IFAD-funded projects have been using with success.⁸⁶ The objectives are: to promote the saving habit and culture as a way to increase self-financing capacities for farmers and other VC actors, thus reducing their dependency on external resources; and to build internal capital in order to reduce the need for and cost of credit in the longer term. Savings and credit groups will be identified through the initial

⁸⁵ The concept of supporting “flexibility to achieve sustainability” in financing rural poor people is central to IFAD’s new Inclusive Rural Finance Policy, with less emphasis on commercial (market-priced) finance at the entry level.

⁸⁶ CARE has also had successful experience in developing the concept for women in Ghana.

profiling process, preferably with all members engaged in the same activity, such as trading or processing.

As they form the group and start transactions, members will be trained in financial literacy and banking activity management. Savings deposited will constitute initial capital that will be leveraged in subsequent investment in equipment on credit with project support. Through the financial education programme, PROSPER will encourage groups to save for future needs, such as raising their counterpart contribution to access Matching Grant funding. Participating PFIs will be trained in product development to incentivise saving. The project will help to create or strengthen 5,300 VSLAs in the targeted regions. MSMEs will be targeted by the same programme. After one year in operation, groups will be assessed on their level of savings, member participation and commitment to developing business activities. The best rated groups will qualify to apply for and benefit from the Matching Grant (MG) fund or Blended Finance Facility (BFF).

Matching Grants. As a second stage, PROSPER will operate a MG fund to capitalize less mature FIs and MSMEs toward raising their production and value addition capacities as part of a business agreement with VC actors, including nucleus farmers, offtakers, processors, traders, aggregators and agroindustry.⁸⁷ Eligibility for a MG will entail more demanding performance criteria. It is expected that participating groups will enhance their business proficiency and become more reliable in the eyes of potential VC partners. PROSPER will promote the adoption of innovative, climate smart and resilient technologies and practices to achieve financial and environmental sustainability in the context of climate change and NR depletion. The MG as a one-off support will help RIs to finance the investments described in their BP.

Three MG funding channels are proposed, for RIs, MSMEs and *Nutrition and other poverty initiatives*. The level of grant/contribution required will vary according to the VC and the profile of the beneficiaries targeted. For women groups, youth groups and PWD eligible for the *Nutrition and other poverty initiatives* funding channel, no BP will be required for small income-generating schemes focused on promoting diversification towards nutrition and food security, (for example, year-round vegetable production schemes). RIs will be assessed against the realization of their BPs and capacity to expand business with their offtaker partner. Similarly, stand-alone MSMEs will be rated on their performance against their BP. The best rated RIs and MSMEs will qualify to prepare an advanced BP with project assistance (under Subcomponent 2.1) and to access an affordable loan from PFIs through the BFF. It is expected that 30% of MG recipients will graduate to BFF financing during the project timeline.

Blended Finance Facility (BFF). The BFF will develop, test and rollout green financial products to finance advanced BPs by the more developed RIs and MSMEs that have the potential to undertake commercial agriculture with climate mitigation and adaptation interventions in partnership with other VC actors.⁸⁸ The Facility is set up to contribute to the opening up of the climate finance market in Ghana.⁸⁹ The BFF will be made available as the third financial product for eligible groups some of whom may not have accessed an MG. BFF will direct the financing only to qualified PROSPER RIs and MSMEs who present bankable BPs with climate mitigation and adaptation interventions. Under the condition of being linked formally with VC actors under contract arrangements, qualified RIs and MSMEs will gain

⁸⁷ This systematic objective selection approach and self-targeting mitigate potential elite capture of the MG fund.

⁸⁸ Only for the six main VCs: rice, maize, soya, poultry, cashew and shea.

⁸⁹ Currently, there is almost no demand for climate finance in Ghana because uptake of climate mitigation and adaptation technologies is still in its very early stages. BFF will be one of the very first funds set up by IFAD in Ghana to contribute to climate finance market development.

access to BFF credit at a blended on-lending rate for financing a more sophisticated BP that has a strong focus on adaptation and mitigation in the face of climate change impacts on small-scale agriculture. Selected RIs within the same cluster and along the same VC will be helped to come together to develop and finance an advanced BP, which could include support to the VC actor as needed, provided that the BP show clear benefits of such support to the IFAD target group taking part. Another BFF funding channel will be made available to BPs developed by small enterprises, (up to 20 employees).

The project will provide this affordable financing solution to the best RIs and MSMEs capacitated to invest on a larger scale (heavy equipment, working capital, inputs, TA) and to grasp other business opportunities. The BFF will operate as a refinancing facility (RF) beyond PROSPER closure to continue providing sustainable access to affordable finance for groups to maintain and develop their business activities with focus on climate mitigation and adaptation.

The BFF will be developed through combining/blending at least five different loanable resources with the objective to foster the development of a climate lending market.⁹⁰ The BFF will mix concessional funds from development institutions with commercial private resources. The five resources are: (i) two lines of credit from the Green Climate Fund (GCF)/IGREENFIN Phase I, with both lines at highly concessional cost of funds (0% for climate mitigation and 1% for climate adaptation activities); (ii) one line of credit from IFAD resources at a concessional cost of funds of 2%; (iii) the Association of Rural Banks (ARB) Apex Bank of Ghana and its Rural Commercial Bank (RCB) members, who will engage their own resources at a treasury bond rate (reference cost of funds) of 12%; and (iv) resources from other private sector investors and/or other development agencies, at a market cost of funds of at least 20%.⁹¹

PROSPER will support access by the above-mentioned groups to credit lines for green agricultural investments, leveraging the Inclusive Green Finance Initiative (IGREENFIN-I) under the GCF Great Green Wall Umbrella Programme (GGWUP). IGREENFIN-I will support (i) Mitigation measures for reducing/mitigating GHG emissions and (ii) Adaptation activities to strengthen climate resilience of the Project beneficiaries. Through IGREENFIN-II, PROSPER will build RIs and MSMEs' capacities to understand climate threats, identify and implement adaptation and mitigation solutions, design viable/profitable business plans, improve financial education, business management and development, and access green loans from banks and MFIs. IGREENFIN-II will also: strengthen the commitment to green and inclusive financing by financial intermediaries, MSMEs and others; contribute to climate resilience-strengthening activities in production and processing in addition to those activities required by SECAP for climate proofing; and support adaptation and mitigation activities included in beneficiaries' BPs through IGREENFIN-II adaptation Window I and IGREENFIN-I mitigation Window II respectively.

The BFF will be established at and managed by the ARB Apex Bank. The Apex Bank, as the Investment Fund Manager, will provide wholesale liquidity on blended terms to its RCB members and other interested retail financial institutions operating with reasonable outreach in the PROSPER project area, for on-lending for smallholder agricultural production and

⁹⁰ A dedicated technical team of IFAD experts, private sector independent consultants and Apex Bank bankers and economists carried out a joint exercise to determine the blended affordable on-lending rate. Details of the adopted approach to the interest rate determination are documented in a “Technical guidance note on determining the on-lending rate from blending and structuring a mixture of highly concessional and commercially-priced loans”.

⁹¹ The ARB Apex Bank in collaboration with PROSPER will look for investors and other development partners. A technical guidance note (in the PIM) shows that the average cost (wholesale rate) of the blended funds will be in the single digits (less than 10%) and the average structured interest rate applied to the clients (on-lending or retail rate) will also be in single digits. This latter is compared to the current market rate of between 26% and 28% applied by Apex Bank's network of RCBs.

MSMEs development.⁹² The Apex Bank relies on its due diligence processes to select its partner retail RCBs and other qualified FIs. This blended financing arrangement will leverage existing derisking tools, including GIRSAL's partial credit guarantee scheme, GAIP's smallholder insurance scheme and GCX market access and warehouse receipt systems. To contribute to mitigating the risk averseness of participating RCBs and other FIs, PROSPER will contribute 50% of the premium to be paid by these FIs to the GIRSAL partial credit guarantee fund for a coverage of up to 70% loss.⁹³ In addition, to encourage beneficiaries to take up high value but risky climate mitigation and adaptation interventions, PROSPER will contribute 50% of the insurance premium paid by clients to GAIP.⁹⁴ To ensure optimal participation from the clients, the agricultural insurance product solicited (weather index insurance and/or area yield index insurance) will be bundled with the credit requested from the PFIs. Among the multiple uses of the TA associated with the BFF, part will be used to address key bottlenecks, including the risk averse nature of FIs in Ghana to finance smallholder agriculture, lack of affordable liquidity in the banks and unaffordable interest rates for smallholder producers. The BFF will be developed and set up at the Apex Bank by an external expert sourced by PROSPER. At inception, BFF PROSPER will be linked with BFF AAFORD.

Partner RCBs and other retail FIs selected to channel BFF financing to beneficiaries will have to commit to offering the predetermined single digit on-lending interest rate negotiated between the Apex Bank and the project, while ensuring a reasonable return and sustainability to the participating RCBs and FIs. In addition to contributing to the credit guarantee fund and the agricultural insurance, a cash contribution of around 25% of the cost of the BP will be required from the RIIs, including a contribution from the partner offtaker, the loan being limited to the remaining amount. IGREENFIN technical assistance to RCB staff will be deployed towards climate change capacity building and financial product development. The BFF will have a dedicated unit in the ARB Apex Bank to run the day-to-day activities of the BFF in coordination with PROSPER. The BFF will be supported by the project's M&E core team.

Component 3. Project management and Policy engagement.

The expected outcome of the support component: *Efficient and timely delivery of PROSPER development results and support to evidence-based sectoral policy formulation.*

Subcomponent 3.1 Project management. PROSPER will be facilitated by an implementation support structure embedded in the host GoG agency providing liaison, physical and financial project management, reporting and accounting, proactive knowledge management and learning activities, and monitoring and evaluation functions. Details are set out in section Ka below and in the PIM.

Subcomponent 3.2 Policy engagement. PROSPER will support developing an enabling policy environment that will help achieve the project's goals and objectives through the provision of technical assistance, organising high-level round table discussions, establishing policy dialogue fora, holding conferences and advocacy as appropriate. This will be underpinned by analytical work and KM products from PROSPER, IFAD and other development partners.

⁹² For purposes of flexibility to achieve sustainability (IRF Policy 2021), the evolution and performance of the innovative blended fund will be closely monitored by a dedicated GCF/IGREENFIN TA-supported M&E Unit lodged at the Apex Bank. The dedicated M&E team will collect and analyse data that will be used to inform recommendations and/or decisions to be taken at midterm (MTR) on whether to make any adjustments to the blended fund and its operations.

⁹³ The premium is currently estimated at 1% of loan portfolio to PROSPER clients.

⁹⁴ Details of the premium determination will be worked out with GAIP in time for the beneficiaries to access BFF.

Top of the agenda are the policy ramifications of the large-scale trial of the new financial sector product “climate/green finance” as a potentially important development instrument in Ghana in coping with climate change. Without substantial incentives, the private sector is unlikely to borrow at scale to remediate NRs at landscape level that have long been neglected, under-invested, over-exploited and regarded as “free goods” by traditional agriculturalists and pastoralists. However, there are potential policy alternatives for public-private partnerships to invest in an ambitious NR recovery and reconstruction programme. Properly managed with appropriate technology, such an approach could provide employment for large numbers of people. Climate/green finance could leverage massive public investment in adaptation and mitigation if a conducive policy framework were devised.

Other areas of policy engagement include (i) focus on creating an enabling environment for investment in agriculture, including access to productive land and improving effectiveness of public expenditure in agriculture, and (ii) financial policies to enhance smallholders’ access to financial services and formalize MSMEs, strengthening their role along different value chains. Salient sectoral policy issues identified during implementation will be supported as well. The project will commission *ad hoc* studies on policy issues related to the IFAD Ghana COSOP and the scope of PROSPER.

2.4 Project geographic area of intervention and target groups

2.4.1 Geographical targeting. The geographical targeting strategy of PROSPER considers (i) high rural population, (ii) high poverty prevalence, (iii) high rate of food and nutrition insecurity, (iv) strong concentration of female and male youth and (v) presence of economic opportunities relevant to the project in each district, combined with indicators of climate vulnerability and the level of cumulative degradation of the productive NR base (particularly soil, water and trees).

The geographic area of intervention extends to eight regions in the above-mentioned Belts. All five regions in the Northern Belt, (Upper West, Upper East, Northeast, Savannah and Northern), have a high poverty head count, the highest 92% (Wa West District, Upper West). The three neighbouring regions in the Middle Belt (Bono East, Bono and Oti) have significant poverty levels and contain pockets with a markedly high poverty head count peaking at 78% Kintampo South District, Bono East. The number of regions has risen from five at Independence to the present 16, but the administrative divisions do not coincide with the environmental and socioeconomic conditions. Broadly, poverty is progressively deeper from South to North with the drier climate and increasingly challenging setting for agriculture with the negative impact of climate change. The poverty analysis underpinning the geographical targeting of PROSPER is presented in the PIM.

Food insecurity prevalence as reported is not necessarily corresponding to the poverty head count. However, the latest food security and nutrition monitoring updates of WFP (June 2020) show high level of food insecurity (moderately and severe) in the target regions, including the worst-off districts in the whole nation in terms of food insecure households. Main barriers to food security are food availability and accessibility. This affects access to micronutrients, especially for women and children.

There are significant regional disparities concerning nutrition security in Ghana. The Northern region is worst off when it comes to rural (extreme) poverty, rural child stunting (chronic undernutrition) and the prevalence of anaemia among women and children. The national child wasting (acute undernutrition) rate stands at 7%, with the highest prevalence reported for Northern region (10.9%). The presence of persons with disabilities also has regional differences. Minimum Dietary Diversity for Women (MDDW) is an indicator for the adequacy of the diet in a household. The Ghana Micronutrient Survey (2017) reports that the proportion of women (15-49 years) not meeting the MDDW score ranged from 37.9% to 42.4% in the target regions, with a high national average of 40.2%. The prevalence of PWDs by district ranges from 3.0% to 8.3% in the Northern Zone and from 7.3% to 12.4% in the Middle Belt.

Figure 2: PROSPER Intervention Areas



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

IFAD Map compiled by IFAD | 20-09-2021

2.4.2 Target groups. PROSPER's primary target groups will be: (1) the poorest and poor households, identified at inception through participatory methodologies appropriate to their circumstances; and (2) vulnerable people who have little access to assets and economic opportunities due to social exclusion, marginalization and the negative impact of climate change, targeted for participation in economic groups (RIs and MSMEs) promoted by the project.⁹⁵

The poorest households hold not more than 1 ha cultivable land or are landless whilst poor households comprise smallholders with less than 2 ha cultivable land whose livelihoods are vulnerable to NR degradation and climate change risks. Vulnerable people within the poor rural population include women (40%), unemployed female and male youth between 18-35 years (30%) and persons with disability who are economically active (5%), many being part of the poor/poorest households. Market-oriented farmers with 2-10 ha cultivable land will also benefit from project support as minority members of the eligible groups and enterprises. The combined total number is estimated at 100,000 beneficiaries. Market-oriented-farming households with more than 10 ha of arable land and larger private sector entities may participate in project activities such as capacity-building only if they offer employment or business opportunities to the primary target group.

PROSPER is highly gender sensitive. Overall, 40% women outreach will be targeted. PROSPER will address the barriers to women's participation and empowerment prevalent in the geographical context of the project. Involvement in training, educational and income generating activities will be promoted by ensuring there is enough time to reach everybody through community meetings and that activities are arranged in a way convenient to women's lives. PROSPER will include activities expected to attract women's participation, such as shea and savings and credit groups. The project will work with local media and trusted local NGOs. Gender targeting in PROSPER includes the inclusion of young women (youth) and women with disabilities (PWDs).

Both male and female unemployed youth (18-35 years) will be targeted, particularly for off-farm opportunities in MSMEs related to primary production along the selected value chains, such as the provision of mechanised land preparation services, the use of by-products for animal feed, and crop aggregation. Each MSME would have a 60% minimum membership requirement of eligible youth. PROSPER will concentrate on potential vulnerabilities affecting specific sections within the youth category, for examples: ensuring that young women have the same opportunities as their male counterparts to participate in and benefit from the project; and inclusion of female and male youth with disabilities. The steady migration of youth from the rural areas to towns, observed in many countries, is a rationale response to the lack of earning opportunities. The country cannot afford to waste the resource of unemployed young people. A key part of the remedy is supporting individual entrepreneurs in setting up any business they choose with their own resources, thereby creating authentic local employment. PROSPER is designed to be as flexible as possible in responding to the energy and aspirations of youth in setting up enterprises from the bottom up.

In sensitizing communities about the project, PROSPER will create awareness about PWDs and the differing nature of impairments. The participatory identification of households with PWDs will be carried out while developing Cluster Plans. The needs assessment of the PWDs will follow tailored approaches for capacity building, economic engagement and social protection depending on the nature of impairment. PROSPER will aim to mainstream

⁹⁵ The socially sensitive household methodologies to be employed, as recommended strongly by GASIP supervision missions, are mentioned in the *Household nutrition and healthy diet campaign* section under Subcomponent 1.1 below and in detail in the PIM.

women, youth and PWDs through their inclusion in the project-supported RIs, MSMEs and other activities.

2.4.3 Phased approach. Selection of all eight proposed PROSPER regions is based on exhaustive analysis of available poverty, food insecurity and socioeconomic data in the Northern and Middle Belts. The plan is to start with three of the poorest regions to conduct the various project-wide inception activities without over-extending Government and management resources and to align with the pattern of project financing. The project will start implementation in three adjacent regions in the Northern Belt (Calibration Phase): Northern, Upper West and either Savannah or North East. The original concept envisaged this cautious approach, with all project activities tried from inception and scaled up when modalities are shown to be effective. The project structure is flexible and phasing can and should be adjusted in the light of experience gained in the first years, particularly with lessons learned from piloting the innovative Blended Finance Facility (BFF).

The project will be scaled up to the remaining five target regions, (Replication and Scalability Phase), by the middle of the third year of implementation according to four trigger conditions: (i) filling the financing gap (currently estimated at USD 38.4 million), in part or in full from IFAD-12 (IFAD); (ii) Government meeting its PROSPER cofinancing commitments during the Calibration Phase (GoG); (iii) MoUs with implementing partners established and progressing well (PROSPER management); and (iv) satisfactory arrangements in place with regard to the operation of the Matching Grants and Blended Finance Facility (PROSPER management). The worst-case scenario if the financing gap is not filled by year three is a reduction in project scope for the remaining period. If other triggers related to overall performance are not met, this could lead to restructuring of the project to or any other possible remedies to address the underlying issues.

3 ENVIRONMENTAL, CLIMATE AND SOCIAL PROFILE OF PROSPER TARGET AREAS

3.1 Physical Environment

☞ Topography and Relief

The Ghana landscape topography is predominantly undulating and of low relief with slopes of less than 1%. Despite the gentle slopes, about 70 % of the country is subject to moderate to severe sheet and gully erosion. The highest elevation in Ghana, Mount Afadjato in the Akwapim-Togo Ranges, rises 880m above sea level. There are five distinct geographical regions:

- The low plains, stretching across the southern part of the country.
- The Ashanti Uplands, stretching from the Côte d'Ivoire border in the west to the elevated edge of the Volta Basin in the east.
- The Akwapim-Togo Ranges in the eastern part of the country consist of a generally rugged complex of folded strata, with many prominent heights composed of volcanic rock. The ranges begin west of Accra and continue in a north-easterly direction, finally crossing the border into Togo.
- The Volta Basin occupies the central part of Ghana and covers about 45 percent of the nation's total area. The basin is characterized by poor soil, generally of Voltaian sandstone.
- The high plains in the northern and north-western part of Ghana, outside the Volta Basin, consist of a dissected plateau. Soils in the high plains are more arable than those in the Volta Basin

The relief of Ghana has been influenced considerably by its geological history. The land is generally below 600m. A ridge and furrow topography is evident on Pre-Cambrian rocks reflecting the fold trends. The lowest lying areas occur in the middle Volta Basin and in a broad belt along the coast. Physiographic regions include the coastal plains, the Buem-Togo ranges, the forest dissected plateau, the southern Voltaian Plateau, the Savanna High Plains and the Gambaga scarp. The topography will largely inform the design of physical component of the Project, especially the likely small earth dams, dugouts to harvest storm waters.



Figure3: Topography and elevation for Ghana

Ghana, located along the south-central coast of West Africa, shares borders with the Republic of Togo to the east, Burkina Faso to the north and Cote d'Ivoire to the west. Ghana has an area of 239,460 km² and its territorial coastal waters extends 200 nautical miles off the coast. Ghana's territory has many water bodies, which include the Lakes Volta and Bosomtwe, which occupy 3,275 km², as well as other seasonally flooded lakes that occupy another 23,350 km²⁹⁶. The country has two broad ecological zones: forest zone, which cover 30% of the southern region and the Northern Savannah Ecological Zone, which covers the remaining, drier, 70%. More than 70% of the country's land area is dedicated to agriculture⁹⁷. Figure 2 shows the topography and elevation for Ghana.

Ghana is a lower middle-income, developing country with a stable and democratic government. In 2019, the country's population was 30.4 million people with an annual population growth rate of 2.2%. Projections suggest that the population will increase to 37.3 million people by 2030 and 51.2 million people by 2050⁹⁸.

Over 55% of Ghanaians reside in urban areas, which are expected to experience considerable growth, with 63% and 73% of the population residing in urban areas by 2030 and 2050⁹⁹. The country has a Gross Domestic Product (GDP) of US\$66.9 billion (2019) and had an annual growth rate of 6.5%¹⁰⁰. The impacts of climate change on Ghana's overall economic growth are predominantly negative (Table 1). Since 2010, economic growth has been fueled by high commodity prices and newly developed offshore oil resources. Despite a recent transition to an industry and services-oriented economy, 45% of the workforce still relies on work dependent upon rainfed agriculture.

The fisheries sector contributes 4.5% to GDP and is another important source of income and nutrition, providing livelihoods for as many as 2.2 million people. Ghana's Northern Savannah Ecological Zone, where agricultural production is centered and where poverty rates are most severe, will see increasing risks as the climate changes¹⁰¹. The risks posed by climate change in Ghana include risks for the health and agriculture sectors, primarily due to altered rainfall patterns and coastal area flooding¹⁰².

Table 1. Data snapshot: Key development indicators

Indicators

Life Expectancy at Birth, Total (Years) (2019)

64.1

Population Density (People per sq. km Land Area) (2018)	130.8
% of Population with Access to Electricity (2018)	82.4%
GDP per Capita (Current US\$) (2019)	\$2,202.10

Source: Ghana Country Profile, The World Bank Group, 2021

⁹⁶ -UNDP (2019). Climate Change Adaptation Profile – Ghana. URL: <https://www.adaptation-undp.org/explore/western-africa/ghana>

⁹⁷ -Republic of Ghana (2015). Ghana's Third National Communication to the UNFCCC. URL: <https://unfccc.int/resource/docs/natc/ghanac3.pdf>

⁹⁸ -World Bank (2019). Internal Climate Migration Profile – Ghana.

⁹⁹ -World Bank Open Data, Data Retrieved March 2021. Data Bank: Population Estimates and Projections, Ghana. URL: <https://databank.worldbank.org/data/reports.aspx?source=health-nutrition-and-population-statistics:-population-estimates-and-projections>

¹⁰⁰ -World Bank Open Data, Data Retrieved March 2021. Data Bank: World Development Indicators, Ghana. URL: <https://databank.worldbank.org/data/reports.aspx?source=2&country>

¹⁰¹ -USAID (2017). Climate Change Risk Profile – Ghana. URL: https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile%20-%20Ghana.pdf

¹⁰² -UNDP (2019). Climate Change Adaptation Profile – Ghana. URL: <https://www.adaptation-undp.org/explore/western-africa/ghana>

Drainage and Water Resources

Ghana's water resources potential is divided into surface and groundwater sources. Surface water resources are mainly from three river systems that drain Ghana, namely: the Volta, Southwestern and Coastal River systems. The Volta system is made up of the Red, Black and White Volta Rivers as well as the Oti River. The Southwestern River system is made up of the Bia Tano, Ankobra and Pra Rivers. The Tordzie/Aka, Densu, Ayensu, Ochi-Nakwa and Ochi-Amisah comprise the Coastal River systems. These river systems make up 70%, 22% and 8% respectively of Ghana's total land area of about 240,000 km². In addition to these, the only significant natural freshwater lake in Ghana is Lake Bosomtwi. This is a meteoritic crater lake located in the forest zone, with a surface area of 50 km², and a maximum depth of 78m (*i.e. Ministry of Water Resources, Works and Housing, 2007*).

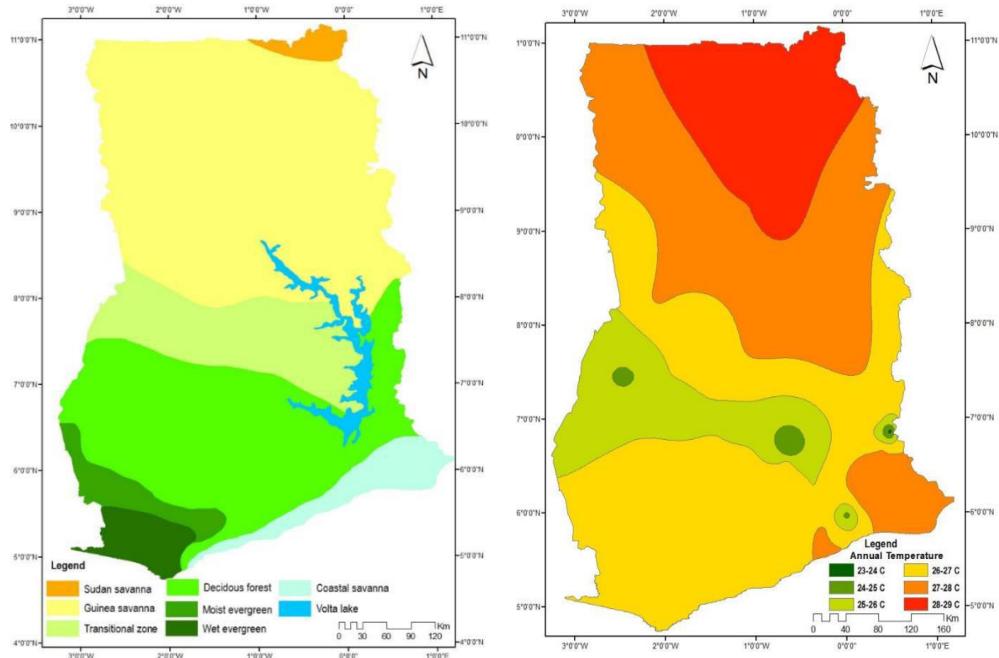
Climate and¹⁰³ Vegetation

Ghana has a warm, humid climate. Mean annual rainfall of the country is estimated at 1,187 mm. Mean annual temperatures range from 26.1 °C near the coast to 28.9 °C in the extreme north (*Figure 3A*). Annual potential open water evaporation has been estimated as ranging between 1,350 mm in the south to about 2,000 mm in the north. The actual amount of evaporation depends on several factors including water availability, vegetation cover and prevailing weather conditions among others.

There are six agro-ecological zones defined based on climate, reflected by the natural vegetation, and influenced by the soils (*Figure 3B*). Rainfall distribution is bimodal in the forest, transitional in coastal zones, giving rise to a major and a minor growing season. In the remaining two agro-ecological zones, the unimodal rainfall distribution gives rise to only one growing season. Only in some parts of the country is the climate favourable for non-irrigated agriculture. Rainfall exceeds potential evaporation during relatively short periods. Even in the southern forest zone where rainfall is at its highest, irrigation is essential for short season crops during the dry period. The unreliability of rainfall is a cause of concern. Complete crop failures can be expected in most northern areas in about one in every five years. This risk can rise to one in every three years during low rainfall periods. The lean season would be targeted by the Project to engage the poor in the public works component.

Figure 4. Typical vegetation zones (left) and average temperatures (right) in Ghana

¹⁰³ -World Bank (2021). DataBank – World Development Indicators. URL: <https://databank.worldbank.org/source/world-developmentindicators>



The ND-GAIN Index¹⁰⁴ ranks 181 countries using a score which calculates a country's vulnerability to climate change and other global challenges as well as their readiness to improve resilience. This Index aims to help businesses and the public sector better identify vulnerability and readiness in order to better prioritize investments for more efficient responses to global challenges. Due to a combination of political, geographic, and social factors, Ghana is recognized as vulnerable to climate change impacts, ranked **109** out of **181** countries in the 2020 ND-GAIN Index. The more vulnerable a country is the lower their score, while the more ready a country is to improve its resilience the higher it will be. Norway has the highest score and is ranked 1st. Figure 2 is a time-series plot of the ND-GAIN Index showing Ghana's progress.

Ghana submitted its Nationally Determined Contribution to the UNFCCC in 2016, in support of the country's efforts to realize its development goals and increase its resilience to climate change. Ghana also published its Fourth National Communication to the UNCCC in 2020. Ghana is particularly focused on increasing its resilience through the development of sustainable land use practices, including food security, climate-proof infrastructure, energy security, sustainable forest management and urban waste management. Key sectoral focus is on energy, industry, agriculture, waste, and forestry sectors to reduce the country's carbon footprint¹⁰⁵.

Ghana's generally tropical climate is strongly influenced by the West African monsoon winds, which varies slightly along with the country's varied topography. Across Ghana, annual rainfall ranges from 1,100mm in the north to approximately 2,100 mm in the southwest. The northern part of the country has one rainy season, which extends from May to September; the south has two rainy seasons: the first from April to July and the second from September to November. The dry season (December to March) brings the arid and dusty harmattan winds that blow from the Sahara Desert, and is marked by low humidity, hot days

¹⁰⁴ -University of Notre Dame (2020). Notre Dame Global Adaptation Initiative. URL: <https://gain.nd.edu/our-work/country-index/>

¹⁰⁵ -Republic of Ghana (2016). Nationally-Determined Contributions. URL: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Ghana%20First/GH_INDC_2392015.pdf

($T > 25^{\circ}\text{C}$) and cool nights ($T < 20^{\circ}\text{C}$) Average annual temperatures are approximately 27°C , with higher temperatures generally exhibited in the north and during the country's dry season. The area between the forest in the southwest and the savannah in the north is vital for domestic food production, due to more reliable rains and an extended growing season¹⁰⁶.

Ghana is highly vulnerable to climate variability and change, which continues to pose a threat to future growth and development. Rising sea levels, drought, higher temperatures, and erratic rainfall negatively impacts infrastructure, hydropower production, food security and coastal and agricultural livelihoods. Approximately $\frac{1}{4}$ of the population lives along the coast in rapidly expanding urban areas like Accra and are especially vulnerable to flooding and waterborne diseases. Drought and reduced rainfall threaten access to reliable power sources, already erratic and insufficient. The climate and socio-economic environment in semi-arid, coastal and wetland areas across Ghana make communities vulnerable to food insecurity and unstable livelihoods as well as leading to unsustainable agroecological systems, crop failure and unproductive rangelands¹⁰⁷.

Analysis of data from the World Bank Group's Climate Change Knowledge Portal (CCKP) (*Table 3*) shows historical information for 1901–2020. Mean annual mean temperature for Ghana is 27.3°C , with average monthly temperatures ranging between 25°C – 26°C (June to September) and 28°C – 29°C (February to April). Mean annual precipitation is 1,189.9 mm, with highest rainfall occurring May to September, with extremely low precipitation falling between November to January, for the most recent climatology, 1991–2020¹⁰⁸.

Table 2. Data snapshot: Summary statistics¹⁰⁹

Climate Variables:	1901–2020	
Mean Annual Temperature ($^{\circ}\text{C}$)	27.3°C	
Mean Annual Precipitation (mm) mm	1,189.9	
Mean Maximum Annual Temperature ($^{\circ}\text{C}$)	32.5°C	
Mean Minimum Annual Temperature ($^{\circ}\text{C}$)	22.1°C	
Table 3. Data snapshot: Coupled Inter-comparison Project No.5 (CMIP5) ensemble projection		
Cmip5 Ensemble Projection	2020–2039	2040–2059
2060–2079	2080–2099	
Annual Temperature Anomaly ($^{\circ}\text{C}$) +1.7 to +3.8	+0.6 to +1.5 +2.3 to +5.3	+1.2 to +2.7 (+0.9 $^{\circ}\text{C}$) (+1.7 $^{\circ}\text{C}$)
(+2.7 $^{\circ}\text{C}$)	(+3.6 $^{\circ}\text{C}$)	

¹⁰⁶ -USAID (2017). Climate Change Risk Profile – Ghana. URL: https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile%20-%20Ghana.pdf

¹⁰⁷ -USAID (2017). Climate Change Risk Profile – Ghana. URL: https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile%20-%20Ghana.pdf

¹⁰⁸ -WBG Climate Change Knowledge Portal (CCKP, 2021). Ghana URL: <https://climateknowledgeportal.worldbank.org/country/ghana/climate-data-historical>

¹⁰⁹ -WBG Climate Change Knowledge Portal (CCKP, 2021). Ghana URL: <https://climateknowledgeportal.worldbank.org/country/ghana/climate-data-historical>

Annual Precipitation Anomaly (mm)			-16.7 to +22.0	-22.2 to
+30.4	-22.9 to +38.9	-29.7 to +45.2	(+0.9 mm)	(+0.3 mm)
(+2.9 mm)	(+1.6 mm)			

Note: The table shows CMIP5 ensemble projection under Representative Concentration Pathways (RCP8.5). Bold value is the range (10th–90th Percentile) and values in parentheses show the median (or 50th Percentile).

Figure 5. Map of average annual temperature ($^{\circ}\text{C}$) (left); annual precipitation (mm) (right) of Ghana, 1991–2020¹¹⁰

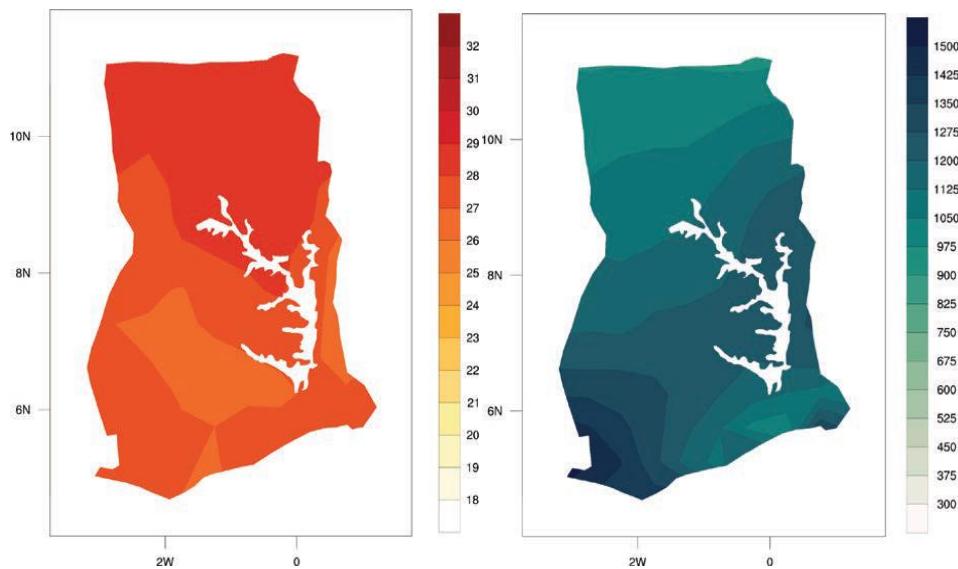


Figure 6. Annual Rainfall Patterns

¹¹⁰ -WBG Climate Change Knowledge Portal (CCKP, 2021). Ghana. URL: <https://climateknowledgeportal.worldbank.org/country/ghana>



Temperature

Temperatures in Ghana have risen by approximately 1°C since the 1960s (an average increase of 0.21°C per decade) (Figure 5). The number of very hot days ($T_{max} > 35^{\circ}\text{C}$) have increased by over 13% per year, and hot nights ($T_{min} > 26^{\circ}\text{C}$) increasing by 20% per year; with the most pronounced increase occurring between September and November¹¹¹. Overall, the rates of increase have been more rapid in the north of the country, and minimum temperatures in the southern regions (rainforest and coastal, agro-ecological areas) have increased. However, the rate of temperature rise for the middle and northern parts of Ghana (savannah zones) were +37%¹¹².

Precipitation

Precipitation in Ghana, and the West Africa region, experience a high degree of interannual and interdecadal variability. However, since the 1960s, an overall reduction in cumulative rainfall of 2.4% per decade was observed¹¹³. Changes in decadal rainfall declined in the

¹¹¹ -USAID (2017). Climate Change Risk Profile – Ghana. URL: https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile%20-%20Ghana.pdf

¹¹² -Republic of Ghana (2015). Ghana's Third National Communication to the UNFCCC. URL: <https://unfccc.int/resource/docs/natc/ghanac3.pdf>

¹¹³ -USAID (2017). Climate Change Risk Profile – Ghana. URL: <https://www.climatelinks.org/sites/default/files/asset/document/>

middle of the country, with more intense rainfall events occurring in both the north and south of the country, indicating an increase in the intensity of rainfall events and possibility of increased dry spell durations¹¹⁴.

3.2 Biological Environment

☞ Ecology

There are six broad ecological divisions in Ghana that are rich and varied. The project area has savanna ecology, which extends into the neighboring countries. It is classified into the Guinea savanna and the Sudan savanna ecological zones.

☞ Flora

The Guinea savanna covers more than 90% of the land surface area of the Northern Savanna Zone but not restricted to it. It stretches from the upper regions down south to the forest fringes. The zone includes the grassland of the north and the derived savanna on the fringes of the forests.

The interior savanna contains 1,519 vascular species known to be native or naturalised to the savanna zones of Ghana. Six species including *Ceropergia gemmifera*, *Commiphora dalzielii*, *Ptleopsis habeensis* and *Eugenia coronta* are rare in Ghana and internationally. The Guinea Savanna consists generally of fire tolerant, deciduous, broad-leaved trees interspersed in a ground flora of mainly grass, sometimes more than 1.5m high. The more important grasses of grazing value include *Andropogon gayanus* and in densely populated areas, *Diectomis fastigiata*, *Pennisetum pedicellatum* and *Loudetia togoensis* are common. Other species that occur are *Heteropogon contortus*, *Schoenfeldia gracilis* and *Aristida hordeacea*. The common trees include *Vitellaria paradoxa* (shea), *Parkia biglobosa* (dawadawa), *Piliostigma thonningli*, *Combretum glutinosum*, *Anogeissus sp.*, *Detarium p.*, *Afzelia sp.*, *Prosopis p.*, *Pterocarpus p.*, *Butyrospermum p.*, *Antiaris sp.*, *Vitex sp.*, *Pilosstigmas p.*, *Lonchocarpus p.* and *Acacia p.*

The Sudan Savanna occurs mainly in the Bawku East, Bawku West and Bolgatanga districts at the extreme northeastern corner of the Northern Savanna Zone. Its total coverage is less than 10% of the zone. The vegetation is made up generally of open savanna with short grass interspersed with relatively short low branching deciduous, broad, and thin-leave trees. The common trees include species of *Adansonia Digitata*, *Butyrospermum*, *Acacia Albida* and *Parkia Biglobosa*. The vegetation in most of the project area is characterized by a mosaic of forest, savanna, marshes and grassland. The ecology is for the most part severely altered. This is a reflection of prolonged unregulated grazing, burning, and intensive cultivation.

There are 72 forest reserves in the northern savanna made up of 23, 33 and 16 in the Northern, Upper East and Upper West in that order. They range in size from 0.4km² to 1,116 km². However, many of these areas are under pressure from subsistence farmers, livestock herders and others who engage in illegal activities in the reserves (Acheampong, 2001).

☞ Fauna

Many of the large wildlife species, which are common to tropical Africa, are also found in Ghana. They live mostly in the savanna eco-system and include *Panthera leo* (lions), *Panthera pardus* (leopards), *Loxodonta africana* (elephants), *Syncerus caffer* (buffalo), *Neotragus pygmaeus* (royal antelope) and *Colobus* and *Cercopithecus sp* (monkeys), *Hippopotamus amphibius* and *Crocodilus sp*. Snakes include pythons and poisonous ones

[2017_USAID_Climate%20Change%20Risk%20Profile%20-%20Ghana.pdf](https://unfccc.int/resource/docs/natc/ghanc3.pdf)

¹¹⁴ -Republic of Ghana (2015). Ghana's Third National Communication to the UNFCCC. URL: <https://unfccc.int/resource/docs/natc/ghanc3.pdf>

such as *Naja nelanoleuca* (cobra), *Bitis gabonica* (gaboon viper), Lizards, e.g. *Veranus niloticus*, often of striking colours are common, as are large snails, spiders and scorpions which are found in large numbers. The insect fauna is also very rich. The bird species include *Francolinus sp* (bush fowl) *Falconidae sp* (falcons, hawks, and eagles) *Psittacus erithacus* (grey parrot), *Neophron sp.* (vultures), *Guttera edouardi* (guinea fowl) and many more. Savanna fauna comprises at least 93 mammal species, about half of which can be considered to be large ones, over 350 bird species, 9 amphibians and 33 reptiles. About 13% of the 860 recorded butterfly species in Ghana are associated with the savanna. The Wildlife Conservation Regulations of 1971, (LI. 685) has schedules which contain lists of wild animals found in Ghana. Fifty-five of these are completely protected (Acheampong, 2001).

☞ **Rare or Endangered Species**

Populations of many wildlife species found in the savanna have dwindled as a result of human-induced interventions, mainly through over hunting, inappropriate agricultural practices and expansion of agricultural land, road construction and bush burning (Appendix IV). The demand for wild animal meat (popularly called bushmeat in Ghana) is ever increasing, resulting in widespread hunting. As human populations in the northern parts of the country increases, exerting enormous pressure on the finite good "land" and creating land hunger among mostly the rural people, intact savanna woodlands and secondary groves which provide wild animals refuge and source of food become fragmented and unable to hold large populations of animals (Acheampong, 2001).

☞ **Wild Animal Migration**

Wild animal movement between reserves, groves and sanctuaries in the northern savanna may be limited because these are either fragmented or interspersed with farmlands. Studies have shown that wild animals move from Togo into Ghana and vice versa, using gallery forests along the Red Volta River. It is also on record that wild animals move from the GEF supported Nazinga Game Ranch in Burkina Faso to farms on the Ghana side of the Ghana-Burkina Faso border. Communities outlying protected areas have occasionally had their farms and property destroyed by wild animals mainly elephants that move outside the reserves, particularly in the dry season, in search for water and food. In 1997 elephants invaded some villages including Widinaba, Zongoiri, Nangodi, Sekoti and Datoko, all at the fringes of the Red Volta Forest Reserve, which is a natural trail for elephants moving from Togo into Ghana. Where villages received no help from the staff of Wildlife Division in driving these animals back into the reserves (or gallery forests) they resorted to killing the rampaging animals (Acheampong, 2001).

3.3 Socio-Economic Environment

☞ **Demographic Characteristics**

As stated above, Ghana is a lower middle-income, developing country with a stable and democratic government. Ghana's population as at 2010 stood at 24,658,823, comprising 12,024,845 (48.8%) males and 12,633,978 (51.2%) females, culminating into a sex ratio of 95.2. In 2018, the county's population is estimated at 30,000,000. On regional basis, Ashanti Region is the most populous, with a population of 4,780,280, representing 19.4 percent of the country's total population followed by Greater Accra, with a population of 4,010,054 (16.3%). The least populous regions are Upper West with 702,110 persons constituting 2.8 percent of the total population and Upper East with 1,046,545 persons or 4.2 percent of Ghana's population. Population density stood at 103 persons per square kilometer in 2010. Average household size also stood at 4.4 (Ghana Statistical Service, 2012).

Most recent data show that in 2019, the country's population was 30.4 million people with an annual population growth rate of 2.2%. If this trend continues, projections suggest that the population will increase to 37.3 million people by 2030 and 51.2 million people by 2050¹¹⁵.

Ghana has a youthful population, thus consisting of a large proportion of children under 15 years, and a small proportion of elderly persons (65 years and older). The proportion of the population living in urban areas in 2010 was 50.9%, with the level of urbanization varies from region to region. Nowadays, it is estimated that over 55% of Ghanaians reside in urban areas, which are expected to experience considerable growth, with 63% and 73% of the population residing in urban areas by 2030 and 2050¹¹⁶.

In terms of ethnicity, Akans are the predominant ethnic group in Ghana (47.5%), followed by the Mole

Dagbani (16.6%), the Ewe (13.9%), Ga-Dangme (7.4), Gurma (5.7%), Guang (3.7 %), Grusi (2.5%). The Mandes (1.1%) and other groups (1.4%) form the smallest ethnic group in Ghana. For religion, 71.2 percent of the population profess the Christian faith, followed by Islam (17.6%). Only a small proportion of the population either adhere to traditional religion (5.2%) or are not affiliated to any religion (5.3%).

Literacy in Ghana is quite high, with majority (74.1%) of the population 11 years and older being literate. A large proportion (67.1%) of the population can read and write in English. About one-fifth (20.1%) can read and write in the English language only while 53.7 percent of the population can read and write in at least one Ghanaian language (Ghana Statistical Service, 2012).

☞ Indigenous Groups

Indigenous peoples, also known as first peoples, aboriginal peoples or native peoples, are ethnic groups who are the original settlers of a given region, in contrast to groups that have settled, occupied or colonized the area more recently. According to the World directory of minority and indigenous people in Ghana published by the Minority Group International, there are no groups in Ghana identified as indigenous people¹¹⁷.

In relation to DFI requirements such as IFAD, there are no groups in Ghana that will meet the definition of 'indigenous groups'¹¹⁸. As part of the implementation of PROSPER activities, it is not therefore foreseen to be any risk associated with indigenous groups that may trigger the requirement for the preparation of an Indigenous Peoples Plan (IPP) for compliance purposes.

☞ Economic Characteristics

Of population aged 15 years and older, 71.1% are economically active and of these, most are employed (94.7%). Only 5.3% are unemployed. Females in this age group are more likely to be unemployed (5.8%) than males (4.8%). Most of the regions have relatively high proportions of economically active persons. However, the highest proportion of economically active persons is in the Brong-Ahafo Region (74.4%) and the lowest is in the Ashanti region (69.4%). The proportion of unemployed population is highest in Greater Accra (7.8%) and lowest in Upper East (2.8%).

¹¹⁵ -World Bank (2019). Internal Climate Migration Profile – Ghana.

¹¹⁶ -World Bank Open Data, Data Retrieved March 2021. Data Bank: Population Estimates and Projections, Ghana. URL: <https://databank.worldbank.org/data/reports.aspx?source=health-nutrition-and-population-statistics:-population-estimates-and-projections>

¹¹⁷ - <https://minorityrights.org/>

¹¹⁸ - As per the requirements of

UN, World Bank Environmental and Social Standard (ESS7) and IFC Performance Standard (PS 7).

About two-fifth (41.2%) of the economically active population aged 15 years and older are skilled agricultural, forestry and fishery workers. About 21% is also engaged as service and sales workers while 15.2% is craft and related trade workers. Skilled agricultural, forestry and fishery work remains the dominant occupation for both males (44.9%) and females (37.7%). However, a much higher proportion of females (31.7%) than males (10.2%) is engaged as service and sales work. In Ghana, this pattern is generally the same for most of the regions, with the three northern regions (Northern, 73.3%; Upper West, 72.3%; Upper East, 70.1%) having relatively high proportions of the economically active population engaged as skilled agricultural, forestry and fishery workers.

According to Ghana Statistical Service, 2015, there is a high concentration of poverty in the North-Western part of Ghana. Though incidence in the districts of the South-Western parts is very low, there are however few districts with relatively high incidence. The concentration of poor persons is mainly observed in the northern than the southern districts of Ghana. Among the districts in Ghana, East Gonja in the Northern Region stands out as the district with most of the poor persons. Districts in the Southern Ghana on the other hand show very low concentration of poor persons, there are few districts with high number of poor persons, but these numbers cannot be compared to what pertains to districts in the northern and middle belts regions.

Aside poverty incidence rate and number of poor persons, high depth of poverty is marked in districts in the northern half of the country as well. Across the country, inequality exists but follows no pattern. The poverty mapping exercise has revealed a striking pattern that would not have been apparent.

☞ **Human Health and Safety**

In the Savannah region, the quality of life rests ultimately on the basic conditions which influence health, morbidity and mortality in the population. These factors include the biological make-up of individuals, prevalence and severity of specific diseases, social, economic, and environmental conditions as well as the availability, accessibility, affordability, and utilization of health care facilities. The safety and human health in the area is further determined by the recurrent floods and droughts regularly devastate communities, infrastructure, and livelihoods.

Women are exposed to more dangers concerning safety and health, as a result of the high rate of illiteracy, lack of specialized services (*family planning, reproductive health and maternal care*) that is reflected in the high rate of early marriages and teenage pregnancy, inadequate access to health care due to lack of health facilities (both hard and soft) and greater vulnerability in access to food and nutritional insecurity. The livestock sector poses potential threat to human health due to lack of veterinary services, quarantine Ministry of Food and Agriculture (MoFA) facilities and conflicts emanating from the activities the settler cattle herdsmen popularly. The poor health of animals has significant adverse implications for human health.

☞ **Cultural Diversity**

Members of the same ethnic group share certain beliefs, values and norms that relate to a common cultural background. The majority of the heads of households within the savannah zone are Mole-Dagbani (14.2 %) followed by Ewe (13. 3%) whilst the Mande (1.1%) constitute the smallest ethnic group. The GLSS6 show that the majority of the household heads in Upper East (67.2%), Northern (67.1%) and Upper West (65.0%) are Mole-Dagbani

and in Volta, Ewe (71.7%). Most of the household heads that belong to the Gurma ethnic group are located in the Northern (17.9%) and Volta (11.8%) regions.

There is close relationship between family and household formation with regard to the type of socio-cultural practices that are prevalent in a particular society. The family system in any human society, whether it is the nuclear or extended type, depicts the type of kinship ties that hold the people together. Labour in the agriculture sector is influenced by cultural diversity among landowners, commercial famers and settler farmers. The agricultural sector is intrinsically associated with cultural practices, especially, the inland fishing, where in most communities is practiced at only specific times by the community as a group. The cultural aspect of people in the Savannah regions play part in the processing and preservation of traditional seeds and some plant species. Most agricultural activities are based on the cultural practices that prevent biotic and climatic hazards and contribute to food security. Cultural practices are further associated with the processing of food such as the shea butter, cassava flour, starch paste, “dawadawa” among others.

4 APPLICABLE POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK GOVERNING THE SOCIAL, ENVIRONMENTAL AND CLIMATE RISKS, IMPACTS AND BENEFITS MANAGEMENT OF PROSPER ACTIVITIES

This section provides a review of the applicable policy, legal, and regulatory (PLR) framework related to the potential risks, impacts, and benefits of the implementation of PROSPER proposed activities. The PLR framework underpins how social and environmental safeguards, but also climate change issues will be gradually addressed and respected. It also compares national PLRs to applicable international law and, as appropriate, indicate institutional and operational weaknesses and capacities strengthening with recommendations to address identified gaps or weaknesses where appropriate and where indicated.

In keeping with Ghanaian law, the Environment Protection Agency (EPA) is statutorily mandated to ensure that the implementation of all undertakings do not harm the environment and/or people and the ESMF and sites specific instruments to be prepared during project implementation will be in conformity with these core requirements. IFAD will work in tandem with the EPA and associated government agencies to ensure due compliance, although nature and level of impacts and risks will be managed in a manner consistent enough with IFAD's SECAP requirements.

Overall, the legal and institutional framework for environmental and social management, as well as climate change issues in Ghana includes, among many others, all of the below:

4.1 National Framework

Table 4. National Applicable Law and Institutional Framework

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
The 1992 Constitution of Ghana	Article 36 (9): Safeguarding the national environment for posterity	Parliament is yet to enact law to regulate the property rights of spouses as provided in article 22 (2). To avoid gender discrimination against women, benefit sharing arrangements will need to be formulated in detail, especially between husbands/wives or between partners.
	Article 258: Lands and Natural Resources	
	Article 270(1): Chieftaincy	
	Article 22: Property rights of spouses	
Ghana Shared Growth and Development Agenda (GSGDA)	Vision for the Environment and Natural Resource Sector in Section 4.2.2	The GSGDA is consistent with REDD+, GCF principles and IFAD's SECAP, and objectives and goes further to acknowledge the use of strategic environmental assessment to inform decision-making and mainstreaming environment into all sectors of the economy.
Land Policies	National Land Policy, 1999	The 1999 land policy does not appear to give support to off-reserve afforestation or reforestation programs as provided under Section 4.4 (d) of ensuring
	Administration of Lands Act of 1962 (Act 123)	

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
	<p>Lands Commission (LC) Act 2008, Act 767</p> <p>Office of the Administrator of Stool Lands Act 1994, Act 481</p> <p>Land Use and Spatial Planning Bill, draft October 2011</p>	<p>sustainable land use. A review of the 1999 Land Policy to encompass off-reserve afforestation/reforestation programs, e.g. community forestry/dedicated forest etc. was recommended for REDD+ work.</p> <p>LVD Crop Compensation Rate: Current crop compensation rates do not cover timber tree species or naturally occurring trees or trees grown to provide ecosystem/environmental services.</p> <p>The Land Use and Spatial Planning Bill provides a comprehensive coverage of land use planning at national, regional and district levels relevant to REDD+, and agricultural and forestry lands. This Bill should be pushed to law.</p>
Forest Policies and Regulations	<p>1994 Forest and Wildlife Policy</p> <p>2012 Forest and Wildlife Policy</p> <p>Forestry Commission Act of 1999 (Act 571)</p> <p>Forest Ordinance of 1927 (Cap 157)</p> <p>Trees and Timber Decree of 1974 (NRCD 273)</p> <p>Trees and Timber (Amendment) Law of 1983 (PNDCL 70)</p> <p>Trees and Timber Amendment Act of 1994 (Act 493)</p> <p>Forest Protection Decree of 1974 (NRCD 243)</p> <p>Forest Protection (Amendment) Act of 1986 (PNDCL 142)</p> <p>Forest Protection Amendment Act of 2002 (Act 624)</p> <p>Concessions Act of 1962 (Act 124)</p>	<p>The 1994 Forest and Wildlife policy promotes collaborative management of forest resources with rural or forest-based communities in Ghana. The Collaborative Wildlife Management Policy (2000), gave rise to CREMAS, devolving management authority to representative community institutions to create incentives for sustainable management of natural resources at the community level. The CREMA mechanism, is an innovative natural resource governance and landscape-level planning tool that authorizes communities to manage their natural resources for economic and livelihood benefits. The aim was to encourage local people to integrate wildlife management into their farming and land management systems as a legitimate land-use option.</p> <p>The Timber Resources Management Act made it illegal for farmers and other users of off reserve lands to harvest any naturally growing trees for commercial or domestic purposes, even if it is growing on their land. It also prohibited logging</p>

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
	<p>Timber Resources Management Act of 1997 (Act 547)</p> <p>Economic Plant Protection Act of 1979</p> <p>Interim Measures for Controlling Illegal Harvesting Outside Forest Reserves of 1995</p> <p>Forest Plantation Development Fund Act of 2000 (Act 583)</p> <p>Wildlife Conservation Regulations of 1971</p>	<p>without prior authorisation from concerned groups or individuals. Under the Timber Resources Act, farmers, and land owners have legal rights to planted trees. When Timber Utilization Contracts are granted off-reserve, the contract holder is obliged to engage in a Social Responsibility Agreement (SRA) with the concerned communities in the proposed area of logging. According to the SRA, 5% of the stumpage fees should be directed to the community as compensation for damaged crops.</p> <p>However, this fee is often captured during the process and the SRAs have not been sufficiently effective in rewarding the farmers and communities for trees on their lands.</p> <p>In terms of legislation on off-reserve tree (both naturally-occurring and planted) harvesting and benefits to CREMAS, Timber Concessions Act of 1962 (Act 124) and Article 267(6) of the 1992 Constitution. Per these, the following are true for CREMAS, which are off-reserve:</p> <ul style="list-style-type: none"> •All naturally-occurring timber on any other land is vested in the President and belongs to him. •Revenue from the exploitation of naturally-occurring trees is shared between the beneficiaries in the manner and proportion outlined in Article 267(6) of the 1992 Constitution. <p>Presently, in the off-reserves, the revenue accruing from naturally-occurring trees is split 50%-50% between the State and the following (<i>i. the Stool through the Traditional Authority ii. the Traditional Authority and iii. the District Assembly</i>). One of the implications for CREMAS is that in the off-reserve areas, the farmers are currently only expected to be consulted by the Stool whenever concessions or timber rights are being given out in respect of naturally-occurring trees on their farms but are not beneficiaries of sale proceeds. If they are</p>

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
Mining and Mineral Policies	<p>National Mining Policy</p> <p>Minerals Commission Act 1993, Act 450</p> <p>Mining and Minerals Act of 2006 (Act 703)</p>	<p>to benefit, it will most likely lie largely on the Stool. This is currently being reviewed by the MLNR and the Forestry Commission.</p> <p>For planted trees (in off-reserves), in theory, plantations are currently the easiest for CREMAs to benefit from: 100% for farmers who are also landowners and 66% (two-thirds) for tenant farmers. Planted trees which are on farms is a little complicated as the farmers (or CREMA members) would still have to register individual trees in order to benefit.</p> <p>On the Wildlife Bill, the last update, as of December 2019, was that it was at the Cabinet level and is still not at Parliament.</p> <p>There are 3 ways timber can be harvested; i.e. by being issued a Timber Utilization Contract (TUC), Timber Utilization permit (TUP) and a Salvage permit. TUPs are given for large-scale harvests whilst TUC are for community/district/group harvests meant for social development. Timber harvested using a TUC (which happens to be given to community groups), cannot be sold. The best approach is to have community plantations/woodlots where they have a much better chance of profiting directly from its sale.</p> <p>Section 3 reveals that unless there is a law preventing the use of a land for some specified purpose, any land in the country may be the subject of application for a mineral right.</p> <p>Section 72 (1) gives the holder of a mining lease the upper hand with regard to the surface right. It is a source of conflict between mining firms and numerous farmers/farming communities with some surface rights within mining concessions.</p> <p>Current crop compensation rates cover known food/cash crops and some economic trees such as teak. There are no</p>

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
		rates for naturally grown trees or timber species. Shade trees in cocoa farms are usually not counted as crops and so do not attract compensation. Forestry officials salvage or harvest such timber trees in cocoa farms prior to destruction by mining companies.
Environmental Protection & Assessment Policies and Regulations	Environmental Protection Agency Act, 1994 Act 490	The environmental protection/climate change policies and regulations are consistent with the IFAD SECAP and the REDD+ principles and objectives.
	National Environment Policy, 2013	
	Environmental Assessment Regulations 1999, LI 1652	
	National Climate Change Policy, 2013	
Energy Policies	Strategic National Energy Plan	Most of the rivers identified for small and medium scale hydro power projects (Ankobra, Tano and Pra) have forests or forest reserves along sections of the river banks. Careful planning and choice of technology is required during the development of any hydro-electric dam in order to minimize inundation of forest along these water bodies. The charcoal export license manual does not indicate clearly which offences warrant suspension and which offences warrant cancellation of licence. It is silent on how long a person can be suspended and if one's licence is cancelled whether he/she is eligible for re-application.
	National Energy Policy, 2010	
	Energy Commission Act 1997, Act 541	
	Renewable Energy Act, 2011, Act 832	
Water Policy	Water Resources Commission Act, 1996 Act 522	The Water Policy factors climate change issues into consideration and is generally consistent
	National Water Policy, 2007	
	Buffer Zone Policy, 2014	
Agricultural Policy	Food and Agriculture Sector Development Policy (FASDEP)	
	Ghana Irrigation Policy, June 2010	
	Tree Crops Policy, 2012	

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
Investment, Employment, Labour, Gender, Local government,	National Employment Policy	The National Labour Act of 2003 provides information on public and private employment and sets out the objectives and procedures as well as the rights of workers. This Act will be followed by the CREMA Community Executive Management Committee for hire of a forester, community mobiliser, accountant and clerk under the Community Trust Fund; and the Forestry Commission in the hiring of labour for plantations through their co-financing.
	National Gender and Children Policy	
	Ghana Investment Promotion Centre Act 1994, Act 478	
	Local Government Act 1993, Act 462	
	Local Government Service Act, 2003, Act 656	
	Chieftaincy Act 759 of 2008	
	National Pensions Act, 2008, Act 766	
	The Labour Act 2003, Act 651	
	Workmen's Compensation Law 1987	
	Intestate Succession Law, PNDC Law 111 (1985)	
	The Children's Act 1998, act 560	
	Factories Offices and Shop Act, 1970, Act 328	
	Ghana National Fire Service Act 1997,	
	Control of Bush Fires Law of 1983 (PNDCL 46)	
	Control and Prevention of Bush Fires Act 1990	

Sector Policy	Some relevant legislation and Clauses	Possible gaps and requirements to implement PROSPER and REDD+ projects
	Ghana Meteorological Agency Act, 2004, Act 682	
	Alternative Dispute Resolution Act 2010, Act 798	

4.2.: International Framework

Ghana is a signatory to several binding international agreements on the environment and social. Among the international commitments, conventions and agreements, the following protocols interfere with the PROSPER project's activities.

Table 5: International Regulations and Conventions

INTERNATIONAL INSTRUMENTS
International Covenant on Civil and Political Rights
International Covenant on Economic, Cultural and Social
International Convention on the Elimination of all Forms of Racial Discrimination
Convention on the Elimination of Discrimination Against Women
Convention on the Political Rights of Women
Convention on the Rights of the Child
Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment
Convention on the Rights of the Child on the involvement of children in armed conflict
Convention on the Rights of the Child on the sale of children, child prostitution and child pornography
African Charter on Human and Peoples' Rights of 1981
International Labour Organization (ILO) Convention No. 169
Convention concerning Forced or Compulsory Labour
Convention on Equal Remuneration Convention
Convention on Abolition of Forced Labour Convention
Convention Concerning Discrimination in Respect of Employment and Occupation
Right to Organise and Collective Bargaining Convention
Convention on the Rights of Persons with Disabilities
Universal Declaration of Human Rights
United Nations Declaration on the Rights of Indigenous Peoples (with clarification on indigenous peoples)
United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)
Convention on Biological Diversity
United Nations Framework Convention on Climate Change - Decision 1/CP.16-Paris Agreement
Convention on the Protection of World Cultural and Natural Heritage
Convention on the International Trade of Endangered Species of Wild Fauna and Flora (CITES)
Ramsar Convention (the Convention on Wetlands of International Importance as Waterfowl Habitant)

Montreal Protocol on Substances that Deplete the Ozone Layer and its amendments
United-Nations Framework Convention on Climate Change (UNFCCC)
Vienna Convention for the Protection of the Ozone Layer
Kyoto Protocol to the UNFCCC
Convention on the Conservation of Migratory Species of Wild Animals (CMS)
African convention on the protection of nature and natural resources

4.3 IFAD policies/strategies/procedures

SECAP

The IFAD'S ten Environmental and Social Values and Principles are relevant to the PROSPER project.¹¹⁹ These social, environmental and climate values and principles are:

- Address the vulnerability and adaptation needs for the rural poor;
- Promote the sustainable use of natural resources and protection of key ecosystems;
- Focus on partnership-oriented initiatives for improved social and environmental quality;
- Address environmental and social impact assessments of agricultural and non-agricultural activities in an integrated manner;
- Incorporate externalities and minimize social costs;
- Implement participatory and inclusive approaches, with special emphasis on the role of women and youth;
- Promote the development of Indigenous Peoples and other marginalized groups (pastoralists, hunters and gatherers);
- Promote environmentally sound agricultural and manufacturing processes;
- Ensure systematic environmental, social and climate monitoring;
- Undertake Strategic Environmental, Social and Climate Assessments.
- IFAD has a Complaints Procedure to receive and facilitate resolution of concerns and complaints with respect to alleged non-compliance of its environmental, social and climate policies and the mandatory aspects of its Social, Environmental and Climate Assessment Procedures. For more information, visit the IFAD webpage: <https://www.ifad.org/web/guest/accountability-and-complaints-procedure>"; and IFAD SECAP Procedure¹²⁰.

The very objectives of the Environment, Social and Climate Impact Assessment in the IFAD's SECAP procedure are to:

- identify key linkages between rural poverty and social climate and environmental management, and assess the potential environmental, climate and social impacts of the proposed project on the natural resource base and livelihoods of communities in the project targeted areas;
- explore and identify key options for advancing environmental, climate and social sustainability; and
- recommend key opportunities to influence IFAD support towards environmental and social sustainability and climate smart development.

This ESMF is intended to provide options that would inform and thus improve decision making of PROSPER project design. The key environmental, climate change and social issues to be addressed include:

¹¹⁹ <https://www.ifad.org/documents/10180/a5e3ffcc-0ed7-4bc6-b523-39c25dc1edd8>

¹²⁰ <https://www.ifad.org/documents/10180/a36f992c-5e31-4fac-8771-404bea02796b>

- ☞ challenges faced to meet its rural development and food security goals;
- ☞ the major environmental, climate change and social issues that have a bearing on IFAD operations in the country;
- ☞ the direct impact and multiplier effect the mentioned issues have on the resilience of ecosystems and productivity of land and crops, natural resource management and rural livelihoods;
- ☞ the scale of volatility and risks resulting from climate variability and change; and
- ☞ regulatory frameworks which are related to rural development and environmental issues.

The results of the ESMF and subprojects site specific ESMPs are:

- ☞ an assessment of the environmental (and social/economic/institutional) issues particularly in the agricultural and rural development sector;
- ☞ the identification of links with relevant ongoing initiatives;
- ☞ the provision of specific measures, recommendations including opportunities to optimize adaptation, environmental and social management, and resource use; in the project area.

These results will shed light on the important opportunities available to build resilience and adaptive capacity in the project under development.

The Key Principles to guide the ESMF and the future subproject site specific ESMPs are to:

- ☞ Look beyond the traditional ‘do no harm’ safeguards approach to mitigating environmental, climate change and social risks towards ‘doing good’ through greater focus on sustainability and management of environmental (rehabilitating degraded lands, seizing adaptation/mitigation opportunities and transforming the underlying inequalities that undermine inclusive development, etc.) and social impacts and risks;
- ☞ Begin the environmental, social and climate impact assessment (ESClA) with a scoping exercise with the objectives of identifying as much as possible the relevant social, environmental, and climate change issues, so that baseline data collection and impact assessment can focus on them;
- ☞ Place strong emphasis on identifying opportunities and develop an appropriate management plan to enhance results and impacts;
- ☞ Identify and compare alternative scenarios to recommend realistic proposals for design mission consideration;
- ☞ identify capacity needs required to effectively implement the environmental and social management plan;
- ☞ Produce a realistic monitoring plan, including appropriate change management processes;
- ☞ Engage affected communities and other interested stakeholders throughout the ESClA process, from scoping to review and comment on the final draft report prior to decision-making.

4.4 The IFAD Climate Change Strategy (2010)¹²¹

The IFAD’s climate change strategy calls for IFAD to systematically respond to increasing demands from clients for technical support and innovation to better respond to climate change. This means analyzing and addressing climate change challenges during the early stages of program and project design to build resilience and adaptive capacity. The strategy goal and purpose are to:

¹²¹ https://www.ifad.org/topic/tags/climate_change/2154532

- ☞ Support innovative approaches to helping smallholder farmers build their resilience to climate change
- ☞ Help smallholder farmers take advantage of available mitigation incentives and funding
- ☞ Inform a more coherent dialogue on climate change, rural development agriculture and food security

The main strategy output is a more ‘climate-smart’ IFAD, where climate change – alongside other risks, opportunities and themes – is systematically integrated into core programmes, policies and activities:

- ☞ On operations, climate change can be – and in many cases already is – factored into IFAD’s operating model. This means incorporating it into our toolkit for the early stages of country programme and project design and for implementation.
- ☞ On knowledge, innovation, and advocacy- IFAD will explore new arrangements for sourcing climate-related expertise, share ground-level experiences to ensure their application throughout IFAD-supported programmes, and continue our work to shape the global dialogue on climate change for smallholders.
- ☞ On resource mobilization, the focus is to make IFAD’s expanding overall portfolio climate-smart. Increased supplementary climate funds will continue to be sought to deepen the integration of climate change into IFAD’s core programmes and to cover the increased cost this implies.
- ☞ On internal organization, IFAD will make greater use of existing in-house skills and people and will implement a new organizational structure that brings together and increases its staff capacity on climate and the environment. It will also continue to demonstrate the values of environmental awareness internally.

4.5 The IFAD Environment and Natural Resource Management (ENRM, 2011) Policy¹²²

Sustainable environment and natural resource management (ENRM) lies at the heart of delivering poverty reduction for rural people. Poor rural people face a series of interconnected natural resource management challenges. They are in the front line of climate change impacts; the ecosystems and biodiversity on which they rely are increasingly degraded; their access to suitable agricultural land is declining in both quantity and quality; their forest resources are increasingly restricted and degraded; they produce on typically marginal rain fed land, with increased water scarcity; energy and agricultural input prices are on a rising long-term trend; and declining fish and marine resources threaten essential sources of income and nutrition.

Environmentally damaging agricultural practices are a major driver of these challenges. There is growing concern over inappropriate approaches that drive excessive use of fertilizers and pesticides, pollution of waterways and aquifers, build-up of salt in the soil, water scarcity in major river basins, declining levels of groundwater and loss of crop biodiversity. Large parts of Africa rely on rainfed agriculture with little or non-existent use of organic or inorganic fertilizers, soil erosion and poor access to seed varieties. Weak governance, damaging policies and changing consumption patterns lie at the heart of this environmental degradation: poor rural people, including smallholders, are often disempowered and thus unable to sustainably manage natural resources; a lack of clear land access and tenure rights removes incentives to maintain natural assets; distorting trade policies and fossil-fuel and other subsidies are key drivers. The response requires an ‘evergreen revolution’, powered by

¹²² https://www.ifad.org/topic/resource/tags/climate_change/2096936

sustainable agriculture that balances crop/livestock, fisheries and agroforestry systems, so that surplus inputs are avoided, and soil fertility and ecosystem services are not compromised, while production and income are increased. Building on a growing body of evidence of the success of sustainable agriculture investments, there is a huge opportunity to further scale up multiple benefits.

IFAD's ENRM stresses that project designs present new opportunities to improve systematic integration and scaling up of ENRM of the portfolio. Such integration can help IFAD to engage in new and strengthened partnerships with specialized entities for enhanced and effective responses to issues associated with natural resources and, climate variability and change. ENRM is at the core of delivering IFAD's poverty reduction and sustainable agriculture mandate because its target groups rely directly on the environment and natural resources for their livelihoods, and client demand for support for ENRM is increasing.

Sexual Exploitation, Abuse and Harassment (SEAH) Policy: IFAD prioritises no tolerance for SEAH in its supported operations. Ensure that appropriate precautionary and remedial measures to identify/receive/remedy/report (*proportionate to level of risks and impacts*) any occurrences of potential SH/SEA risks/complaints are incorporated in both the project design and PIM (*see IFAD policy on SEAH*).

4.6 IFAD Strategy and Action Plan on Environment and Climate Change 2019-2025

This 2019-2025 Environment and Climate Change Strategy consolidates and updates IFAD's strategy and policy frameworks on environment and climate change. It aligns with [IFAD's Strategic Framework \(2016-2025\)](#) and responds to commitments to the Eleventh Replenishment of IFAD's Resources (IFAD11). This strategy consolidates and updates IFAD's strategy and policy frameworks on environment⁴ and climate change⁵ in light of internal and global policy changes over the last several years. Its preparation was led by IFAD's Environment, Climate, Gender and Social Inclusion Division.

The consultative process involved staff, Board members and partners through interviews, a survey, workshops and meetings. The process also included benchmarking IFAD's policies and practices against those of selected organizations. The strategy's purpose is to guide IFAD in addressing environment and climate change across all its policies, strategies and operations (see figure 1 below). The strategy aims to achieve the following:

The main objective underlying this strategy is enhanced resilience of smallholder farmers and rural communities to environmental degradation and climate change impacts. This will ultimately provide the foundation for more prosperous livelihoods today and in the future. IFAD will contribute to meeting this objective through the following outcomes:

- Governments are increasingly effective in integrating environment and climate change objectives and considerations into smallholder agriculture and other rural development policies and programmes.
- IFAD has the skills, capacity, partnerships, systems and resources needed to fully support governments in integrating environment and climate change into rural development policies and programmes.
- IFAD investments contribute to the generation of environmental assets and services, and global public goods that make the livelihoods of poor rural people more prosperous and resilient, and IFAD's own operations more environmentally sustainable.

- IFAD becomes a global leader in generating knowledge on managing sustainable rural livelihoods – enabling IFAD to play a greater advocacy role in supporting global efforts to build a healthy planet

5. POTENTIAL SOCIAL, ENVIRONMENTAL AND CLIMATE RISKS, IMPACTS AND PROCEDURES IN ADDRESSING PROSPER COMPLIANCE

5.1 Overview of PROSPER Environmental, Climate and Social Risks, Impacts and Opportunities

As stated earlier above, the screening of the foreseen project activities in each of the participating 8 regions, using IFAD's Environmental, Climate and Social Screening Form (see Annexes X), revealed a rather moderate environmental and social risk rating, because of the low, site-specific nature, type and magnitude of the risks which are mostly reversible and easily manageable. The Project has been rated as a **moderate risk** and classified as a **category B** operation; however, given the level of greenhouse gas emission and the likely impacts of climate on both the physical (*households, RIs, Livestock*) and biological environment (*fauna, flora, ecosystem, etc.*), the climate risks was rated as **High**. Because at this very juncture the detailed footprints of foreseen projects sub-activities mainly in component 1 (precisely subcomponent 1.2) are not yet fully defined and known, and, will definitely not so be prior to project approval or during project implementation , therefore, as respectively prescribed by the IFAD's SECAP and the applicable Ghanaian policies, standards and regulations, this **environmental and social management framework (ESMF)**¹²³ is elaborated for due diligence in addressing identified impacts, risks and opportunities/benefits.

Overall, the environmental, climate and social impacts of the PROSPER project will be positive, as well as generate series of opportunities for beneficiary communities, especially women, youth and disabled. Besides the inequality in the labour market and presence of landless farmers in the project area who will be included in project activities; the project is expected to improve agricultural land, Community ecosystem, and the natural resources upon which Ghanaian farmers work is based, and on improved climate-resilient agricultural practices as well as improved natural resources management, specifically water management technics across the northern and middle belts regions. More specifically, better functioning ecosystems, controlled transhumance practices, and a greater and collaborative stakeholders' engagement and participation, will positively affect human health, nutrition, and well-being in the long run.

Socially, the project will engage women, youth, disabled and broader vulnerable communities through a Gender Action Plan (GAP), with a great emphasis on the proactivity and diversity of RIss and MSMEs that ensures proactive mainstreaming of women, youth, and vulnerable groups into all activities, empowering them with community-driven agricultural skills and knowledge (i.e. multiplication of multifunctional kitchen gardens, maintenance of farm tracks and/or feeder roads, etc.). Livelihoods are expected to improve greatly, based on increased adaptive and climate resilient capacities and practices within the target communities of each of the participating districts. Investments in better and more adaptable machinery, equipment, technology, and high-quality agricultural inputs used on-farm and off-farm, as well as learning-by-doing technics through farmer-field schools/field demonstration practices, are expected to reduce impacts of climate change on agricultural productivity and production and yield better and more sustainable results in the northern and middle belts regions.

¹²³- As mentioned earlier, the ESMF will serve to further guide project implementing agencies and stakeholders on environmental and social assessment, mitigation of impacts, and monitoring and reporting procedures during project implementation, including grievance redress mechanisms (GRM) and other corporate institutional requirements, such as gender-based violence, sexual exploitation and abuse, child labor, workers influx, citizen engagement, etc.

Furthermore, the project is expected to positively impact government ministries and departments, facilitating improved coordination and planning of natural resources and agricultural extension services with a climate adaptation and mitigation focus. In addition to these positive impacts, the project incorporates special participatory training sessions and activities in farmer field demonstration and awareness raising campaigns, and similar formats under Component 1 to ensure that farmers are able to proactively enhance their livelihoods in ways that would not have occurred in a “without project” scenario. Under component 2, the Business Plans (subcomponent 2.1) will be encouraged to include measures to build resilience to climate impacts (supplementary irrigation, climate resilient inputs, conservation agriculture, etc) and mitigate emissions (use of renewables, solar panels, tree cultivation, regenerative agricultural approaches, reuse of crop residues and by-products as bio-fertilizer, livestock feed, biofuels, etc). Positive impacts of the project, namely increased indirect use of pesticides or incremental usage of biofertilizers will be mitigated and/or encouraged through gradual and sporadic training on Integrated Pest Management (IPM) practices to promote climate-smart and sustainable pest and pesticide management that reduces reliance on and overall use of pesticides on IFAD financed activities.

In instances where pesticide use is unavoidable, training on the safe handling of pesticides will be provided and bio-pesticides and/or bio-fertilizers will be encouraged and promoted over other more hazardous and toxic varieties; with the end-view of protecting communities livelihoods resources (water bodies and forest and multifunctional kitchen gardens, etc.). The more people will be trained on the safe and secure usages of pesticides, the greater communities will be better off and the best for reconvening such knowledge sharing. As enforced by IFAD’s protocols, there will be no pesticides procurement under PROSPER project, and highly hazardous pesticides will not be used in the project areas. The project is not focused on complex construction activities, though minor construction activities may be pursued for the sake of rehabilitating/constructing short distances feeder and/or track roads (7-9.5km of length), preparation of agricultural lands (mostly 2ha), constructing small earth dams to harvest stormwaters for the purpose of developing community-driven livelihood support activities (*i.e. fish-farming, apiculture, tree nurseries, livestock drinking points, etc.*), establishing new agro-met systems or some selected agriculture silos and/or warehouses; use of biodigesters and/or solar panel as green energy. Due to the small size of such water stations and/or community-driven infrastructures, potential negative impacts are expected to be minor and can be easily mitigated. For example, biophysical environment risks (*i.e. noise pollution during installation, air pollution due to dust, and health/safety risks, natural waste management, ...*) during installation of agro-met stations, warehouses, biodigesters, feeder and track-road, etc. are envisaged to be low-to-moderate, localized, and temporary.

5.2 Breakdown of Impacts per Component

Complementary to what is stated here above, the key findings on the screening and field assessment of PROSPER project foreseen activities’ positive and negative risks and impacts in the participating districts of the project intervention areas could be summarized as follows:

5.2.1 Positive Impacts: The project is expected to improve the natural resources and agricultural land upon which farmers work, based on improved, climate-smart and resilient agricultural practices and integrated natural resources management (*specifically water, arable land use management across the 2 belts*).

→ ***Environmentally and climate change***, improved farming and poultry practices will support better functioning ecosystems, especially in these fragile and climate-weakened regions (*i.e. Upper West and Upper East regions, Savannah region, etc.*) which, in turn, can positively affect human health, nutrition and social well-being in the long run. Investments in machinery and equipment, technology, and high-quality agricultural inputs (seed, trees, etc.), poultry productivity, both in terms of while meat and dunks for biofertilizer used on-farm and off-farm are expected to reduce impacts of climate change on and increase agricultural productivity and production in the PROSPER intervention areas. Special field demonstration sessions and activities under Component 1 will ensure that farmers are able to proactively “***do better***” than they would have done under the without-project scenario. For example, Integrated Pest Management (IPM) will be used under the project to promote sustainable pest and pesticides management that reduces reliance on (and overall use of) pesticides, and rather promote the efficient and sustainable usage of bio-pesticides, and bio-fertilizers, that are climate sensitive and smart and respectful of both human and biological environments.

Overall, the greatest positive benefits from the Value-chain crops (*i.e., Rice, Maize, Soybeans poultry, Shea and Cashew*) production perhaps lies in the ability to convert their diverse wastes to somewhat useful products. Rice wastes are excellent for charcoal briquette making which can serve as alternative source of fuel for heating in rural households. The same goes also for the animal dunks for propane gas production via biodigesters. Available literature proves to show that this will reduce the pressure on firewood and forest resources degradation, especially in the climate affected PROSPER intervention areas. The harvested rice, maize, soybean straws, as well as shea and cashew shells could also be excellent for hay/silage to feed animals, especially during the dry-season and drought periods. Poultry production not only contributes to enhance nutrition quality, generate more income for households, but the dunks used are biofertilizer/manure contributes to increase agriculture bioproduction. However, without the transformation and conversion knowhow and both technical and material resources, the waste from the abovementioned PROSPER’s VC crops will most likely become a nuisance with their concomitant effects on human and environmental health.

→ ***Socially*** speaking, livelihoods are expected to improve based on increased adaptive capacities within the target communities. Aside from considerably/gradually improving the nutrition died intake and conversely the health conditions, especially for under-5 years children, lactating new mothers and/or pregnant women, or malnourished and ill people; the project may also improve the living conditions of rural farmers, especially women and youth, both in terms of improved and affordable accessibility, but also in terms of climate smart usage of green energies (*solar panels, solar pumps for water harvesting, and biodigesters through the usage of animal dunks, and biofertilizers, etc.*).

Demonstrations under sub-component 1-1 will be designed to include such technologies. The project may also positively reduce levels of migrant labor, given that increased productivity of land may reduce the need for farmers to migrate in search of work elsewhere, be it in nearby Kumasi or Accra (*rural exodus*) or to the nearby neighboring countries (*immigration*). The drive to implement climate resilient agriculture and to establish climate smart water and natural resources management information portal is expected to positively impact government ministries and departments, facilitating improved coordination and planning of natural resources and agricultural extension services with a climate resilience and adaptation focus. The project also engages women and youth through a highly participatory and inclusive Gender Action Plan that ensures proactive mainstreaming of women into all activities, empowering women

with agricultural skills and knowledge, as well as facilitating their access to local markets and financing institutions (*i.e. income generation activities, etc.*).

5.2.2 Negative Impacts: Potential negative impacts are minor, mitigatable, and forecast only for the implementation stages.

→ From the *social perspective*, the project's inclusion of landless farmers and tenants means that there is a potential risk of changes in tenant/landlord relationships due to increase in land value resulting from increased agricultural productivity. In addition to this, and as part of the wholehearted cultural induction/education of children, in Ghana, as in many other African countries, youth often assist their respective families with farming works, and there is therefore, a risk that those youth may work beyond what is age-appropriate, unless closely monitored. Likewise, given the climate impacts on the scarce natural resources, particularly animal/livestock feeding resources, there is a high potential of conflicts between farmers and herders due to animal divagation during transhumance periods; and as a worst scenario, which occurred not long time ago given the proximity of the two major natural parks in both the Upper West and Upper East regions, wild animal divagation into parks-adjacent farming plots may result in a deadly conflict between farmers/villagers and Elephants, Hippos and other wild-ruminants; henceforth causing more food shortage and famine in the affected regions.

→ From an *environmental and climate perspective* however, increased agricultural production may result in the generation of new environmental waste from, for instance, slow-release fertilizers that do not fully breakdown/decompose. Thus, increased production is also often a trigger for increased pesticides use, even if the pesticide use is indirect and not promoted under this PROSPER project. Provision of environmentally friendly seed and planting materials for the RIs and introduction of climate-resilient crop varieties also increases the project to medium risk, even though the inputs used, and varieties recommended would be registered/certified and already in use within the country (albeit on a smaller scale). Furthermore, the social issues described here above could also result in the increased usage of bush-meat hunting for survival purpose, which down the road may result in partially if not totally depleting the stock of wildlife in the project regions. Last of all, while the project is not focused on major construction activities, minor construction activities may however be pursued for the sake of establishing small water retention infrastructure (*i.e. earth dams, boreholes, wells, etc.*), agricultural warehouses (*i.e. seed-banks, agricultural inputs, family-size silos, etc.*) or feeder and/or track roads, other community-driven infrastructure (biogigesters, improved stoves, multifunctional kitchen gardens, etc.). Due to the small size of such infrastructures, potential negative impacts are expected to be minor, mostly site-specific and easily mitigatable, for example: noise pollution during installation, air pollution due to dust, and health/safety risks during installation and/or operationalization, etc.). All these negative impacts – most of which are linked to Component 1 – are envisaged to be low-to-moderate, localized, temporary, and thus mitigatable.

5.2.3 Potential negative environmental impacts in the agricultural sector

Despite being rated as a **category B** operation with limited environmental and social impacts, current available data reveal that a few potential negative environmental impacts have been experienced in Ghana and the subregion lately. Consequently, PROSPER has already planned some interventions that may benefit to other projects and country environmental, climate and social management.

Some of the other issues are the low productivity, limited access to markets; limited access to financial services and products especially for young people and women, inefficient and limited farming technologies and unsustainable practices (*i.e., deforestation, shifting cultivation, slash and burn technics, poor rain-waters harvesting, etc.*) ; lack of gainful employment opportunities, off-season and off-farm, which spurs youth migration and decreases labour availability during the production season; local land access and user rights that require official recognition and results in gender disparities; unclear systems of succession which discourage on-farm investments; climate shocks, high rural illiteracy rates that impede adoption of improved technologies low availability of financing for family farming; and lack of capacity to efficiently deliver essential rural services such as extension advice and land registration and management.

A breakdown of the expected positive and potential negative impacts, by output (all risks being linked to solely Component 1), is provided in the following charts, based on components description from the available Project Development Report (PDR)¹²⁴:

5.2.4 Climate Change Issues

Overall, Ghana is vulnerable to increasing aridity, droughts and extreme rainfall events and flooding¹²⁵, and faces significant challenges from a changing climate change to its ecology, economy, and society. In addition, Ghana has a high degree of risk to natural hazards and disasters. The country is exposed to risks from multiple weather-related hazards, particularly those due to floods and droughts in the Northern Savannah belt. There are also risks related to coastal resources, including storm surges and coastal erosion as well as landslides, earthquakes, pest infestations, locusts' invasion, and wildfires. Between 1991 and 2011 the country experienced seven major floods. In 2010, floods in the White Volta River Basin affected hundreds of thousands of people and destroyed many of their livelihoods. Urban floods also regularly impact major cities. Current development dynamics and demographic changes in Ghana further compound the risk of disasters. These dynamics are related to rural poverty, rapid urbanization, and environmental degradation. Agriculture and livestock, two sectors most impacted by weather-related hazards, constitute the foundation of Ghana's economy and employ 55% of the economically active population¹²⁶. Climate change and variability are already affecting Ghana's water resources damage and flood exposure is projected to result in \$160 million annually, due to flooding¹²⁷. Nevertheless, in Ghana there are already farming systems practices being undertaken by smallholder farmers that conform to the principles and strategies of sustainable agriculture (*i.e. soil and nutrient management, water harvesting and use, pest and disease control, resilient ecosystems, genetic resources, multi-crops farming, etc.*).

¹²⁴ -As of September 9, 2021.

¹²⁵ -Republic of Ghana (2015). Ghana's Third National Communication to the UNFCCC. URL: <https://unfccc.int/resource/docs/natc/ghanac3.pdf>

¹²⁶ -GFDRR (2019). Ghana, Country Context. URL: <https://www.gfdrr.org/en/ghana>

¹²⁷ -UNISDR (2018). Disaster Risk Profile – Ghana. URL: <http://africa.cimafoundation.org/documents/869>

a. Overview of risks, impacts and mitigation measures per component, and ways for improvements

Table 6: Breakdown of risks, impacts and mitigation measures per Component

Risk identified	Possible negative impacts	Possible positive impacts	Mitigation measures	Responsibility
Component 1 : Development of rural institutions and socioeconomic infrastructure				
<p>The project will underline the use of water by promoting small irrigation projets (the "drop by drop" system, for instance, and other small-scale earth dams, boreholes, wells, etc.) in the lowlands, which are traditionally aimed at setting up small-scale family farming.</p> <ul style="list-style-type: none"> - Increased risk of COVID-19 contamination (<i>gathering at RIs demos plots, warehouse, workshops</i>) - Increased usage of pesticides (<i>e.g. risk of contamination at a much larger scale if not contained</i>); - soil salinisation - conflicts over the sharing of water - Poor quality maintenance of water infrastructure and waterworks (<i>leakages, floods and pollution of waterbodies, ...</i>) - Likely risk of increase degradation of deforestation and natural resources - decrease in the quantities of water available downstream 				
	<ul style="list-style-type: none"> - Social discrimination (<i>risk of non-selection and/or inclusion of gender aspects during the selection process of TOT, as well as during the certification of TOT. Even so, risk of them, not being respected when leading a group of male farmers, etc.</i>) - Poor knowledge transfer (<i>inconsistence, incomplete with local women (cultural barriers, etc.),</i>) - more effective water management - longer period during which water is available. - Unforeseen land acquisition (<i>e.g. fallow lands, increased land grab, further slash and burn and deforestation</i>) - Increased violent conflicts partly due to (i) increased transhumance trends; (ii) rapid acquisition of new lands; or as a consequence of food shortage (iii) animal divagation 	<ul style="list-style-type: none"> - Target smallholders in the lowland areas - Involve local water services in charge of water (not only extension workers) - Adopt plans to share and distribute water at the platform level - Training and awareness-raising for producers on water-saving methods available (Integrated Water Resource Management, IWRM) 	<ul style="list-style-type: none"> - EPA - DWS (District Water Services) - District and traditional authorities - Project coordination - DDA services - DWA (District Women Affairs) 	

Risk identified	Possible negative impacts	Possible positive impacts	Mitigation measures	Responsibility
Component 1 : Development of rural institutions and socioeconomic infrastructure				
The project will regenerate or equip lowland areas for Multifunctional kitchen gardening or rice, maize, cow pea farming				
	<ul style="list-style-type: none"> - increase in anthropogenic pressure on these areas - risks of conflicts arising between producers and new arrivals (agric. Migrants, etc.) - risk of conflict between crop farmers and livestock farmers; -Risks of poor maintenance of community infrastructure 	<ul style="list-style-type: none"> - crop diversification - increase in production and income - improvement in employment -improvement in farm field accessibility and transfer of harvested crops 	<ul style="list-style-type: none"> - Encourage dialogue between different parties - Support the operation of a land governance organization involving local communities and authorities; -promotion of climate-smart technics & tools 	<ul style="list-style-type: none"> - Local MOFA/DDA services - Local platforms (RI, RCB, other FIs, - Project coordination - District and traditional authorities ; - Accessibility to local markets & support services,

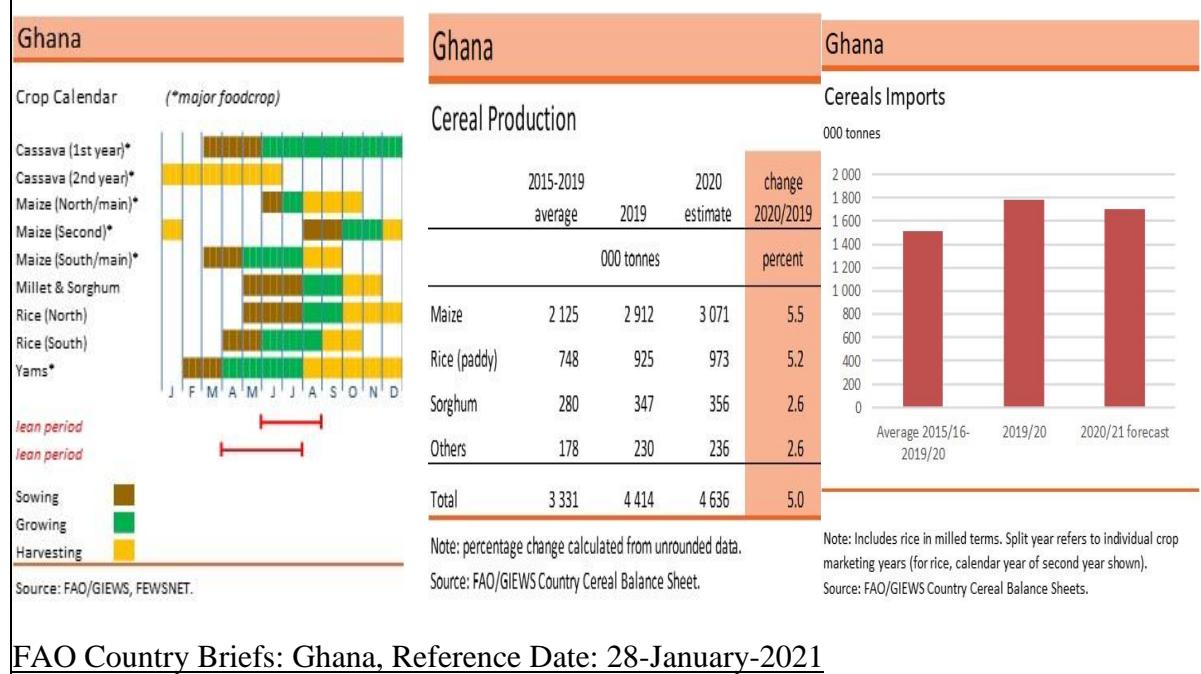
Risk identified	Possible negative impacts	Possible positive impacts	Mitigation measures	Responsibility
Component 1 : Development of rural institutions and socioeconomic infrastructure				
<p>The project plans to promote the use of multifunctional kitchen gardening seeds as well as forest plants and fruit trees (nurseries, banks/silos, ...)</p> <ul style="list-style-type: none"> -Moving new, unsuitable, or invasive species from one area to another -Poor water infrastructure and civil works quality; -Pollution risk (<i>biophysical & human environment</i>) -Accident risks during civil works (COVID-19, Ebola, physical, ...) -Risk of broader contamination of the surrounding watersheds, lands properties, air and atmosphere due to an excessive usage of uncontrolled pesticides. -Increased deforestation during water and/or road/tracks infrastructures construction/rehabilitation,.... -Risk of destruction of tree nurseries and/or agricultural crops prior to project appraisal due partially to (i) animal divagation, and (ii) transporting harvested crop out from the farm fields to the villages. 				
			<ul style="list-style-type: none"> - Agricultural diversification -Encourage native vegetables and tree species that are rural and of economic interest -Jobs creation for women, youth and vulnerable groups; -Gender Discrimination (due to frustrations generated from lack of transparency in the selection process of who the key beneficiaries could be for trainings and/or field visits or access to FIs, ...), -Risk of persistent conflict between transhuman herders and farmers due to the poor visualization of existing/proposed transhumance corridors boundaries and schedules) - lack of transparency in 	<ul style="list-style-type: none"> - MOFA/DDA/MO W/EPA technical services - RI/RCCBs and al. - Project coordination (Safeguards & Climate & Gender team) - University/Academia/Local institutes or training centers

Risk identified	Possible negative impacts	Possible positive impacts	Mitigation measures	Responsibility
Component 1 : Development of rural institutions and socioeconomic infrastructure				
The project will make sufficient amounts of seeds and local plants available	-Introduction of untested plants and seeds	-Seed issues would no longer be a problem (endogenous and sustainable)	- Ensure that specifications are strictly adhered to as regards seed and plant purchases - Involve seed and plant testing service + farming water services	- MOFA/MOW/EP A technical services - Project coordination (SCT) - RI/Grower associations - RCB/FIs services - Private Sector/Market

b. Potential Impacts and Recommended Mitigation for Agriculture public and private enterprise Projects

PROSPER selected value-chain crops such as Rice, Maize, Cowpea, Horticulture (Vegetables) and tree crops (Shea and Cashew) production, processing and marketing/commercialization are supported by the program with additional value chains including transportation, agrochemical applications, waste conversion and reuse.

Figure 7: Cereal production in 2020 estimated at above - average levels



FAO Country Briefs: Ghana, Reference Date: 28-January-2021

→ Rice, Maize, Soybean Cultivation and Processing

Rice is fast becoming the most important staple food in Ghanaian homes. Rice paddies are becoming a common sight across the Ghanaian regions and especially in the selected

PROSPER regions with floodplains and major inland valleys. Lowland and highland rice is extensively cultivated along the tidal swamps along the riverbanks, which flood during the high tide in most of the regions or just irrigated.

Although wetland rice is naturally suited to the flood plains and major river valleys, flood and drought are the major environmental and climate impact on rice. In recent past, several rice farms in Ghana, such as in southern/costal and middle belts have been lost to floods across the regions. In some cases, such as in the northern belt regions, droughts and dry spells have also been responsible for additional replanting costs as the plant wilted from low water and high temperature. Both floods and dry spells effects are often aggravated by lack of agro-climatic information on key parameters including onset and cessation of the rains and duration and time of dry spells. These impacts can be mitigated through strong collaboration with the The Ghanaian Meteorological Agency (GMA) to prepare and disseminate place-specific forecasts for farmers.

Besides being specific and most fragile amongst the selected crops, the same goes also for Maize and soybeans, and tree plants crops (Shea and Cashew) and poultry. Their cultivation also requires clearing of lands and removal of virtually all the trees and wetland plants to provide enough sunshine for the rice paddy or others crops. Rice and other VC crops production may also impact on biodiversity, especially birds and rodents' population that feed on these chosen crops' grains. These technics also lead to forest and woodland degradation through selective cutting of trees for rice parboiling by local rice processors. Particularly rice waste, which can constitute a nuisance to the environment, it has the potential of being converted into charcoal briquettes for rice parboiling and household cooking and heating purposes. Local farmers that cultivate tubercles (*Yam, Cassava, Cocoa Yam, etc.*) and other tuber crops have also found a use for rice waste in mulching. The harvested rice stems can also be used for feeding cattle. Rice, Maize, Soybean cultivation require agrochemicals and pesticides that can easily pollute surface and ground water bodies and environment. These are also vulnerable to pest infestations including stem borers which may lead to considerable loss of investment if not checked on time. The planted seeds are also important to the expected yield per hectare. Bad seeds can lead to substantial loss of investments. Thus, seeds quality control is imperative to lead to good productivity and maintain the expected return on investment.

Emission of greenhouse gases (GHG - especially methane) from rice paddies remains a strong impact on climate. Although GHG emissions from rice, maize and/or soybean fields can be reduced by periodically draining for instance the rice paddies, farmers need to be trained in so doing. Furthermore, higher temperatures can make rice sterile with low productivity. Resource conflicts between farmers and pastoralists driven by climate change and poor land governance regimes poses significant threats to investments and human security in some of the project area. Most of the regions are tackling this by building mutual understanding and confidence between the two social groups – farmers and pastoralists. This is done through expanded community security and traditional committee that include representatives from the Farmers and pastoralists communities. However, mitigation measures including avoid farming on grazing routes and fencing of farms with crops that are repellent to grazing livestock are critically important. Poultry activities are seen not so as nutrition enhancement means, but also as both an income generation activity as well as climate-friendly resource for agricultural inputs. In fact, the use of poultry waste as biofertilizer/manure greatly contribute to reduce the use of chemical fertilizer, reduce GHG

emission and increase agricultural productivity and yield ; which is beneficial to farmers, especially in the horticulture sector.

Some of the recommended mitigation measures for rice farming include:

- Encourage the farmers to take risk transfer as loss mitigation measures – encourage and assist farmers to sign on to climate risk (including flood and drought) insurance with competent Agricultural Insurance institutions.
- This will also mitigate possible losses from farm destruction occasioned by grazing livestock. A number of the projects implemented by some development partners in the regions are currently experimenting with this, but at limited scale.
- Improve collaboration with the Ghanaian Meteorological Agency to ensure production and dissemination (using existing extension vehicles and on smartphones devices) of key agroclimatic information to farmers in local languages and at frequent intervals. The agency may be empowered through setting up at least one mini-meteorological (Ag-Met) station in each participating District Department of Agriculture to improve the density of their climate stations and forecasts. Such climate stations may be set-up to include flood gauge and monitoring systems in the critical DDAs along the waterbodies.
- As much as is possible, discourage cultivation in areas that are very close to the major river systems to minimize overflow during normal flow seasons. Avoid deforestation and cultivation in areas of high biodiversity/critical habitats/wetlands significance as well as in dry highlands;
- Improve collaboration with research institutes (such as IITA, Cereal Research Institutes, etc.) to introduce early maturing/short duration rice varieties to the farmers. This may make the peak flooding or drought season coincides with post-harvest season rather than pre-harvest season as have witnessed in recent times.
- Support for Seed lab – Equip and Strengthen seed labs to be able to carry out rigorous tests on seeds to ensure that only genuine foundation seeds are used by farmers to reduce loss or poor return on investment.
- Ensure training and certification of ‘spraying gangs’ on what to apply, at what stage, and in what density, and human impacts (including need to wear personal protection gears) to safeguard the health of crops, soils, water and both the people and animals.
- Collaborate with chemicals regulatory agencies to ensure that agrochemicals are genuine (eliminate expired and banned chemicals) and in training of spraying gangs and farmers
- Encourage the use of organic manure in farms as much as possible
- Make provision for conversion of rice wastes to briquette in all the rice processing units
- Train-of trainers (TOT) for extension workers to step down training of farmers on methods for draining rice paddies in mid-season to reduce GHG emission;
- Make provision for improved modern bird scaring-equipment on farms to reduce birds impact on rice farms and maintain avian population viability
- Synchronized production timing for efficiency in bird management
- Improve community and neighborhood security arrangements by supporting dialogue and understanding between farmers and pastoralists to reduce resource conflicts
- Avoid farming along recognized grazing routes/corridors and demarcated grazing reserves

- Promote efficient land management as adaptation - Collaborate with other organizations such as USAID, FAO and government committees on Land Reform to support policy dialogue with the Regional Governments and processes to improve on land governance by instituting land regimes that ensures efficient land management and administration with agricultural land cadastration and security of tenure and ensure land capitalism through a systematic land titling and registration process.
- Work diligently with Business Coaches to better plan agricultural activities that yield real revenues,

c. Gender Equality and women and youth empowerment:

Gender inequality remains a challenge that hinders efforts to achieve inclusive human development and economic growth. In the absence of equity and equality, certain project envisioned actions could have some impacts on gender bias/relations in the given communities of the participating districts within the 8 targeted region of the northern and middle belts. Impacts could be the aggravation of tendential disequilibrium both in terms of economic power between men and women, intellectual resources, and the know-how, and between local communities traditionally established or communally called/labelled “autochthones” and newly establish immigrant communities.

Like everywhere in Africa, women in Ghana form a large proportion of the labour force in the agricultural and non-agricultural sectors (*i.e., economic, business development, etc.*) and are responsible for guaranteeing their family's nutrition and food security. The gender gap in agricultural productivity is linked to unequal access to essential agricultural inputs such as land, labour, techniques, and seeds, but also social, economic, and financial institutions and norms. These gender gaps are still very significant and that traditional gender norms remain tenacious, (*the result being that women and girls are at a disadvantage in both the public and private spheres*), including land ownerships. This limits opportunities for investments.

- ☞ **Youth:** The future of Ghana, as in any developing country around the world, depends heavily in the youth. In Ghana particularly, despite the tangible efforts the Government has been deploying lately, few young people see a future for themselves in agriculture or in the rural areas. Attracted by modernity and digital opportunities, rural Ghanaians millennials from families that are highly dependent on agriculture are migrating from rural areas to cities and abroad at an astounding rate. In most cases, once they reach their destination, they are forced to face unemployment, poor health conditions, social exclusion/inclusion, and inadequate living conditions in poor and unwelcoming slums. They are also highly vulnerable to radicalization by sex tourism, extremist/jihadist groups and human traffickers, especially in the Sahel with Boko Haram in the nearby Nigeria and Niger and Burkina Faso. Rural-urban migration can also be highly gender-biased. However, because of the size of the country, agriculture could be very attractive to the bulge of youth living in cities and working in rural areas or vice versa.
- ☞ **Resource Conflicts:** As stated earlier, climate vulnerability is hitting hard on the available natural resources, especially in the PROSPER targeted areas. Henceforth, clashes between communities and pastoralists leading to heightened human insecurity remains one of the threats that should be considered during and throughout the implementation of PROSPER. This needs to be managed through iterative stakeholder engagement and strengthening of existing informal and formal grievance redress

systems to build confidence and understanding and address any complaints raised in a fair, responsive, and timely manner. PROSPER should also pursue land governance and sustainable land management that guarantees land capitalism and security of tenure as a mitigation option to often growing land conflicts.

- ☞ **Unsafe and Non-Healthy Working Conditions:** Working conditions across sectors are generally poor in the rural areas due to relatively weak extension systems, and limited awareness of and non-compliance with health and safety standards. In the agricultural sector, the drudgery faced by most farmers makes them more vulnerable to agro-chemical toxins from wrong methods of handling and overuse of fertilizer and pesticides. In addition, due to the high level of poverty, children often help in the production and/or processing of agricultural commodities. Although cases of water-borne diseases among rice farmers are not common in the project area, concerted efforts should be made to ensure that appropriate Personal Protective Equipment (PPE) are used while engaging in these activities, that PROSPER do not foresee to finance.
- ☞ **Managing expectations and Conflicts resurgence:** Agriculture is now in the front burner of issues discussed in the whole country, more precisely in PROSPER targeted regions. Lately, there has been an increase in the awareness about agriculture and conflicts; and this has increased the expectation levels of local beneficiaries. In managing expectations, the project should ensure that the beneficiaries are enlightened and sensitized about the various similar projects and their activities in the areas. It is also important that information pertaining the PROSPER is disseminated through credible persons or media, especially reliable community leaders and focal points
- ☞ **Elite and Political Capture:** Weak and non-transparent governance structures as well as exclusionary and divisive politics poses the risks of PROSPER being hijacked or captured by the political and administrative elite to benefit only their cronies with significant impacts on the target beneficiaries. The approach which ensures that prospective beneficiaries are selected based on laid down criteria should be clearly implemented in the selected project districts and regions. Luckily, this has been taken care of in the design of PROSPER, precisely in the approach to targeting and profiling of RIs and beneficiaries
- ☞ PROSPER will not exploit children and will not hire ineligible migrant workers, defined as workers who are not legally authorized to work in the country and / or sector in accordance with national law, and when it does not conflict with other IFAD Standards. All jobs will be governed by contracts signed in accordance with national and international labor conventions. In addition, the project will promote information and sensitization of communities on the risks incurred in the event of child labor, education and training of children, education and awareness on the use of dangerous and toxic products which can have negative effects on children, the use of technologies, mechanization and agricultural and post-harvest practices to increase productivity and reduce the risks of child labor demand, improve access to the water point for avoid the work especially of young girls in collecting water but also for watering livestock, taking into account the prohibition of child labor in procurement procedures. Training and awareness-raising on gender-based violence for communities and local authorities

5.3 Assessment of Cumulative Impacts.

Overall, the cumulative project impacts are expected to be positive, as the overall PROSPER project development objective is to “*Strengthen the integration, climate resilience, social and environmental sustainability of smallholders and businesses in priority value chains in the Northern and Middle Ecological Belts taking advantage of the increased demand created by the national agro-processing strategy*”. Even with these expected, major positive impacts, the project has been classified as moderate risk (*i.e. Category B*) largely due to inequality in the labor market and presence of landless farmers in the project area who will be included in project activities.

In its efforts to improve the participating communities’ livelihoods and living conditions better off, the PROSPER Project equally carries on some important threats to the sustainability of the Environment (*biophysical and human*) in the northern and middle belts (NMB) areas. These cumulative impacts could be:

- ✓ **Agricultural pressure on the existing natural resources:** land scarcity, loss of habitats, triggered wildfires, impactful climate change effects, the practice/implementation of certain activities that require huge agricultural lands (community wood-forest, nurseries, and plantations, and likely extensive usage of pesticides in the region that will/could further weaken land fertility and affect the overall quality of the NMB areas watershed could further increase the pressure over land in the riparian territories to PROSPER interventions areas. However, the established community-led co-management of certain natural resources and forest platforms and the development of income-generation activities (tree-nurseries, agroforestry, horticulture, honey production, aquaculture, etc. could surely help diversify communities’ source of income and safeguards the arable lands; and
- ✓ **Transhumance with its downsize effects:** The NMB regions are ground for a rich livestock capital. Henceforth, recurrent conflicts between herders and farmers that oftentimes leads/results in deadly and socioeconomically detrimental outcomes. The implementation of solution-oriented measures could further exacerbate these restrictions and negatively impact herders. This was extensively discussed during the field consultation and more constructive alternatives ought to be designed and found to ease and satisfactorily facilitate the sustainable implementation of the PROSPER within the NMB regions;

5.4 Potential Impacts and Recommended Mitigation for Socioeconomic Infrastructure Projects

The following are some of the socioeconomic infrastructure projects likely to be embarked upon by the project;

1. Construction and rehabilitation of feeder/track roads, causeways and spillways
2. Construction and rehabilitation of feeder/track roads, causeways and spillways
2. Construction and rehabilitation of culverts and feeder/track roads
3. Construction and rehabilitation of processing facilities
4. Land development activities
5. Construction of small scale (earthen) dams and irrigation schemes

Some of the potential impacts of socioeconomic infrastructure development include:

- *Land Access*

Socioeconomic infrastructure will require the availability of land resource for their provision. Given the small scale and nature of construction/rehabilitation of socioeconomic infrastructure no land acquisition is foreseen, as most construction/rehabilitations of feeder

road/track road vary between 7 to 9.5 km, agricultural plots are around 2ha and other socioeconomic infrastructure are small in size mostly localize on small portions of community lands, free of any claims¹²⁸. The arrangement made for land will go a long way in determining sustainability of these socioeconomic infrastructure. Agriculture land development, irrigation activities and feeder/track roads construction or rehabilitation all may likely require some expanse of land. Some preconditions for socioeconomic infrastructure include assurance that Government or the community has guaranteed the lease of land to the beneficiaries during PROSPER lifespan, and the development of strategies for the maintenance and sustainability of the socioeconomic infrastructure by the concerned beneficiary/recipient parties.

➤ *Dust, Vibration and Noise*

The degree to which individuals perceive dust to be a nuisance depends on the frequency, intensity, and duration of a dust-generating event. Farmers usually engage in a variety of activities that uses equipment or practices that create dust. Most land clearing equipment generates some dust. Dust may also be generated as fugitive dust when fine particulates are lifted from fields, roads, buildings, and yards via air turbulence. The main mitigation measures recommended for mitigating dust including dust protection masks for machine operators and the spraying of water to reduce the level of dust during construction/rehabilitation, and/or transport activities.

Heavy equipment used for feeder/track roads construction/rehabilitation create ground movement such that cracks can occur in adjacent buildings/facilities. These can also create some form of discomfort to inhabitants of the surroundings. If any an assessment of surrounding buildings around project intervention areas, would be carried out to ascertain the level of susceptibility to cracks because of ground movement. The buildings (warehouses, workshops) are to be strengthened and compensation paid for damages where it is unavoidable. Noise from the use of equipment is also a major concern. Operators should only use authorized construction equipment that produce a moderate decibel level and consider the times when people will experience less discomfort (i.e., daytime only). Feeder road construction and/or rehabilitation contractors will be expected to produce Contractors Environmental and Social Management Plans (C-ESMP) for road construction and conduct environmental screening for the construction of farm tracks.

➤ *Deforestation*

The removal of vegetation cover and trees during construction/rehabilitation, depending on the scale and amplitude, can lead to deforestation and should therefore be avoided as much as possible. Where tree removal is unavoidable, this should be compensated by tree and vegetation replanting along the constructed roads. Trees removed from farm during land preparations should be equality compensated by planting trees in addition to hedges along the farm boundaries or nearby suitable community plots.

➤ *Surface and Ground Water Contamination*

Unchecked and unmonitored surface and underground exploration, for example during earth dams or dikes construction, can lead to ground water contamination if not properly planned. Appropriate impact studies/assessments should be conducted prior to the construction of such stormwater harvesting dams and/or irrigation structures.

¹²⁸ - The project will not invest on land development beyond 100 ha contiguous. Most of the beneficiaries have on average less than 2 ha and even combined per site, it is less than 50 ha contiguous.

➤ *Flooding/ Erosion/landslides/droughts*

Flooding, erosion, landslides and/or partial droughts can occur because of poor judgment and poor design and construction/rehabilitation practices. This is very evident during the stakeholders' discussion for this ESMF. Adequate drainage should be provided for surface water run-off in all the roads and agriculture plots to be constructed or rehabilitated.

Geotextiles and Vegetation cover should be provided for slopes and indigenous grasses and shrubs with proven ability to stop erosion should be planted in areas undergoing erosion. Unnecessary dug- outs and/or excavation of soil from its natural terrain should be avoided to reduce flooding or partial droughts. Replacement of dug out soils should be carried out when necessary.

5.5 Environmental and Socio-Economic Management Framework (ESMF)

Table 9 below provides a framework for managing the likely impacts of the various activities expected to be implemented during the key parts in the agricultural value chain, i.e.; preparation/production, processing, marketing, transport (and supply). It is important to emphasize that these management plans are relevant to the entire PROSPER project, including the MSMEs and related socioeconomic infrastructure

Table 7: Environmental and Social Management Framework (ESMF) for proposed PROSPER Agricultural Value Chain Stages

Part in value chain	Key issue Affecting the Environment	Potential impact (negative) and positive)				Monitoring & indicators		
		Environmental	Social & Institutional	Economic	Standard Mitigation Measures			
Component 1: Development of rural institutions and socioeconomic Subcomponent 1.2 Development of socioeconomic infrastructure.								
<i>Preparation/Production preparation – land clearing, cultivation, & other issues</i>								
	<input type="checkbox"/> Land	<input type="checkbox"/> Forest and Woodland loss	<input type="checkbox"/> Increased youth, women and men employment directly and indirectly	<ul style="list-style-type: none"> • Increased household income and reduced poverty 	<input type="checkbox"/> As much as possible, discourage the opening of virgin or pristine forests	<input type="checkbox"/> Number of farmers that received training on sustainable land preparation		
	<input type="checkbox"/> Land clearing, cultivation, & other issues	<input type="checkbox"/> Land & soil degradation	<input type="checkbox"/> Increased sense of pride and responsibility by participating youth and women	<input type="checkbox"/> Increased youth employment and social well-being	<input type="checkbox"/> Train farmers in sustainable land use management practices and agrochemical management empowering the use of biotechnologies	<input type="checkbox"/> Change in forests area		
	<input type="checkbox"/> Use of earth-moving machines, e.g. tractors for clearing	<input type="checkbox"/> Water and soil pollution	<input type="checkbox"/> Flooding	<input type="checkbox"/> Improved nutrition and food security	<input type="checkbox"/> Results from periodic soil and water analysis			
	<input type="checkbox"/> Use of agro-chemicals	<input type="checkbox"/> Erosion	<input type="checkbox"/> Resource conflicts	<input type="checkbox"/> Increased ability of women and youth to manage their enterprises in productive and profitable manner,	<input type="checkbox"/> Deliver training and agricultural inputs to farmers on-time to enable them to adjust and adapt their planting and harvesting methods and timing	<input type="checkbox"/> Heath, safety, social and environment manual		
	<input type="checkbox"/> Use of pesticides	<input type="checkbox"/> Bush fire	<input type="checkbox"/> Possible agitation from youth not presently included in the programme	<input type="checkbox"/> thereby increasing GDP and manpower development	<input type="checkbox"/> Adopt and enforce health, safety and environment rules at production sites	<input type="checkbox"/> Number of value chain enterprises around soil testing and agrochemicals management		
	<input type="checkbox"/> Use of pesticides	<input type="checkbox"/> Biodiversity loss	<input type="checkbox"/> Waste management issues	<input type="checkbox"/> Social exclusion of women and youth and PLWD	<input type="checkbox"/> Encourage full exploration of the value chain including soil testing and agrochemical services	<input type="checkbox"/> Stakeholder Engagement Plan		
	<input type="checkbox"/> Use of pesticides	<input type="checkbox"/> GHG emission	<ul style="list-style-type: none"> • Use of child labour 	<input type="checkbox"/> Increased import substitution especially of rice. Maize, cowpea, but also shea and cashew products.	<input type="checkbox"/> Conflict resolution committee meetings			
	<input type="checkbox"/> Use of pesticides	<input type="checkbox"/> Drought	<ul style="list-style-type: none"> ▪ Possible loss of cultural 	<input type="checkbox"/> But increasing associated environmental and social costs	<input type="checkbox"/> Lists of approved projects and their beneficiaries			

Part in value chain	Key issue Affecting the Environment	Potential impact (negative) and positive)			Standard Mitigation Measures	Monitoring & indicators			
		Environmental	Social & Institutional	Economic					
Component 1: Development of rural institutions and socioeconomic									
Subcomponent 1.2 Development of socioeconomic infrastructure.									
<i>Processing</i>	<input type="checkbox"/> <i>Use of processing machine</i> <i>Parboiling of Rice</i>	<input type="checkbox"/> Waste generation <input type="checkbox"/> Air, water and land pollution <input type="checkbox"/> GHG emission from machines <ul style="list-style-type: none"> • Use of wood for heating/parboiling 	<input type="checkbox"/> Unsafe and non-healthy working conditions <input type="checkbox"/> Possible use of child Labourers <ul style="list-style-type: none"> • Migration influx to processing sites 	<input type="checkbox"/> Increased sales and household income <input type="checkbox"/> Increased youth employment and social well-being <input type="checkbox"/> Improved processing capacity, value additions and value chain development <input type="checkbox"/> Improved nutrition and food security <input type="checkbox"/> Increased ability of youth to manage their enterprises in productive and profitable manner, thereby increasing GDP and manpower development <input type="checkbox"/> Increased import substitution of Rice <input type="checkbox"/> But increasing associated environmental and social costs	<input type="checkbox"/> Encourage the use of renewable and low-carbon energy sources during processing operations <input type="checkbox"/> Adopt health, safety, and environment rules at processing sites <input type="checkbox"/> Train farmers in sustainable agro-processing practices to reduce environmental, climate and social risks and impacts <input type="checkbox"/> Step up knowledge management and information dissemination to showcase the achievement of the project	<input type="checkbox"/> Number of operators adopting renewable low carbon technologies <input type="checkbox"/> Number of enterprises established focusing on processing <input type="checkbox"/> Number of entrepreneurs adopting sustainable processing operations <input type="checkbox"/> Knowledge management/communication plans, stakeholder meeting reports, communication project flyers/leaflets			

Part in value chain	Key issue Affecting the Environment	Potential impact (negative) and positive)			Standard Mitigation Measures	Monitoring & indicators
		Environmental	Social & Institutional	Economic		
Component 1: Development of rural institutions and socioeconomic						
Subcomponent 1.2 Development of socioeconomic infrastructure.						
<i>Marketing</i>	<input type="checkbox"/> Construction of socioeconomic infrastructure	<input type="checkbox"/> Dust, smoke, noise, ground movement / vibration <input type="checkbox"/> Deforestation <input type="checkbox"/> Water pollution <input type="checkbox"/> Flooding and erosion from poorly constructed culverts, roads, etc.	<input type="checkbox"/> Better access to the Local market and FIs <input type="checkbox"/> Better access to production and processing sites by supervisory agencies <input type="checkbox"/> Improved access to rural communities <input type="checkbox"/> Conflict over land and demand for compensation where infrastructure is to be constructed	<input type="checkbox"/> Improved market penetration <input type="checkbox"/> Access to market information and market linkage and support services <input type="checkbox"/> Strengthened market value chain, with more profitable enterprises <input type="checkbox"/> Improved storage and reduced waste and postharvest losses	<input type="checkbox"/> Use construction equipment with moderate decibel during construction <input type="checkbox"/> Develop/adopt and enforce health, safety and environment rules at construction sites <input type="checkbox"/> Lawful and willing consent of community/or individuals on land site for socioeconomic infrastructure Roads must be constructed with drainages Develop contingency plans for dykes/spillways to manage unexpected circumstances. •	<input type="checkbox"/> Observation of construction equipment for dust, noise, smoke, vibration, etc. <input type="checkbox"/> Work inspection report on the environmental quality of market infrastructure <input type="checkbox"/> Health, safety and environment plans <input type="checkbox"/> Copy of consent of community /individuals on market infrastructure land site

Part in value chain	Key issue Affecting the Environment	Potential impact (negative) and positive)			Standard Mitigation Measures	Monitoring & indicators
		Environmental	Social & Institutional	Economic		
Component 1: Development of rural institutions and socioeconomic						
Subcomponent 1.2 Development of socioeconomic infrastructure.						
<i>Transportation</i>	<i><input type="checkbox"/> Use of motorized and heavy transportation machines</i>	<input type="checkbox"/> GHG emission from transportation <input type="checkbox"/> Influx of rural Migrant workers to agri- enterprise sites and processing areas <input type="checkbox"/> Increased number of service providers, which boost the economy	<input type="checkbox"/> Increased ownership of motorized and other transport system <input type="checkbox"/> Increased number of service providers <input type="checkbox"/> Increased GDP <input type="checkbox"/> But increasing associated	<input type="checkbox"/> Organize transport entrepreneurs into an association for easy management <input type="checkbox"/> Develop a code of conduct, and health, safety, and environment regulation for transport operators	<input type="checkbox"/> Code of conduct for transport operators <input type="checkbox"/> Minutes of meetings of transport operators' association	

5.6 Analysis of Alternatives

The traditional approach to PROSPER selected VC crops (i.e. *Rice, Maize, Cowpea, Horticulture (Vegetables) and shea and cashew*) in Ghana is to reuse inputs and make use of available cultural technics with little concern for quality control. Based on the analysis of the approach thus far, the outcome has been to focus on high-yielding varieties. Farmers will be encouraged to abandon the predominant agronomic practices to improved, efficient and climate-smart agronomic practices as enumerated on Table 9.

Table8: Commodity Value-Chain + Household Level Activities

Commodity Value chain	Predominant Practice	Climate Smart Agriculture practices
Rice, Maize, Soybeans	<ul style="list-style-type: none"> • Recycling of paddy and use of untested seeds • Wrong application of soil amendments and agrochemicals • Use of low yield and long gestation varieties • Fertilizer spreading • Tillage operations remove all trees • Use of inorganic crop protection chemicals • No risk transfer measures to mitigate losses • No draining at mid-season increases methane emission • Farming activities not guided by agro-climatic information • Waste poorly managed and constitute nuisance • Wood for parboiling causing woodland and forest degradation • Limited to rainy season farming • Use wood for parboiling 	<ul style="list-style-type: none"> • Encourage paddy transplanting and tested seeds from certified seed producers/suppliers • Encourage soil sample analysis and use of biofertilizers instead • Train and certify spraying gangs on the adequate usage of biofertilizer/biopesticides • Encourage the adoption of improved, pest resistant and early maturing varieties • Encourage deep application of bio-urea at 6cm-10cm depth • Encourage minimum or zero tillage • Encourage the use of organic crop protection solutions like Neem oil and other bionutrients • Encourage carbon sequestration activities • Fence farms with hedges and trees to reduce animal intrusions • Encourage farmers to sign-on to agric insurance for no greats and risk transfer • Strengthen collaboration to ensure Farming activities is guided by agro-climatic information for better timing (i.e. with GAMA) • Train farmers to drain paddies at mid-season to reduce methane emission • Value chain to be created for waste conversion to briquette and greener energy

Commodity Value chain	Predominant Practice	Climate Smart Agriculture practices
		<ul style="list-style-type: none"> • Parboiling to be done with briquettes and other alternative efficient energy sources such a biogas from animal dunks • Construct small earth dams to harvest stormwaters and use of drip irrigation scheme for dry season farming • Train farmers on construction of rainwater harvesting structure to retain water for dry season farming (<i>i.e., fish farming and cattle drinking points</i>) • Encourage farmers to use briquettes and clean cooking stoves, such as biogas from biodigesters supplied by animals.
Vegetables (Not a VC but a HH level Activity)	<ul style="list-style-type: none"> • Use of spent and low-quality stems • Wrong application of soil amendments and agrochemicals • Use of low-yield varieties and long gestation • Fertilizer spreading • Tillage operations remove all trees • Use of inorganic crop protection chemicals • Waste poorly managed and constitute nuisance in environment • No risk transfer mechanism • Production activities not guided by agroclimatic information • Trees and woods on land totally removed • Poor application of technology for erosion and flooding control 	<ul style="list-style-type: none"> • Encourage out grower schemes • Encourage soil sample analysis • Encourage the adoption of improved varieties • Encourage ring application at 6cm-10cm depth • Encourage minimum or zero tillage • the use of organic crop protection solutions like neem oil or bio-nutrients • Encourage carbon sequestration activities • Value chain to be created around waste conversion to animal feed • Wastewater to be properly channelled from to reduce odour • Farmers to be encourage to sign on to agric insurance for no regrets and risk transfer mechanism • Strengthen collaboration to ensure Farming activities is guided by agro-climatic information for better timing

Commodity Value chain	Predominant Practice	Climate Smart Agriculture practices
		<ul style="list-style-type: none"> • Encourage agroforestry to maintain tree on farms, and replant trees along farm borders • Adopt techniques including terracing, bunding and contouring to control erosion and flooding in inland areas • Encourage conservation agriculture to reduce soils erosions and infertility
Shea and Cashew Trees	<ul style="list-style-type: none"> • Use of endemic seed with low productivity • Poor management of plants • Untimely replantation of plants • Poor usage of agrochemicals • Waste poorly managed and constitute nuisance in environment • No risk transfer mechanism • Production activities not guided by agroclimatic information • Unrationalized cutting of tree for wood fuel or de-shelving 	<ul style="list-style-type: none"> • Adoption of climate smart and productive varieties • Bio fertilizer for greater productivity • Climate smart processing of trees and growth monitoring; • Use of shorter productivity cycle • Sustainable waste management • Use of biogas to de-shell and process • Use of shells as animal feeding supplements • Well-rounded VC practices
Poultry	<ul style="list-style-type: none"> • Heat Stress (HS) • Poor management of facilities • Untimely replenishment of stocks/rupture • Poor usage of feeding ratios • Poor waste management and constitute likely nuisance to the environment • Unwelcoming/unbearable smell on site and in the vicinity of poultry farming • GHG production • Production activities not guided by scientific information • Water Pollution • Poor poultry farming with negative impact on the ecosystem 	<ul style="list-style-type: none"> • Provision of quality water services • Good feeding stations and grains • Use of proper stockage system • Good ventilation to reduce HS. <p>Appropriate slaughtering stations Adequate waste management yield to transfer into agriculture fields (bio-fertilizer)</p>

5.7 The Without Project Scenario:

As stated above, the overall vision of this project is to sustainably improve the livelihood and living conditions of Ghanaians farmers active in the participating districts of the NMB regions faced with growing and constraining climate change factors. The project area context speaks volumes of the difficult conditions farmers are currently faced with in the project intervention areas. PROSPER contribution is foreseen to bring way more positive benefits than adverse risks and impacts, which, as determined by its **moderate to low safeguards risk rating** and **category B** stance as mostly site specific and easily manageable, albeit its high-risk climate change vulnerability. Consequently, the without project contribution will most likely further increase the current constraining factors in a context of impactful climate change regime and hinder more the future of these beneficiary farmers livelihoods and living conditions. Moreover, this will add more difficulties on the Government's efforts to alleviate rural poverty, especially in this NMB regions; which altogether will result in more rural exodus and immigration, especially from the working forces (youth); transformational changes from farmers to other more affordable work skills (*mechanics, trader, security agents, porters, informal income generating businessmen/women, etc.*); hence, further and further depleting the Agricultural wide-sector from its main workforce. As for the biophysical environment, available arable land, scattered natural resources, as well as quality of water and grassland will be further shrunk and depleted; thus, adding more burden on remaining rural households; increase land ownership and natural resources co-sharing more problematic with an exponential rise of transhuman-driven conflicts and detrimental consequences (*malnourishment, poor nutrition diet, weak health conditions, etc.*).

This is to, simply further justify, the timeliness, and overall relevance of the PROSPER project in supporting Government of Ghana's efforts and recipient communities' vision to foster a better future for their lives and that of their future generations.

6 - ENVIRONMENTAL, CLIMATE AND SOCIAL MANAGEMENT PLAN (ESMP)

For moderate risk projects, IFAD requires the development of an environmental and social management plan (ESMP) to set out the core measures and actions required for the project to manage and effectively mitigate environmental, climate and social risks and achieve compliance with SECAP.

The environmental, climate and social management plans (ESMPs) presented below are relevant to the entire PROSPER project, including the agri-enterprise and related socioeconomic infrastructure sub-projects whose locations are not yet known, and will not be prior to project appraisal. However, for these subprojects, a separate screening as outlined herein is still required. The outcome of this screening and subsequent review may lead to the likely development of more detailed, site-specific ESMPs. In this case, the ESMP will list the commitments and actions PROSPER will undertake to achieve compliance with the relevant SECAP policies/standards throughout the entire project lifecycle.

In case of a change management that leads to a reclassification of the project during the implementation stage of this project, and new risks are identified then, the ESMP will be reviewed accordingly.

6.1 Mitigation Measures Checklist

By design, PROSPER is expected to have far greater environmental, climate and social benefits than its foreseen adverse impacts. These potential adverse impacts from the project are likely to be small in scale and limited in size. Spatial and temporal distribution of impacts that would result from the project activities, as well as the sub-projects requires specific attention particularly during project screening.

However, it is recognized that such impacts, if they are not identified early enough during the planning and preparation stages, and their mitigation measures adequately integrated into the project planning and implementation, they can most likely accrue into larger impacts. Given the fact that minimum impact sub-projects are eligible and the level of available fund for each district, such impacts could be easily mitigated using sensible site selection criteria, good construction practices in harmony with the local culture and diligent management practices in the operational phase¹²⁹.

This section discusses the impacts and mitigation measures for component 1 activities mainly. The following table describes the impacts and mitigation measures from the agricultural production activities, mainly driven from foreseen activities in component 1.

¹²⁹-As mitigation measures must be taken into account as part of the sub-project design and costs, the ESMP does not need a separate budget allocation. However, it is imperative that activities' costs reflect the resources needed to fully implement the ESMP.

Table 9: Environmental (incl. Climate Change) and Social Management Plan

Parameter (Activity & Significance)	Activity (Proposed Mitigation Means)	Recommended Monitoring Indicator	Responsibility for Implementation monitoring	Indicators and Monitoring means	Recommended frequency of monitoring
Component 1: Development of rural institutions and socioeconomic Subcomponent 1.2 Development of socioeconomic infrastructure.					
ENVIRONMENTAL, CLIMATE & SOCIAL MONITORING					
Socioeconomic Infrastructure <i>(Moderate)</i>	Feasibility study for feeder/track roads and causeways, dykes	Baseline on status of the environmental climate and social conditions in the selected communities	PCU / contractor/ Ministry of infrastructure (MOI)	Site-specific ESMP reports Adherence to laid legal and policy requirements (Category B)	Once, at the beginning of project
Environmental and social baseline <i>(Moderate)</i>	Conduct a baseline assessment to obtain baseline values of key environmental. Climate and social parameters in concerned communities	See environmental, climate and social indicators mentioned below	PCU/ National Environment Agency (EPA)	Field survey	Baseline, once at beginning of project
Land and soil degradation <i>(Moderate)</i>	Monitor quality of soil and other biological conditions	Soil micro-organism count Soil organic matter count Adopt use of climate friendly technics	PCU (<i>Safeguards and climate team</i>)	Field measurement, incl. soil sample analysis	Annual (or after cropping cycle)
Surface and subsurface water quality <i>(Moderate)</i>	Monitor sample quality of surface and subsurface water at random sites	Water quality	PCU	Field measurement and Laboratory test	Annual (or after cropping cycle)
Degradation of Forest and wetland <i>(Moderate)</i>	Monitor quality of forest and wetlands	Changes in forest and wetland area	PCU	Remote sensing and field assessment	Baseline, Mid-Term, End- Term

Parameter (Activity & Significance)	Activity (Proposed Mitigation Means)	Recommended Monitoring Indicator	Responsibility for Implementation monitoring	Indicators and Monitoring means	Recommended frequency of monitoring
Erosion and gully <i>(Moderate)</i>	Monitor quality of land	Changes in area of bare surfaces	PCU	Remote sensing and field assessment	Baseline, Mid-Term, End- Term
Bush and pipeline fire	Monitor quality of vegetation	Changes in vegetal cover	PCU	Remote sensing and field assessment	Annual
Loss of biodiversity <i>(Moderate)</i>	Monitor quality of biodiversity	Changes in abundance of biodiversity	PCU	Field survey	Annual
Waste proliferation <i>(High)</i>	Monitor quality of land, water, and air	Changes in soil, air, and water quality	PCU	Field measurement and laboratory test	Annual
Use of agrochemicals <i>(Moderate)</i>	Monitor quality of plant, soil, and water	Changes in quality of plant, soil, and water	PCU	Laboratory test	Annual
Flooding <i>(High)</i>	Monitor quality of land	Extent of land inundation	PCU	Field survey and remote sensing	Quarterly
GHG emissions <i>(High)</i>	Monitor quality of air	Preponderance of GHG in the air	PCU/ National Environment Agency (EPA)	Field measurement	Annually
Socio-economic conditions <i>(Moderate)</i>	Conduct a combined sustainable livelihood analysis (SLA) / resilience assessment, providing baseline status of key socio-economic conditions in selected communities	Food security, assets, employment, income, production methods and volumes, access to markets and finance, social inclusion, disaster preparedness	PCU	Field survey Field measurement (update)	

Parameter (Activity & Significance)	Activity (Proposed Mitigation Means)	Recommended Monitoring Indicator	Responsibility for Implementation monitoring	Indicators and Monitoring means	Recommended frequency of monitoring	
Community conflict (internal) <i>(Moderate)</i>	Monitor the effectiveness of grievance redress mechanism	Occurrence of violent conflicts within selected communities	PCU/ Ministry of social affairs and local development	Community visit		
Youth violence (militancy and cultism) <i>(Moderate)</i>	Monitor youth violence situation	Occurrence of youth violence within selected communities	PCU/Ministry of Justice	Community visit	Quarterly	
Resource-based conflict (farmers – pastoralists) <i>(High)</i>	Monitor conflict situation	Occurrence of violent conflicts between selected communities and external parties	PCU	Community visit	Quarterly	
Loss of (access to) agricultural land <i>(Moderate)</i>	Monitor land access and ownership	Change in land access and ownership for women and youth	PCU	Community visit	Annually	
Social exclusion <i>(Moderate)</i>	Monitor inclusion of women, PWD, and youth in decision-making	Percentage of women, PWD and youth represented in community-level decision-making committees, associations and meetings	PCU/ Ministry of Justice	Community visit	Annually	
Elite capture <i>(High)</i>	Monitor (political) interference, conflicts of interest, corruption	PCU	PCU/ ministry of agriculture	Community visit	Annually	
Unsafe and non-healthy working conditions <i>(Moderate)</i>	Monitor health impacts and child labour	Number of cases reported and suspected of health impact due to use of agro-chemicals, accidents due to use of production and processing machinery and	PCU/ Ministry of Heath	Community visit	Annually	

Parameter (Activity & Significance)	Activity (Proposed Mitigation Means)	Recommended Monitoring Indicator	Responsibility for Implementation monitoring	Indicators and Monitoring means	Recommended frequency of monitoring
		related faulty wiring and, use of child labour.			
Gender-based Violence including Sexual Exploitation, Abuse (High)	raise awareness or interventions on SEA	Percentage of people sensitized	PCU/ Ministry of Justice/ Gender and women	Community visit	Annually
Financing (Moderate)	Subscribe to the principles of sustainable environmental, climate and social management in the financing of business plans (ESMS of FIs such as RCBs)	Number of MFIs partners that have integrated sustainability into their financing (ESMS of FIs such as RCBs)	PCU	Community visit	Annually
Socioeconomic Infrastructures (Moderate)	Feasibility studies	Reports	PCU/ Ministry of infrastructures	Community visit	First year
Business Plan Development per activity (Moderate)	Screening of sub-activity + Site specific E&S impacts Assessment (ESMP)	Reports	PCU	Community visit	At the beginning prior to activity implementation

Source: CATS-August 2021

Summary of Environmental and Climate Mitigation Measures: Indirect, increased use of pesticides will be mitigated against by proactively offering training on IPM. In instances where pesticides use is unavoidable, training on the safe handling of pesticides will be provided and bio-pesticides and biofertilizer will be promoted in the BPs over other varieties. There will be no pesticides procurement under this project, and highly hazardous pesticides (HHP) would not be used in the project areas. Both the PCU and LPIU Safeguards specialists will work closely with recipient communities to ensure systematic compliance with these safeguards measures.

Summary of Social Mitigation Measures: Risks associated with decent rural employment, GBV/SEAH, occupational health and safety, and land tenure will be mitigated with application of: (i) *the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT)*; (ii) *sensitization training on safe, decent rural employment and age-appropriate work, given that youth often assist with the farming work of their respective families, including GBV and SEAH*; and (iii) *safe and secured use of pesticides*. To further ensure social inclusion of vulnerable groups and citizen/stakeholders' engagement, ongoing consultations, and participatory M&E will continue throughout the project lifecycle as a means of providing a feedback loop to foster stakeholders' ownership and social accountability. The established grievance redress mechanism (GRM) will be conducted in line with the requests from community consultations and will be sensitive to the needs of vulnerable groups, especially widows, disadvantaged and disabled.

6.2 Approach to Enhance Project Implementation

This ESMF, along with the Gender Action Plan (GAP), is not being used solely as a compliance process: it goes beyond compliance and takes a proactive approach in design. Similarly, the grievance redress mechanism included in this document is not just about being a last-resort mechanism; rather, the GRM is about creating a project culture of transparency with built-in feedback systems. Both the ESMF and the Gender Action Plan are taken as positive aspects that help the project implementation units (at central and local levels) in identifying and developing activities for greater environmental and social co-benefits. To ensure, that the social, climate and environmental issues are addressed properly in accordance and in compliance with the IFAD's SECAP, all project activities shall systematically undergo a thorough screening, assessment, review, and clearance process before the physical execution of project activities.

This chapter describes the process for ensuring that environmental, climate and social safeguards concerns are adequately addressed through the proposed institutional arrangements and procedures used by the project for managing the identification, preparation, approval, implementation and reporting of sub-activities. The detailed environmental and social safeguard process is listed below:

6.2.1 Screening and Review

PROSPER Environment and Social Safeguards Risk Category is 'B' which means that 'some adverse impacts can be readily remedied by appropriate preventive actions and/or mitigation'¹³⁰. However, to remain a 'B' Category Project serious attention must be paid to land development (i.e., *likely potential for deforestation and related secondary effects*), and development of socioeconomic infrastructure including construction of feeder roads and small earth dams and irrigation schemes development. Loss of investments to floods, other natural hazards including drought is also very high across the participating 8 regions of the middle and north belts. By far the most important social risk is the resource-induced clashes between farmers and pastoralists given the rich livestock capital both natural regions are endowed with. All the project areas have the potential of being impacted by this risk.

¹³⁰ Source: IFAD (2016) Managing Risks to Create Opportunities. IFAD's Social, Environmental and Climate Assessment Procedures (SECAP) (IFAD: Rome), p.18

During implementation, it is essential that all sub-project proposals be screened, first on eligibility on the basis of the ‘letter of interest’ / application form (see Annex 1), and secondly on the basis of environmental, climate and social impacts using the more detailed screening forms (see Annex 2)). Project Screening for Project Screening for environmental, climate and social impacts will ensure that sub-projects with high and irreversible impacts on the environment or people that cannot be readily mitigated are not eligible for support by PROSPER . It is very important to ensure that before land is developed for any cluster or farmer organization, they should take the responsibility of planting trees at the perimeter of the land area and nurturing them.

Sub-project proposals with medium (manageable) environmental and social impacts should include the following basic elements in the application and contain in the project-specific ESMP:

- a. A summary and description of the possible adverse effects that specific sub-project activities may occur;
- b. A description of any planned measures to avoid or mitigate adverse impacts, and how and when they will be implemented;
- c. A system for monitoring the environmental and social effects of the project;
- d. A description of who will be responsible for implementing and monitoring the mitigation measures; and
- e. A cost estimate of the mitigation measures, which should be included in the sub-project proposal.

The scope of any environmental and/or social review and related mitigation measures will be determined by the relevant PIU Environmental, Climate, Social Specialist (PIU- 1ECSS) in consultation with each of the two Zonal Officers (*Northern Belt & Middle Belt – 2 ZECSO*) and each of the 8 Regional Safeguards and Climate Focal Points (8 RSCFP) and involved technical experts where needed, via the sub-project screening and approval process. Sub-project proposals with only minor or no adverse impacts do not need a separate review (or ESMP).

Screening for Eligibility

Thus far, PROSPER’s PDR provides a detailed description of the targeting and selection process for project beneficiaries. Annex 1 provides the proposed format for the letter of interest/application form, which should be completed by each intended beneficiary and will be used as the primary tool for screening for eligibility.

Screening for Environmental, Climate and Social Impacts

Based on relevant SECAP guidelines, two separate environmental and social screening forms have been developed: for agri-enterprise (Annex 2) and related socioeconomic infrastructure subprojects (Annex 3), and climate screening form for sub-projects (Annex 4).The intended beneficiaries are only required to complete the intention/application form in Annex 1 while the screening is done using the form in Annex 2, 3 and 4 by the PIU Environmental, Climate and Social Specialist (ECSS, assisted by the corresponding zonal ZECSO and corresponding RSCFP).

Annex 5 provides an environmental and social guideline for contractors, especially those handling the construction of socioeconomic infrastructure such as the construction/rehabilitation of market-connected rural feeder roads, irrigation facilities, dam’s construction, production platforms, etc. Sound environmental and social management of construction projects can be achieved only with adequate site selection and project design. As such, the ESMP for projects involving any new construction, or any rehabilitation or reconstruction for existing projects, should provide information as to screening criteria for site selection and design. The guidelines include the site selection, prohibitions, construction management measures, safety during construction, community relations, chance finds procedures and environmental supervision during construction.

☞ *Impact Significance Rating*

To determine the significance of impacts, the likelihood of an impact occurring is considered against the consequence or magnitude of the impact if it was to occur. Likelihood is defined as the frequency of an impact occurring.

Table 10 Definitions of Consequence

Consequence	Definition
No Impact / No change	<ul style="list-style-type: none"> • No impacts on biophysical and social environments / livelihood / health / gender • No public concerns • No legal issues
Negligible	<ul style="list-style-type: none"> • Low/minor impact on environment / livelihood / health / gender • Minor social impacts • No legal issues
Intermediate	<ul style="list-style-type: none"> • Some level of impact on environment / livelihood / health / gender • Social issues apparent • May have legal implications
Severe	<ul style="list-style-type: none"> • High level impacts on environment / livelihood / health / gender • High public concerns or perceptions • Legal non-compliance
Unknown	<ul style="list-style-type: none"> • Extent of the impact cannot be determined at this point • Apply precautionary principle

- Projects that have low significance impacts may not require a new ESMP; in that case the standard ESMP in the ESMF report will suffice.
- In the case of project with medium significance, the development of appropriate plans, in addition to the standard ESMP in this ESMF may suffice to manage the severity of the impacts.
- In the case of projects with impacts of high significance, a separate ESIA is almost always required.

6.2.2 Safeguards and Climate Implementation Arrangements (SCIA)

Project Implementation Arrangement for Safeguards and Climate

For safeguards implementation, the Project Coordinator leading the **Project Coordination Unit (PCU)** will have the overall responsibility and accountability for the implementation of the project, including environmental and social safeguards and climate change compliance. More specifically, a Safeguards and Climate Specialist as well as Gender and Social Inclusion Specialist will be included in the PCU. They both will be the recipient of all project-related grievances at both the central and local levels, as detailed within the Grievance Redress Mechanism process in the below pages (i.e. section 9) of this ESMF. The roles and responsibilities of some of the PCU staffs are described in more details in both the project description in this document and in the Project Document Report (PDR).

➔ **Project Coordination Unit (PCU):** A Project Coordination Unit, led and hosted by the MOFA, will be established in the project area (potentially in Tamale) to ensure political anchorage within the overarching decision-making structures, SECAP and strategies. The Project Steering Committee (SC) will include EPA. A **National Project Coordinator (NPC)** will be responsible for the physical operational and administrative project implementation and coordination with all project stakeholders, and operational leadership of the PCU. Under the overall leadership of the NPC, and in close coordination with the PCU **Senior Safeguards and Climate Specialist (SSCS)**, the **Senior Gender and Social Inclusion Specialist (SGSIS)** and likewise, financial intermediaries like APEX Bank will have both a **Safeguards and Climate Specialist (SSCS)**, the **Gender and Social Inclusion Specialist (SGSIS)**

the Executing Entity (**MOFA**), the **PROSPER-PCU** will be responsible for providing support to the implementation of the day-to-day activities at the national/central level

Both the Senior SCS and the Senior GSIS will be hired by the PCU to spearhead the different Safeguards and Climate, as well as Gender and Social Inclusion compliance with the ESMF and ESMP core requirements, its implementation, and its regular reporting across all project activities. In order to retain close proximity to the project intervention areas, the SSCS and the GSIS will be based out at the PCU in the field and ensure that the staff on-the-ground in the project areas conduct a screening for sub-activities prior to implementation, and then mitigate for any medium-risk activities using site-specific ESMPs developed during project implementation, based on that very screening checklist, once project activities footprints are known and clearer.

At local level, the BFF at the APEX Bank will include a Safeguards and Climate Specialist (SCS) and Gender and Social Inclusion Specialist (GSIS) who will ensure that the BPs are implemented in accordance with this ESMF/ESMP and IFAD SECAP guidelines. These two specialists will work in tandem with and report to the PCU's Specialists.

IFAD will have a designated Lead Safeguards and Climate Expert (LSCE) who will liaise with both PCU and APEX specialists to ensure constant brainstorming on the way the safeguards and climate as well as Gender and Social Inclusion dimensions agenda of PROSPER to ensure SECAP procedures are fully and adequately complied with. S/He will work in tandem with both the PCU and APEX Specialists.

6.3 Integrated Pests and Pesticides Management Plan (IPPM)

As stated in the tables above and some of the listed national laws and regulations, procurement of pest and pesticides is not envisaged under this project. However, the project could include sub-projects relating to enhancement of agricultural productivity and introduction of high value crops, support seed banks and beekeeping. These activities could result in the use of pesticides. The ESMF has included a screening tool to identify subprojects that would need to prepare a simple integrated pest management plan (IPPM). Such subprojects will prepare and publicly disclose an IPPM before they are approved for physical implementation. The Project will include relevant training at the field level such as in pest management (PM), selecting disease free seeds, bee keeping, etc. A mechanism will be put in place to demonstrate Integrated Pest Management procedures and to develop a farmer education program that stresses good and safe practices for storage and application of pesticides.

The project will use the Guidance document provided in *Annex 11* for identifying the need to prepare an IPPM for a sub-project. A separate IPPM is needed if expected quantities of pesticides to be used are significant from health and environment (*biophysical & human*) standpoint; or if pesticides use or other non-indigenous biological control into an area will be introduced; or if hazardous products (*WHO Class 1a & 1b*) will be financed. The IPPM consists of the following components:

- Activities
- Actors and partners
- Institutional arrangements for implementation
- Phasing plan
- Cost estimates

The activities of the PMP are designed to ensure that implementation of PROSPER project in the selected 5 districts in each of the 8 regions of PROSPER intervention areas complies with both IFAD and corresponding national regulation.

- ➔ *Activity 1* – If feasible, study tours will be organized to similar programs/agency where farmers participatory Pest Management (PM) programs have been successfully implemented. The study tour

will be organized for representatives of selected project district areas. A regional PM workshop (within the NMB) will be organized to cross fertilize and share experiences gained during the study tour and to facilitate the implementation of the IPMPs.

- ➔ **Activity 2 - Promoting the adoption of climate-smart PM practices**
 - ✓ Supporting activities of the Community PM Action Committees
 - ✓ Developing PM training capacity in the extension services
 - ✓ Developing PM capacities amongst PIU and farmer Groups
 - ✓ Production of field brochures, PM posters, field guides and other IPM promotional materials; purchase of various PM Extension Guides publications.
 - ✓ Public awareness programs and PM networking amongst the project stakeholders
- ➔ **Activity 3 - Training in pesticides management; safe and secure use of pesticides**
 - ✓ Making decisions to use pesticides
 - ✓ Transport, storage, handling, and distribution of pesticides
 - ✓ Safe application of pesticides
 - ✓ Risks in the handling and use of pesticides
 - ✓ Managing risks and pesticide poisoning
 - ✓ Protective gear; use and maintenance
 - ✓ Public awareness raising on the safe use of pesticides; radio talks, social medias, etc.
- ➔ **Activity 4 - Strengthening national regulatory frameworks and institutional capacities**
 - ✓ Support PCU to assist with national coordination of PMP activities of PROSPER project.
 - ✓ Support teams and beneficiaries to participate effectively in the implementation of the PMP
- ➔ **Activity 5 - Integrated Vector Management:** surveillance of disease vector populations in the environment of small irrigation schemes.
 - ✓ Surveillance teams to be set up in villages around the water sources and irrigation sites to conduct regular surveys on the incidence of waterborne diseases.
 - ✓ Training in environment and social management for the control of waterborne diseases

6.4 ESMF Monitoring and Evaluation

The overall objective of environmental and social monitoring is to ensure that recommended mitigation measures are incorporated, and that activities carried out during sensitization (i.e., training and awareness-raising) and infrastructure construction/maintenance are environmentally and socially acceptable, and therefore sustainable.

6.4.1 Project Monitoring & Evaluation

Currently IFAD M&E conducts multiple impact assessment studies for the projects they implement: Baseline Surveys, Post-Distribution Assessments, and Impact Assessments, etc. The Baseline Surveys, conducted regularly, will employ a hybrid approach that uses IFAD Field Monitors. An Impact Assessment to evaluate the project performance and achievements will be conducted once all data have been analyzed, activities implemented, and results validated by IFAD-Ghana.

6.4.2 Sub-Project Monitoring and Evaluation

Monitoring and reporting will be supervised by IFAD staff. Associated Government agencies and members of the community, through their representatives, should be trained to undertake both compliance monitoring and impact monitoring. This will be done throughout the sub-project cycle namely:

- ⊕ During the planning phase, communities will participate in the identification of indicators for monitoring the mitigating measures;

- During the implementation phase, monitoring the execution of any works with respect to environmental and social aspects,
- During the operation and maintenance phase, the overall environmental, climate and social monitoring (including monitoring human-natural resources conflict) and alerting on any emerging environmental/climate hazards in conjunction with the ongoing sub-project activities. Communities will pass on their observations and concerns through the local Ghana-IFAD Project staff.

Key Performance Indicators

The key impact indicators for PROSPER are that:

- Estimated corresponding total number of household members
- Corresponding number of households reached
- Persons receiving services promoted or supported by the project (out of which 10% are PWD)
- Number of people with greater resilience (including PWD)
- Number of women and youth with access to good nutrition services
- Percentage of households reporting an improved access to markets and a 30% income increase)

, The key monitoring indicators/variables include:

- Number of persons/households reporting adoption of new/improved inputs, technologies, or practices
- Number of hectares of farmland under water-related infrastructure constructed/rehabilitated
- Number of upgraded women/youth-led vegetable gardens
- Number of integrated market-oriented vegetable garden financed through matching grants
- Number of persons trained in production practices and/or technologies
- Number of rural producers accessing production inputs
- Number of Jobs created (100% youth-led agricultural service businesses)
- Number of financial service providers supported in delivering outreach strategies, financial products and services to rural areas
- Number of farmers' organizations engaged in formal partnerships/agreements or contracts with public or private entities
- Number of effective agricultural value chain interaction platforms (AVIP)
- Number of rural farmers' organizations supported
- Number of 4P businesses supported
- Number of feeder road/track roads (Km) rehabilitated/construction per districts
- Number of feeder road/track-roads maintained per year in districts,
- Number occupational health and safety sessions per RI organized per district
- Number of market or storage facilities (warehouse, workshop, silos) constructed or rehabilitated
- Number of agribusiness policy-dialogue (meetings, roundtables) between public, private and producers' stakeholders conducted

Various project impacts and aspects relate to these overall performance targets. When the activities and indicators are established, baseline data needs to be collected to serve as a benchmark and against which changes in the identified indicators can be measured. The types of parameters that can be monitored may include mitigation measures or design features, or actual impacts. In some cases, such as drainage structures and soil conservation interventions, monitoring is straightforward and can be done as part of routine or periodic maintenance. However, other parameters, particularly those related to social, ecological and climate change issues can only be effectively assessed over a period of 2 to 3 years.

6.5 ESMF Implementation Timeline and Budget

As outlined in the ESMF, the day-to-day implementation of the ESMF for the PROSPER project, will be led by two full-time project-recruited staffs, namely (i) a **Senior Environmental, Climate and Social Safeguards Specialist (SECSSS)** and a (ii) **Senior Gender and Social Inclusion Specialist (SGSIS)** at the PCU level in Tamale (indicatively), and supplemented by a **Focal Point (FP) in each of the participating 85 districts** of PROSPER in the 8 regions. These FPs will be hosted at the Local Authorities level with whom PROSPER management will sign an MOU (Memorandum of Understanding) to spearhead project implementation at local levels. The foreseen duration of PROSPER is eight (**08**) years (**2022-2029**). The total hiring of the proposed Safeguards et Climate + Gender and Social Inclusion team (**1 SECSSS & 1 SGSIS**), so to properly integrate gender and social inclusion mainstreaming in the safeguards management, especially at local level during the 8-years project duration, along with their provision for personal capacity strengthening each year is estimated to be **\$910,000 USD**. This cost will be included in the project overall cost, notably in Component 3.

At local level, the BFF at the APEX Bank will include a Safeguards and Climate Specialist (SCS) and Gender and Social Inclusion Specialist (GSIS) who will ensure that the BPs are implemented in accordance with this ESMF/ESMP and IFAD SECAP guidelines. These two specialists will work in tandem with and report to the PCU's Specialists.

IFAD will have a designated Lead Safeguards and Climate Expert (LSCE) who will work as counterpart with all 4 specialists (2 for the PCU and 2 for APEX). To ensure safeguards and climate as well as Gender and Social Inclusion compliance agenda of PROSPER to ensure SECAP procedures are fully and adequately complied with. S/He will work in tandem with both the PCU and APEX Specialists.

The monitoring plan in Table 12- lists the parameters to be monitored, activity that will generate the parameters, monitoring indicators, and responsibility, monitoring means, frequency and the estimated cost.

Table 11- ESMF Timeline & Budget for PROSPER Implementation

Parameter	Activity	Monitoring Indicator	Responsibility for monitoring	Monitoring means	Recommended frequency of monitoring	Estimated Monitoring Costs (USD)
ENVIRONMENTAL MONITORING						
Site-specific ESMPs and Environmental, Climate and Social Screening for roads (feeder and/or track) construction/rehabilitation, processing facilities construction, irrigation schemes development, commodity warehouse or workshop construction, and borehole/drinking water points	Environmental, Climate et Social Screening and impact assessment	Baseline on the status of the environmental, climate and social conditions	PCUs FP, EPA, MOFA, DDA, MOW, Infrastructure/ Transport/ Irrigation Engineer, ECS Officer, Service Providers; RI, CRBs, District.	C-ESMP reports Adherence to laid legal and policy requirements (Category B)	Once (project specific – At least once each year, depending also on the needs on the ground)	1,000,000 (\$125,000 x 8)

Parameter	Activity	Monitoring Indicator	Responsibility for monitoring	Monitoring means	Recommended frequency of monitoring	Estimated Monitoring Costs (USD)
construction/rehabilitation						
Environmental, Climate and Social Monitoring – include - baseline and end term survey, biodiversity surveys; monitoring of land, water, and soil degradation and agrochemicals; climate, flooding and erosion prediction; pest infestation prediction and management	Environmental, Climate and Social Screening and risk & impact assessment	Baseline on status of the social, environment and climate conditions, risks, and vulnerabilities	PCUs & FP, EPA, MOFA, DDA, MOW, Infrastructure/ Transport/ Irrigation Engineer, ECS Officer, Service Providers; RI, CRBs, District.	Baseline reports, Biodiversity surveys report Climate risk and flooding and erosion risk reports Pest infestation prediction report	Baseline and end term Once for specialized reports (incremental, based on needs on the ground)	200,000 (\$25,000x 8)
Risk Transfer - Agric insurance	Climate and conflicts risk transfer	Farmers sign on to agriculture insurance	PCUs & FPs, EPA, MOFA, DDA, MOW, Infrastructure/ Transport/ Irrigation Engineer, ECS Officer, Service Providers; RI, CRBs, District.	Number of RIs that sign onto agric-insurance	Annual	350,000 <i>This is part of the original project activities</i>
Technical support and backstopping - includes support for GHANA Agrimet for agroclimatic weather production and dissemination and setting up mini weather station; seed labs/silos; and bio waste valorization (Biogas et/ou bio-fertilizers production	Support for the GHANA Agrimet to install weather station and produce agroclimatic data for periodic climate monitoring	Number of mini weather stations installed Periodic production and dissemination of agroclimatic	PCUs & PFPs, EPA, MOFA, DDA, MOW, Infrastructure/ Transport/ Irrigation Engineer, ECS Officer, Service Providers;	Field observation	Twice a year and on a random basis to ensure consistency	600,000 (\$75,000x 8) <i>Only AGRIMET included in the costabs explicitly, the rest are mainstream</i>

Parameter	Activity	Monitoring Indicator	Responsibility for monitoring	Monitoring means	Recommended frequency of monitoring	Estimated Monitoring Costs (USD)
	Support seed lab development Support rice and vegetable waste valorization	information Number of equipped seed lab Number of rice and vegetable waste valorization initiatives	RI, CRBs, District.			<i>med in the BP.</i>
Training-includes training of spraying gangs, draining of rice paddies; and construction of water harvesting structure for both dry season irrigation and animal drinking point and fishfarming	Training of spraying gangs integrated pest and agrochemical management Training of farmers on water harvesting for dry season farming	Number of those trained	PCUs & FPs, EPA, MOFA, DDA, MOW, Infrastructure/ Transport/Irrigation Engineer, ECS Officer, Service Providers; RI, CRBs, District.	Field observation	Twice a year, on a random basis.	200,000
SOCIAL MONITORING						
Support for conflict resolution - include support for stakeholders dialogue on conflict management and land governance	Conflict resolution stakeholders support and land governance dialogue	Activities of conflict resolution committee Organize land governance dialogue	PCU/FP, MOFA, EPA, Environmental Officer,	Conflict resolution and land governance dialogue reports	Once (more precisely the need is put forth	300,000
Other Social monitoring (GBV, SEAH vulnerability,	Include gender and People living with disabilities (PLWD) mainstreaming	Activities of Targeting committee	PCU/FP, MOFA, EPA, MOWA Environmental Officer,	Social Surveys, Beneficiaries assessment	Annual	100,000
Health and Safety		Number of farmers	PCU/FP, MOFA,	DHS Reports	Annual	100,000

Parameter	Activity	Monitoring Indicator	Responsibility for monitoring	Monitoring means	Recommended frequency of monitoring	Estimated Monitoring Costs (USD)
	Health Insurance and outreach	with health insurance contracts	EPA, MOWA, MOH, Environmental Officer,			
GRAND TOTAL						2,850,000

NOTE: Most of these costs are already included in the project costab and already mainstreamed altogether with other related activities, carefully distributed between among sub-component 1-2 (**\$700K**), Matching Grants Scheme of sub-component 2-2 (**\$100K**) and Blended Finance Facility of sub-component 2-2 (**200K**).

7. CAPACITY BUILDING AND TRAINING FOR ENVIRONMENTAL, CLIMATE AND SOCIAL MANAGEMENT AND MONITORING PLANS

7.1 Strengthening Capacity and Improving Resilience

A successful mainstreaming of climate change and the ESMF into implementation of the project requires the strengthening of institutional capacities, in particular those, of the Agricultural Development Program by setting up mini weather station, Farmers Organization and Women Organizations. Moreover, there is a strong need for context-specific, in-situ training sessions for farmers, and others in the value chain, for example on climate-smart agriculture and climate change adaptation, to improve their resilience to deal more effectively with climate-related weather events. The same is also true for the economic, social and environmental literacy of RI, especially women, youth, PLWDs and RCBs.

7.1.1 Training Topics

Proposed training topics include, at the very least:

- a. Screening and rating as prescribed in the ESMF;
- b. Requirements of IFAD's SECAP and NRM, Gender/GBV/SEAH/VAC, Climate, Land, policies ;
- c. ESMF processes, procedures and institutional arrangements to develop and implement required management plans;
- d. Stakeholder consultation, participation, and public disclosure policies
- e. Agroclimatic data and early warning (including pest infestation) capacity building
- f. Environmental, social and climate risks and impacts assessment, and requirements ;
- g. Preparation, implementation, monitoring and reporting of ESMPs ;
- h. Community, RIs and agro-SMEs sensitization – including insurance and risk transfer mechanisms
- i. RIs training on climate smart agriculture, environmental and social best practices, including:
Sustainable land preparations, agrochemical application and pest and disease management, sustainable agronomic practices, soil fertility management, low-impact farming methods,
- j. Conflict resolution and grievance management mechanisms;
- k. Sustainable agriculture waste management ;
- l. Environmental (EMS-ISO.14001), social audit, and report writing

7.1.2 Target Audience and Approach

The target groups for training should include, at least:

- a. Project Coordination Units Staffs (PCU+ SGIS + FP)
- b. MOFA, EPA, DDAs, MOW/MOSF staff, and EAs
- c. Service providers
- d. Beneficiaries (i.e., incubators and apprentices)
- e. Farmers Organizations
- f. Economists

The training topics will be delivered based on the needs of each training target group. As much as possible, Training the Trainers (TOT) will be encouraged, where applicable, to manage resources and effectively reach the target audiences.

Table 12: Training Activity and Estimated Cost

N B	Activity	Year (2022-2029)								Budget (USD)	Remarks
		1	2	3	4	5	6	7	8		
1	Global Stakeholders and District Communities sensitization workshops This is already factored in the project design under sub-component 1-1	X	X	X	X	X	X	X		350,000	Local media stream (recurrent) +:

N B	Activity	Year (2022-2029)								Budget (USD)	Remarks
		1	2	3	4	5	6	7	8		
2	ToT Capacity building for uptake of agroclimatic information and early warming DDAAs including safeguards	X		X		X		X		120,000	2-day -Training of ECS Officers and Focal Points and selected implementation staff, to downscale to farmers ,(Included in ToT under subcomponent 1.1) – This is already mainstreamed in the costable.
3	Stakeholders dialogue on green financing and climate smart agriculture	X	X	X		X	X			75,000	1day workshop (In the policy dialogue sub-component 3-2
4	Capacity building in IFADs & EPA ESMPs processes, procedures, implementation, and monitoring	X	X	X		X	X			100,000	3 days training (refresher courses) each other year
5	RIs training on climate smart agriculture, environmental and social best practices,	X	X	X		X	X			125,000	2day per each of the 8 regions Under component 1-1
6	Stakeholders' capacity building on Conflict resolution and grievance redress mechanism									85,000	2day per each of the 8 regions
8	Environmental, Climate and Social Audit and report writing	X	X	X		X	X			75,000	3day workshop for ECS officers led by IFAD's LSCS
	GRAND TOTAL									920,000	

Note: Generally, training is already mainstreamed across the different components¹³¹. Given the fact that PROSPER is a climate focused project and has a strong focus on the environment and the social, many of the training and ESMP measures are already mainstreamed in project activities. However, the abovementioned cost are just for safeguards purposes. The total training cost for the whole project duration is estimated at **USD \$920,000** of the project cost. The total cost of the 2 Specialists at the PCU level and the two from APEX offices.

More specifically, a conservative estimate is that both the Environmental and Social Monitoring (including safeguards and Gender provision for the MOU with the Government, especially for the **85 Focal Points** pour les 8 années de fonctionnement du PROSPER, costs and Training cost accounts for **USD \$ 3 million..**

Tableau 13: Key PCU, Safeguards and Climate Staffs estimated Budget.

¹³¹ - These are distributed among sub-component 1-2 (\$700K), Matching Grants Scheme of sub-component 2-2 (\$100K) and Blended Finance Facility of sub-component 2-2 (200K)

Designation	Duration	Unit Cost/Year	Total Cost
Senior Environmental, Climate and Social Safeguards Specialist – PCU (<i>Female</i>)	96	36,000	550,000
Senior Gender (GBV/SEAHVAC) Mainstreaming Officer (<i>Female</i>)	96	36,000	500,000
Environmental, Climate and Social Safeguards Specialist – (<i>APEX</i>)	96	32,000	450,000
Gender (GBV/SEAHVAC) Mainstreaming Officer (<i>APEX</i>)	96	32,000	430,000
Capacity Building to enhance their technical performances	FF	1,700	65,000
Broader Miscellaneous (5%)	FF	10,000	80,000
Grand Total	---	----	2,080,000

Note: We opted for a rather more inclusive approach. Therefore, the above estimate is for both the Environmental, Climate and Social Safeguards Specialist and the Gender and Social Inclusion at the PCU level in Tamalé (Most likely). . There will Safeguards focal point identified at the district level.

To make it rather more inclusive and constructive, as it will surely yield more sustainable results, it is suggestable to:

- ➔ (i) have both the (a) Senior Environmental, Climate and Social Safeguards Specialist (SECSSS) and the Senior Gender and Social Inclusion Specialist (SGSIS) at the PCU level in the main office in Temale; and (b) an Environmental, Climate and Social Safeguards Specialist (ECSSS) and the Gender and Social Inclusion Specialist (APEX level) to facilitate GSIS at to oversee both Safeguards and Climate, and the Gender and Social Inclusion mainstreaming compliance. To that effect, for their hiring, the respective TORs will include that candidates have some solid/proven background and expertise in properly handling safeguards/climate and gender mainstreaming issues in development operations ;
- ➔ (ii) have the District Focal Point (DFP) working to spearhead both safeguards and gender dimensions, and report directly to both the SECSSS and SGSIS at the PCU levels, together with the IFAD Lead International ECSS.

8. PUBLIC CONSULTATIONS, PARTICIPATION, AND INFORMATION DISCLOSURE

8.1 Stakeholder Consultations and Participation

Experience with previous IFAD and other economic and social investment projects indicate that stakeholder engagement and sensitization are of critical importance to project success. In the absence of clear communication with relevant stakeholders and appropriate sensitization of local communities, rumors, misinformation and speculation thrive, and accusations and tensions easily boil over into (violent) conflict within and between communities. Therefore, for many of the potential environmental, climate and social impacts, the ESMF preparation included extensive stakeholder consultations and participation. Key project stakeholders were identified for consultations and these included Government Ministries, State Agencies / Organizations/and Departments, Project offices, academia, research institutions, Non-governmental organization and local communities, both the affected and host communities, including women, the poor and most vulnerable groups.

Stakeholder consultations and participation is an iterative process that goes throughout the project lifespan. Thus, community sensitization (*i.e., awareness-raising and training*) activities need to be clear, timely and culturally appropriate; this means that key messages need to be communicated in a format and language that is easy to understand, preferably by someone who speaks the local language and is familiar with local customs and sensitivities, and during a time that is convenient and sufficient for all key community groups, particularly women, youth, people living with disabilities (PLWD). To ensure appropriate community entry and reach target groups most effectively and efficiently, it is advisable to also involve civil society organizations that are already active in and trusted by the selected communities.

Henceforth, during the field mission in Kumasi and Tamale regions, meetings were held with key officials and opinion leaders to gauge level of awareness and involvement with the project, concerns of project implementation, and to obtain relevant documents or baseline information. The consultations and participation also served to gather information on the mandates and permitting requirements to inform the development of the Program. The list of stakeholders contacted and issues discussed are presented in the Stakeholder Meetings and Public Consultation annex here below.

8.2 ESMF Disclosure

As many international development agencies, IFAD policies require that environmental, climate and social reports for projects are made available to project affected groups, local NGOs, and the public at large. Public disclosure of environmental, climate and social information is also a requirement of the Ghana EPA's procedures. However, there is no limitation as to the extent and scope of disclosure. IFAD, in collaboration with the Government line agencies and EPA will make available copies of the ESMF in selected public places as required by law for information and comments. Public notice in the media should be served for that purpose as well to ensure broader transparency in the design, preparation, and implementation of PROSPER intended activities. In the context of the COVID-19 pandemic, the notification will be done through all available means of communication, a newspaper, radio announcement, internet and broader social medias.

The notification should provide:

- a brief description of the Project;
- a list of venues where the ESMF report is on display and available for viewing;
- duration of the display period; and
- Contact information for comments.

The EPA will assist to select display venues upon consultation with MoFA. These would be project sites specific and very much informative to beneficiaries

9. GRIEVANCE REDRESS MECHANISM

9.1 Rationale of Grievances:

Grievance redress mechanisms (GRM) provide a formal avenue for affected groups or stakeholders to engage with the project implementers or owners on issues of concern or unaddressed impacts. Grievances are any

complaints or suggestions about the way a project is being implemented. They may take the form of specific complaints for damages/injury, concerns about routine project activities, or perceived incidents or impacts. Identifying and responding to grievances supports the development of positive relationships between projects and affected groups/communities, and other stakeholders.

Like many international development agencies, the IFAD's SECAP procedures outline requirements for grievance redress mechanisms for some projects. GRM should receive and facilitate resolution of the affected institutional or communities' concerns and grievances. These concerns should be addressed promptly using an understandable and transparent process that is culturally appropriate and readily acceptable to all segments of project affected communities, at no cost and without retribution nor fear. Mechanisms should be appropriate to the scale of impacts and risks presented by a project. Grievances can be an indication of growing stakeholder concerns (real and perceived) and can escalate if not identified and resolved. The management of grievances is therefore a vital component of stakeholder management and an important aspect of risk management for a project.

9.2 Managing Grievances:

Projects may have a range of potential adverse impacts to people and the environment in general, identifying grievances ahead of time and ensuring their timely resolution in an amicable way is therefore very necessary. As such the ESMF has developed a grievance management process to serve as a guide during project implementation. This Grievance Redress Mechanism (GRM) builds pretty much on the one provided in the table below.

Table 14. Grievance Management Guide

Step	Process	Description	Timeframe	Other information
1	Identification of grievance	Face to face; phone; letter, e-mail; recorded during public/community interaction; others	1 Day	Email address; hotline number
2	Grievance assessed and logged	Significance assessed and grievance recorded or logged (i.e. in a log book)	3-7 Days	Significance criteria * Level 1 – one off event; * Level 2 – complaint is widespread or repeated; * Level 3 - any complaint (one off or repeated) that indicates breach of law or policy or this ESMF provisions
3	Grievance is acknowledged	Acknowledgement of grievance through appropriate medium	7-14 Days	
4	Development of response	- Grievance assigned to appropriate party for resolution -Response development with input from management/relevant stakeholders.	3-7 Days 10-14 Days	
5	Response signed off	Redress action approved at appropriate levels	3-7 Days	IFAD/PCU/PIU should sign off

Step	Process	Description	Timeframe	Other information
6	Implementation and communication of response	Redress action implemented and update of progress on resolution	10-14 Days	

Experience with previous IFAD and other economic and social investment projects indicate that stakeholder engagement and sensitization are of critical importance to project success. In the absence of clear communication with relevant stakeholders and appropriate sensitization of local communities, rumors, misinformation and speculation thrive, and accusations and tensions easily boil over into (violent) conflict within and between communities. Therefore, for many of the potential environmental and social impacts, the management plans recommend the development of a stakeholder engagement plan with a clear communication strategy and the organization of community sensitization activities on a regular basis.

A stakeholder engagement plan (SEP) when the exact location are known for ESIA should include at least the following components¹³²:

- a) Principles, objectives and scope of engagement
- b) Regulations and (institutional) requirements
- c) Summary of previous stakeholder engagement activities
- d) Stakeholder mapping and analysis
- e) Strategies of engagement
- f) Key messages and communication channels
- g) Grievance mechanism (see also section 9.6 below)
- h) Resources and responsibilities
- i) Monitoring and evaluation

Community sensitization (i.e., awareness-raising and training) activities need to be clear, timely and culturally appropriate; this means that key messages need to be communicated in a format and language that is easy to understand, preferably by someone who speaks the local language and is familiar with local customs and sensitivities, and during a time that is convenient and sufficient for all key community groups, particularly women and youth. To ensure appropriate community entry and reach target groups most effectively and efficiently, it is advisable to also involve those civil society organizations that are already active in and trusted by the selected communities.

Grievance Management

Whenever a project causes negative environmental or social impacts there will be grievances (complaints) from people who are affected. “Having a good overall community engagement process in place and providing access to information on a regular basis can substantially help to prevent grievances from arising in the first place, or from escalating to a level that can potentially undermine project performance .In order to reduce conflicts, a robust grievance / complaints mechanism that meets at least the following ‘effectiveness’ criteria should be instituted:

- a) Legitimate: enabling trust from the stakeholder groups for whose use they are intended, and being accountable for the fair conduct of grievance processes;
- b) Accessible: being known to all stakeholder groups for whose use they are intended, and providing adequate assistance for those who may face particular barriers to access;

¹³² Adapted from IFC (2007) *Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets* (IFC: Washington, D.C.), pp.164-168

- c) Predictable: providing a clear and known procedure with an indicative time frame for each stage, and clarity on the types of process and outcome available and means of monitoring implementation;
- d) Equitable: seeking to ensure that aggrieved parties have reasonable access to sources of information, advice and expertise necessary to engage in a grievance process on fair, informed and respectful terms;
- e) Transparent: keeping parties to a grievance informed about its progress, and providing sufficient information about the mechanism's performance to build confidence in its effectiveness and meet any public interest at stake;
- f) Rights-compatible: ensuring that outcomes and remedies accord with internationally recognized human rights;
- g) A source of continuous learning: drawing on relevant measures to identify lessons for improving the mechanism and preventing future grievances and harms;
- h) Based on engagement and dialogue: consulting the stakeholder groups for whose use they are intended on their design and performance, and focusing on dialogue as the means to address and resolve grievances.

IFAD has established a Complaints Procedure to receive and facilitate resolution of concerns and complaints with respect to alleged non-compliance of its environmental and social policies and the mandatory aspects of its Social, Environmental and Climate Assessment Procedures in the context of IFAD-supported projects.

Complaints must concern environmental, social and climate issues only and should not be accusations of fraudulent or corrupt activities in relation to project implementation – these are dealt with by IFAD's Office of Audit and Oversight.

- Eligibility criteria

To file a complaint for alleged non-compliance with IFAD's social and environmental policies and mandatory aspects of its SECAP, IFAD will consider only complaints meeting the following criteria:

- The complainants claim that IFAD has failed to apply its social and environmental policies and/or the mandatory provisions set out in SECAP.
- The complainants claim that they have been or will be adversely affected by IFAD's failure to apply these policies.
- Complaints must be put forward by at least two people who are both nationals of the country concerned and/or living in the project area. Complaints from foreign locations or anonymous complaints will not be taken into account.
- Complaints must concern projects/programmes currently under design or implementation. Complaints concerning closed projects, or those that are more than 95 per cent disbursed, will not be considered.
- The process

The complainants should first bring the matter to the attention of the government or non-governmental organisation responsible for planning or executing the project or programme (the Lead Agency), or to any governmental body with the responsibility for overseeing the Lead Agency. If the Lead Agency does not adequately respond, then the matter may be brought to the attention of IFAD. The issue may be brought straight to IFAD if the complainants feel they might be subject to retaliation if they went to the Lead Agency directly.

The Regional Division will examine the complaint and, if necessary, will contact the Lead Agency, or the governmental body with the responsibility for overseeing the Lead Agency, to decide if the complaints are justified. If the complainants request that their identities be protected, IFAD will not disclose this information to the Lead Agency or anyone else in government.

If the complaint is not justified, the Regional Division will inform the complainants in writing.

If the Regional Division finds the complaint is justified and there is proof of actual or likely harm through IFAD's failure to follow its policies and procedures, IFAD will take action. This may consist of making changes to the project/programme, or requiring that the government observes its obligations under the Financing Agreement. IFAD's response will focus bringing the project/programme into compliance and no monetary damages will be available or paid in response to such complaints. The complainants will be informed of the outcome of the issue by the Regional Division.

In all cases, if the complainants disagree with IFAD's response, they may submit a request to SECAPcomplaints@ifad.org and request that an impartial review be carried out by the Office of the Vice-President.

The Office of the Vice-President will decide on the steps to be taken to examine such complaints, including, if necessary, contracting external experts to review the matter. The complainants will be informed of the results of the review.

IFAD will include in its Annual Report a list of received complaints and a summary of actions taken to address them.

- How to submit a complaint

A complaint relating to non-compliance with IFAD's Social and Environmental Policies and mandatory aspects of its SECAP can be submitted in any of the following ways:

- [Download the complaints form \(Word\)](#)
- [Send an email to SECAPcomplaints@ifad.org](mailto:SECAPcomplaints@ifad.org)

If you email or mail your complaint, please include the following information:

- Name, address, telephone number and other contact information
- Whether the complainants wish to keep their identity confidential, and if so, why
- Name, location, and nature of the IFAD project/programme (if known)
- How the Complainants believe they have been, or are likely to be, adversely affected by the IFAD-supported project or programme

Complaints sent by mail should be addressed to:

IFAD

SECAP Complaints (PMD)

Via Paolo di Dono 44

00142 Rome, Italy

9.3 Closing the Loop and Fostering Sustainability

While grievances are inevitable in sustainable development operations, and they are meant to weight the checks and balances as to how well the project is doing in terms of making beneficiaries lives "**better-off**"; however, one core lessons to be learnt is to always avoid triggering such grievances. Though there is never a better way to avoiding such triggering; inclusive and systematic stakeholder consultation not only at the very early stages of project formulation, and thereafter throughout the project lifespan, has always proven to avoid or minimize their occurrence. Therefore, one common sense is to always keep in mind that the earliest inclusive and participatory stakeholder consultation is started earliest enough in a project life cycle, the better beneficiaries ownership such project activities (*i.e. feeling part and partial of the whole process*), and foster social accountability behaviour towards that very project. Experience has shown that triggering these two pillars (*i.e. Community Ownership & Social Accountability*) often leads to fostering project Sustainability. Therefore, each grievance needs to be processed in due diligence; and once the process is satisfactorily completed, steps should be taken to properly close the loop by recording the whole process and ensuring that all issues at stakes are therefore taken care of in an amicably fashion, and that nothing is left behind.

10. CONCLUSION

The field mission in the PROSPER intervention areas, precisely in Kumasi and Tamale enabled to clearly hear the collective voices of all farmers in the participating two regional zones, namely the Northern Belt and the Middle Belt. The teams was able to equally weight the welcoming and highly committed and capable-hands desperately waiting for the PROSPER project to materialize. It undoubtedly speaks volumes about both its timeliness and relevance for thousands of poor rural farmers in the participating 8 regions. It's truly clear from them that this project will bring them the needed support to sustain their livelihoods.

The **Promoting Rural Opportunities, Sustainable Profits and Environmental Resilience (PROSPER)** development objective is “*to strengthen the integration, climate resilience and environmental sustainability of smallholders and businesses in priority value chains in the Northern and Middle Ecological Belts taking advantage of the increased demand created by the national agro-processing strategy.*”, by reducing greenhouse gas emissions and improving the resilience and sustainable adaptation of vulnerable agroecosystems and of rural communities in the two concomitant belts in a context of climate change, aiming towards food, nutrition and water security.

As stated from the onset, the initial screening of proposed PROSPER activities reveals that the potential environmental and social risks rating is moderate to low. Despite its high climate risk rating, the main risks associated with the implementation of project foreseen activities in component 1 are small in scale, very limited, mostly site-specific, and readily avoidable if not considerably reduced with appropriate mitigation plans (ESMP), as stated in the project’s ESMF.

As a Category B operation¹³³, a formal Environmental and Social Impact Assessment is required. Further analysis of the conflict dimensions and site-specific Environmental and Social Management Plans (ESMP) will be mainstreamed throughout PROSPER implementation lifecycle. Moreover, to ensure safeguards compliance and project sustainability, a Safeguards and Climate Change Specialist and a Gender and Vulnerability Specialist (GBV/EASH/VAC) will be part of the PCU. Quarterly safeguards and climate compliance reports summarizing the level of compliance and performance of project activities implementation will be prepared and shared to inform IFAD and stakeholders.

Overall, the cumulative project environmental and social impacts are expected to be positive, and generate series of opportunities for beneficiary communities, as the end objective of PROSPER is to increase climate resiliency of the most vulnerable farmers in the targeted northern and middle belts of Ghana. Besides the inequality in the labour market and presence of landless farmers in the project area who will be included in project activities; the project is expected to improve agricultural land and the natural resources upon which NMB communities farmers work is based, and on improved climate-resilient agricultural practices as well as improved natural resources management, specifically water management technics. More specifically, better functioning ecosystems, controlled transhumance practices, and a greater and collaborative stakeholders’ engagement and participation, will positively affect human health, nutrition and well-being in the long run.

During project implementation stage, once the physical footprints of subproject activities are known, to ensure, that the identified social, climate and environmental issues are properly addressed in accordance and compliance with the IFAD SECAP Policies, all project activities will systematically undergo (i) a thorough screening, assessment, review, and clearance process, and (ii) elaborate site-specific **Environmental and Social Management Plan (ESMP)** prior to the physical execution of project activities in each of the selected districts of the regions of PROSPER. Hence, the elaboration of the ESMF allowed to identify series of environmental and social risks and impacts, and the elaboration of an environmental and social management plan (ESMP) that includes a comprehensive implementation arrangement scheme to help implement the identified series of safeguards mitigation measures.

¹³³ The project will not invest in any category A subproject activities.

The estimated total budget for safeguards and climate change compliance and gender and social inclusion mainstreaming, including staffing the project over the foreseen eight (**8**) years duration of PROSPER is: **three million (\$3,000,000 USD)**. This cost is included in the project overall cost, notably in component 3.

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12. ANNEXES

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Annex I – Eligibility Screening Form

PROSPER PROJECT

Letter of Interest (Eligibility Screening Form)

Please complete all the required spaces in this form

1. Name: Surname ----- Other Names:-----
Maiden name (for married women):-----
2. Sex: (a) Male { } (b) Female { }
3. Date of birth: -----
4. Highest Education Level: (a) No formal education { } (b) Primary School { } (c) Secondary School { } (d) Vocational school (e) Tertiary Education { }
5. Which community do you belong to: -----
6. How long have you lived in this community: -----
7. How do you belong to this community: (a) by birth { } (b) by marriage { } (c) other (specify):-----
8. Local Government Area (LGA): ----- State: -----
9. What enterprise are you interested in (see list of selected enterprises for the LGA): -----
10. Do you have any experience in this enterprise: (a) Yes { } (b) No { }. If yes, how many years: -----
11. Do you belong to any youth or women organization: (a) Yes { } (b) No { }. If yes, what is the name: -----
12. Do you belong to any cooperative society: (a) Yes { } (b) No { }. If yes, what is the name: -----
13. Do you have access to any land for the enterprise: (a) Yes { } (b) No { }.
14. If yes to question 13, where is the land located-----; and what is the area size of the land? -----
15. What kind of title to you have to the land: (a) Government paper { } (b) Inheritance from parent { } (c) husband or wife's consent { } (d) family allocation { } (e) community's allocation { } (f) Others (specify):-----

Endorsements:

Applicant: I certify that the information provided here is correct

Name: -----

Signature: -----

Date: -----

Community/traditional leader:

Name: -----

Sign: -----

Date: -----

Verifications:

Comments by the Local Government Liaison Office:-----

Name of Officer: -----
Designation: -----
Sign and date: -----

Comments by the RCU Office:-----

Name of Officer: -----
Designation: -----
Sign and date: -----

Screening:

Comments by service providers:-----

---Categorical comments (a) Applicant Eligible { } (b) Applicant Ineligible { }

Annex 2 - Environmental and Social Screening Forms for PROSPER Subprojects

A: Screening Form for SME/Socio-economic Infrastructure Projects

General Information

Project Name:	
Name of incubator / applicant:	
Name of Cooperative:	
Contact person's details:	
Name of Apex Group:	
Contact person's details:	
Project Location:	
Project sector (e.g. rice farming, vegetable processing, etc.)	
Estimated Cost:	
Proposed Date of Commencement:	
Expected Project duration:	
Site (estimated area in ha):	
Any equity/contribution brought into the project:	
Any plan for new construction:	

A1. Screening for Environmental and Social Issues

Question	Yes	No	Additional explanation of 'Yes' response
1. Will the sub-project develop any wetlands?			
2. Would the sub-project result in economic displacement ¹³⁴ (loss of assets or access to resources) or physical resettlement			
3. Would the sub-project result in conversion and/or loss of physical cultural resources?			

¹³⁴ Economic displacement implies the loss of land, assets, access to assets, income sources or means of livelihoods (see SECAP Procedure Guidance Statement 13)

Question	Yes	No	Additional explanation of ‘Yes’ response
4. Will the sub-project have significant social adverse impacts (affecting access to and/use rights to land, access to potable water and water for other uses) on local communities or other project-affected parties?			
5. Will the project trigger unsustainable natural resource management practices (fisheries, forestry, livestock, and significant increase in use of agrochemicals) that exceed the carrying capacity?			
6. Does the sub-project include conversion of significant areas (above 50 ha) of natural forests/other wild lands?			
7. Would the project potentially cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. habitat loss, erosion/ other form of land degradation, fragmentation, hydrological changes)?			
8. Does the proposed project target area include ecologically sensitive areas ¹³⁵ ; areas of global significance for biodiversity conservation and/or biodiversity-rich area; habitats depended on by endangered species?			
9. Does the project involve fisheries development in situations where little information exists on sustainable yield?			
10. Could the project pose a risk of introducing invasive alien species?			
11. Does the project involve the transfer, handling or use of genetically modified organisms/living modified organisms that may have an adverse effect on threatened biodiversity?			
12. Is the project site close to any oil and gas installation such as flow stations, oil terminal, oil or gas pipeline right of way?			
13. Has oil spill/ or pipeline fire ever been recorded around project site?			
14. Does the project involve land use changes (agricultural intensification and/or expansion of the cropping area) and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods?			
15. Will the project result in increased use of agrochemicals which may affect the natural environment/human health?			
16. Does the project include small-scale irrigation and drainage projects, and water impoundment including small dams (except in wetlands)?			

¹³⁵ ‘Sensitive areas’ include: protected areas (national parks, wildlife/nature reserves, biosphere reserves); areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance) and areas with high social vulnerability due to poverty, disease, ethnicity and race.

Question	Yes	No	Additional explanation of 'Yes' response
17. Does the project involve agricultural intensification and/or expansion of cropping area in non-sensitive areas?			
18. Do the project activities include rangeland and livestock development?			
19. Does the project involve artisanal fisheries where there is information on sustainable yield?			
20. Do the project activities include aquaculture and/or mariculture?			
21. Do the project activities include watershed management or rehabilitation?			
22. Does the project include large-scale soil and water conservation measures?			
23. Does the project include small and micro enterprise development sub-projects?			
24. Does the project involve credit operations through financial service providers, including credit for pesticide/other agrochemicals, livestock purchasing, irrigation, etc.?			
25. Do the project activities include natural resources-based value chain development?			
26. Would any of the project activities have minor adverse impacts on physical cultural resources?			
27. Would the project have low probability to have physical resettlement or economic displacement?			
28. Does the project include development of agro-processing facilities?			
29. Will the project require a migrant workforce during construction?			
30. Will the project require seasonal workers to plant and/or harvest produce?			
31. Will the construction or operation of the project cause an increase in traffic on rural roads?			

Guidance for sub-project categorization

"Yes" response to any of questions 1-13	Sub-project Environmental and social category is A	The project will not invest in Catgery A sub project and the screening is not required
"Yes" response to questions 14-31	Sub-project Environmental and social category is B	Sub-project to adopt the ESMP in the general ESMF
"No" response to almost all questions	Subproject Environmental and social category is C	No further analysis is required

B: Screening Form for (Market) Infrastructure Sub-Projects

Name of market infrastructure:	
Infrastructure type:	
Location:	
Proposed Date of Commencement:	
Expected Project duration:	
Estimated cost:	
Estimate number of communities to be served:	
Estimated number of entrepreneur to be served:	

B1: Screening for (Market) Infrastructure Sub-projects

Question	Yes	No
1. Will the project activities include construction/rehabilitation of rural roads or other rural infrastructure in protected/sensitive areas ¹³⁶ ?		All road length < 10 km
2. Does the project include construction of roads or other infrastructure that entail the total area being cleared of 50 ha or above?		
3. Does the project include construction of dam (s)/reservoir (between 5-15 m high with a reservoir exceeding 2 million m ³)?		
4. Does the project involve large-scale irrigation schemes rehabilitation/ development (above 100 ha)?		
5. Does the project involve significant extraction of ground water (significantly above recharge capacity)?		
6. Does the project include water-based (ground or surface) development where it is believed that significant depletion due to climate change or overutilization has occurred?		
7. Does the project involve significant extraction, diversion or containment of surface water?		

¹³⁶ ‘Sensitive areas’ include: protected areas (national parks, wildlife/nature reserves, biosphere reserves); areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance) and areas with high social vulnerability due to poverty, disease, ethnicity and race.

8. Does the project include drainage or correction of natural water bodies (e.g. river draining)?		
9. Will the project include construction/rehabilitation of rural roads that pass through oil infrastructure locations such as flow stations, tank farms or oil and gas pipelines?		
10. Would any of the project activities have minor adverse impacts on physical cultural resources?		
11. Does the project include development of agro-processing facilities?		
12. Will the project require a migrant workforce during construction?		
13. Will the construction or operation of the project cause an increase in traffic on rural roads?		
14. Has the government or community guaranteed the lease of the land for the (market) infrastructure?		
15. Is there any plan in place for sustainability of the infrastructure during the project life time?		
16. Does the project include specific measures to protect against dust (such as dust masks and water spraying)?		
17. Has arrangement been made to pay adequate compensation for private property that may be affected by the construction of the project?		
18. Will construction equipment with moderate decibels be used and the timing of use be so that people will experience less discomfort?		
19. Will tree and vegetation replanting be carried out to stabilize slopes and re-green road sides?		

Guidance for categorization

"Yes" response to any of questions 1-9	Environmental and social category is A	The project will not invest in Catgery A sub project and the screening is not required
"Yes" response to questions 10-13	Environmental and social category is B	Sub-project to adopt the general ESMP in the ESMF
"No" response to almost all questions 1-13 and 'Yes' to questions 14-19	Environmental and social category is C	No further analysis is required

C: Climate Screening Form for Sub-Projects

To be used with the environmental and social screening forms.

Screening for Climate Issues

Question	Yes	No	Additional Explanation of 'Yes' response*
1. Is the project area subject to extreme climatic events such as flooding, drought, tropical storms, or heat waves?			
2. Do climate scenarios for the project area foresee changes in temperature, rainfall or extreme weather that will adversely affect the project impact, sustainability or cost over its lifetime?			
3. Will the project make investments in low-lying coastal areas/ zones exposed to river flooding and coastal storm surge?			
4. Will the project promote agricultural activity in marginal and/or highly degraded areas that have increased sensitivity to climatic events (such as on hillsides, deforested slopes or floodplains)?			
5. Is the project located in areas where rural development projects have experienced significant weather- related losses and damages in the past?			
6. Will the project develop/ install infrastructure in areas with a track record of extreme weather events?			
7. Is the project target group entirely dependent on natural resources (such as seasonal crops, rain-fed agricultural plots, and migratory fish stocks) that have been affected by in the last decade by climate trends or specific climatic events?			
8. Will climate variability likely affect agricultural productivity (crops/ livestock/fisheries) or the associated incidence of pests and diseases for the project target groups?			
9. Would weather-related risks or climatic extremes likely adversely impact upon key stages of identified value chains in the project (from production to markets)?			
10. Is the project investing in climate-sensitive livelihoods that are diversified?			
11. Is the project investing in infrastructure that is exposed to infrequent extreme weather events?			
12. Is the project investing in institutional development and capacity building for rural institutions (such as farmer groups, cooperatives) in climatically heterogeneous areas?			

Question	Yes	No	Additional Explanation of 'Yes' response*
13. Does the project have the potential to become more resilient through the adoption green technologies at a reasonable cost?			
14. Does the project intervention have opportunities to strengthen indigenous climate risk management capabilities?			
15. Does the project have opportunities to integrate climate resilience aspects through policy dialogue to improve agricultural sector strategies/policies?			
16. Does the project have potential to integrate climate resilience measures without extensive additional costs (e.g. improved crop variety, capacity building; or including climate risk issues in policy processes)			
17. Based on the information available would the project benefit from a more thorough climate risk and vulnerability analysis to identify additional complementary investment actions to manage climate risks?			

Guidance for categorization

"Yes" response to any of questions 1-9	Sub-project Climate risk is High	Climate risk Analysis is required for sub-project
"No" response to almost all questions	Sub-project climate risk is moderate	Sub-project to adopt the ESMP in the general ESMF

Annex 3 - Environmental and Social Guidelines for contractors¹³⁷

(for reference in contractor agreements/contracts)

Sound environmental and social management of construction projects can be achieved only with adequate site selection and project design. As such, the ESMP for projects involving any new construction, or any rehabilitation or reconstruction for existing projects, should provide information as to screening criteria for site selection and design including the following:

Site Selection

Sites should be chosen based on community needs for additional projects, with specific lots chosen based on geographic and topographic characteristics. The site selection process involves site visits and studies to analyze: (i) the site's, sub-urban, or rural characteristics; (ii) national, regional, or municipal regulations affecting the proposed sites; (iii) accessibility and distance from inhabited areas; (iv) land ownership, including verification of absence of squatters and/or other potential legal problems with land acquisition; (v) determination of site vulnerability to natural hazards, (i.e. intensity and frequency of floods, landslides, etc.); (vi) suitability of soils and sub-soils for construction; (vii) site contamination; (viii) flora and fauna characteristics; (ix) presence or absence of natural habitats and/or ecologically important habitats on site or in vicinity (e.g. forests, wetlands, rare or endangered species); and (ix) historic and community characteristics.

The rules (including specific prohibitions and construction management measures) should be incorporated into all relevant bidding documents, contracts, and work orders.

Prohibitions

The following activities are prohibited on or near the project site:

- Cutting of trees for any reason outside the approved construction area;
- Hunting, fishing, wildlife capture, or plant collection;
- Use of unapproved toxic materials, including lead-based paints, asbestos, etc.
- Disturbance to anything with architectural or historical value;
- Building of fires;
- Use of firearms (except by authorized security guards);
- Use of alcohol by workers.
- Use of all forms of forced labor and child labor
- Unfair treatment and discrimination of workers

Construction Management Measures

Solid, sanitation, and hazardous wastes must be properly controlled, through the implementation of the following measures:

Waste Management:

- Minimize the production of waste that must be treated or eliminated;
- Identify and classify the type of waste generated. If hazardous wastes (including health care wastes) are generated, proper procedures must be taken regarding their storage, collection, transportation and disposal;
- Identify and demarcate disposal areas clearly indicating the specific materials that can be deposited in each;
- Control placement of all construction waste (including earth cuts) to approved disposal sites (>300 m from rivers, streams, lakes, or wetlands). All garbage, metals, used oils, and

¹³⁷ Adapted from Ministry of Agriculture, Irrigation and Water Development, Republic of Malawi (2015) *Environmental and Social Management Framework for Programme for Rural Irrigation Development in Malawi*, pp.76-80.

excess material generated during construction should only be disposed in authorized areas, incorporating recycling systems and the separation of materials.

Maintenance:

- Identify and demarcate equipment maintenance areas (>15m from rivers, streams, lakes or wetlands);
- Ensure that all equipment maintenance activities, including oil changes, are conducted within demarcated maintenance areas; never dispose spent oils on the ground, in water courses, drainage canals or in sewer systems;
- Identify, demarcate and enforce the use of within-site access routes to limit impact on site vegetation;
- Install and maintain an adequate drainage system to prevent erosion on the site during and after construction.

Erosion Control

- Erect erosion control barriers around perimeter of cuts, disposal pits, and roadways;
- Spray water on dirt roads, cuts, fill material and stockpiled soil to reduce wind-induced erosion, as needed;
- Maintain vehicle speeds at or below 10mph within the work area, 15mph or below within 200m of the site, and abide by the relevant speed limits at all times to / from the work area.

Stockpiles and Borrow Pits

- Identify and demarcate locations for stockpiles and borrow pits, ensuring that they are 15 meters away from critical areas such as steep slopes, erosion-prone soils, and areas that drain directly into sensitive water bodies;
- Limit extraction of material to approved and demarcated borrow pits.

Site Cleanup

- Establish and enforce daily site clean-up procedures, including maintenance of adequate disposal facilities for construction debris.

Safety during Construction

The Contractor's responsibilities include the protection of every person and nearby property from construction accidents. The Contractor shall be responsible for complying with all national and local safety requirements and any other measures necessary to avoid accidents, including the following:

- Carefully and clearly mark pedestrian-safe access routes;
- If school children are in the vicinity, include traffic safety personnel to direct traffic;
- Maintain supply of supplies for traffic signs (including paint, easel, sign material, etc.), road marking, and guard rails to maintain pedestrian safety during construction;
- Conduct safety training for construction workers prior to beginning work;
- Provide personal protective equipment (PPE) and clothing (such as goggles, gloves, respirators, dust masks, hard hats, steel-toed and -shanked boots, etc.,) for construction workers and enforce their use;
- Post Material Safety Data Sheets for each chemical present on the worksite;
- Require that all workers read, or have read, all Material Safety Data Sheets. Clearly explain the risks to them and their partners, especially when pregnant or planning to start a family. Encourage workers to share the information with their physicians, when relevant;
- Ensure that the removal of asbestos-containing materials or other toxic substances be performed and disposed of by specially trained workers;
- During heavy rains or emergencies of any kind, apply construction safeguards guidelines;

- Brace electrical and mechanical equipment to withstand unexpected events during construction.

Nuisance and Dust Control

To control nuisance and dust the Contractor should:

- Maintain all construction-related traffic at or below 15 mph on streets within 200 m of the site;
- Maintain all on-site vehicle speeds at or below 10 mph;
- To the extent possible, maintain noise levels associated with all machinery and equipment at or below 90db;
- In sensitive areas (including residential neighborhoods, health centers, schools, etc.) more strict measures may need to be implemented to prevent undesirable noise levels;
- Minimize production of dust and particulate materials at all times, to avoid impacts on surrounding families and businesses, and especially to vulnerable people (children, elderly);
- Phase removal of vegetation to prevent large areas from becoming exposed to wind;
- Place dust screens around construction areas, paying particular attention to areas close to housing, commercial areas, and recreational areas;
- Spray water as needed on dirt roads, cut areas and soil stockpiles or fill material;
- Apply proper measures to minimize disruptions from vibration or noise coming from construction activities.

Community Relations

To maintain cordial community relations, the Contractor should:

- Following the country and ESMP requirements, inform the population about construction and work schedules, interruption of services, traffic detour routes, as appropriate;
- Limit construction activities at night. When necessary ensure that night work is carefully scheduled and the community is properly informed so they can take necessary measures;
- At least five days in advance of any service interruption (including water, electricity) the community must be advised through clearly visible posters at the project site and at central community locations;
- Where possible, particularly for tasks that can also be performed through low-skilled manual labor (such as digging of shallow trenches, etc.), make use of labor from the local community.

Chance Find Procedures for Culturally Significant Artifacts

In case culturally valuable materials (incl. shrines, graves, etc.) are uncovered during excavation:

- Stop work immediately following the discovery of any materials with possible archeological, historical, paleontological, or other cultural value, announce findings to project manager and notify relevant authorities;
- Protect artifacts as well as possible using plastic covers, and implement measures to stabilize the area, if necessary, to properly protect artifacts;
- Prevent and penalize any unauthorized access to the artifacts;
- Restart construction works only upon the authorization of the relevant authorities.

Environmental Supervision during Construction

The bidding documents should indicate how compliance with environmental rules and design specifications would be supervised, along with the penalties for non-compliance by contractors or workers. Construction supervision requires oversight of compliance with the manual and environmental specifications by the contractor or his designated environmental

supervisor. Contractors are also required to comply with national and state regulations governing labour, the environment, public health and safety.

Annex 4 – Checklist for Construction Works

Based on the National Environmental (Construction Sector) Regulations (2011), at every construction facility the following checklist should be implemented:¹³⁸

- (1) Every facility shall implement programmes on best practices as set out in Schedule I of the Regulations while taking recognition of workers organizations
- (2) Every facility shall provide base for ancillary equipment and bund wall for containment of waste oil in the event of any unanticipated discharge or spillage.
- (3) Every operator of construction facility/site shall ensure:
 - (a) it has a functional, adequate and appropriate drainage system for the project;
 - (b) the separation or diversion of clean water runoff to prevent it from mixing with water containing high solid particle content;
 - (c) it minimizes the volume of water to be treated prior to release (same as storm water control system);
 - (d) the use of color coding for the drainage system such as blue for surface water drains and red for foul water drains;
 - (e) safe movement of materials and fuel to and from site;
 - (f) tanks are clearly labelled with their contents and storage capacity;
 - (g) workers are trained to carry out the outlined procedures in the Emergency Response Plan as specified in Schedule II to the Regulations;
 - (h) absorbent materials and other containment equipment (e.g. spill kits) suitable for the construction type, are available in adequate quantity on site; and
 - (i) all tanks are properly covered.
- (4) The operator shall ensure:
 - (a) high standard of housekeeping;
 - (b) that dust/particulate matter arising from loaded trucks entering or leaving the site is kept to a minimum level by the use of tarpaulin materials as cover and that water sprays or other dust suppression or collection methods are used at every dusty place where work is carried out;
 - (c) appropriate use of Personnel Protective Equipment (PPE) by all persons at construction site as in Schedule VI to the Regulations;
- (5) Every facility shall have an Emergency Response Plan in accordance with the guide template specified in Schedule II to these Regulations.

¹³⁸ National Environmental (Construction Sector) Regulations (2011). S.I. No.19.

Annex 5 - Social Inclusion Strategy

*"In every country, certain groups (...) Confront barriers that prevent them from fully participating in their nation's political, economic, and social life. These groups are branded by stereotypes, stigmas, and superstitions. They often live with insecurity. And such disadvantages not only preclude them from capitalizing on opportunities to lead a better life, they also rob them of dignity."*¹³⁹

Social inclusion means different things to different people. In its flagship publication on the topic, the World Bank defines social inclusion as "the process of improving the ability, opportunity, and dignity of people, disadvantaged on the basis of their identity, to take part in society."¹⁴⁰ A strategy for social inclusion should therefore both address the above-mentioned 'barriers' as well as strengthen the capacities that disadvantaged groups in society require to make the most of development opportunities and realize their full potential.

The PROSPER will directly contribute to social inclusion by actively focusing on unemployed youth and women, which together with people with disabilities and widows remain among the most disadvantaged groups in The society.¹⁴¹ To ensure fragile areas are not entirely excluded from project activities and left marginalized, PROSPER is advised to develop tailor-made solutions in those locations where there is at least a commitment to safe access for the project so that youth and women in such areas will still be able to participate in different value chain components.

Using the World Bank's advice to focus on three critical 'inclusion domains' of markets, services and spaces, PROSPER can help promote social inclusion in the project area through the following instruments and policies:

1. Markets (Land, Regulatory Framework)

- Negotiate with traditional authorities in local communities for long-term land access by women and youth for agri-enterprise activities;
- Negotiate with state governments to allocate larger plots of unused (but suitable) farmland and provide security of tenure for women and youth associations for agri-enterprise activities;
- Support legislative reform establishing gender parity in land ownership and inheritance;
- Closely monitor project progress, hold regular meetings with leaders/representatives of women and youth organizations to discuss project challenges, and provide additional (technical) support where needed.

2. Services (Training, Financial, Labour, ICT)

- Provide refresher, advanced and/or top-up skills training on-site for women and youth (on any relevant topic that hinders progress in their agri-enterprises) in combination with intensive mentoring support;
- Support opportunities for information sharing, whereby women and youth who are currently not part of the project can visit the agri-enterprise sites and whereby entrepreneurs can share their experiences (including reasons for failure and success);
- Negotiate with agricultural banks to provide preferential credit arrangements for high-potential women or youth agri-entrepreneurs;

¹³⁹ World Bank (2013) *Inclusion Matters: The Foundation for Shared Prosperity* (WB: Washington, D.C.), p.xv.

¹⁴⁰ Idem, p.4.

¹⁴¹ Widows are often dispossessed of their late spouses' property including land by the spouse's kinsmen. Special consideration and protection needs to be given to this category of vulnerable people to make sure they have access to land and other productive bases.

- Encourage contractors / service providers to give employment preference to local community members (e.g. via ‘code of conduct’);
- Organize a ‘hackathon’ together with a technology-oriented innovation centre to develop a special app for rural youth in the project area to promote farming and facilitate market access as well as create an online platform that allows women and youth to showcase their achievements and experiences with wider society and other relevant actors (e.g. government and donor agencies).

3. Spaces (Physical, Cultural, Social)

- Liaise with local police to ensure security in farming areas, markets and access routes;
- Organize public awareness-raising campaigns in consultation with local CSOs to promote farming, encourage inclusive community-level decision-making, prevent intra-community conflict and reduce gender-based violence;
- In general, ensure that initial screening, selection and support to project beneficiaries by community leaders and others at the grassroots level is based on merit and need rather than lingering primordial considerations;
- To prevent climate-induced exclusion, recommended climate change adaptation and mitigation measures should be given priority. Many beneficiaries may not be able to bounce back once they are affected by hydro-meteorological disasters such as flooding and erosion.

Annex 6 –Stakeholders Consultations (evidence from various locations – Design mission August 10-15, 2021- Kumasi & Tamale)

B. Guiding questions for environment and social screening	Yes/No	Comments/explanation
Category A project: The project will not invest in Category A sub project and the screening is not required		
Project location		
32. Would the project develop any wetlands? (Guidance statement GS1)	No	
33. Would the project cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. conversion of more than 50 hectares of natural forest, loss of habitat, erosion/other form of land degradation, fragmentation, and hydrological changes)? (GS 1, 2 & 5)	No	
34. Does the proposed project target area include ecologically sensitive areas, ¹⁴² areas of global/national significance for biodiversity conservation and/or biodiversity-rich areas and habitats depended on by endangered species? (GS1)	No	
35. Is the project location subjected to major destruction as a result geophysical hazards (tsunamis, landslides, earthquakes, volcanic eruptions)?	No	
Natural resources		
36. Would the project lead to unsustainable natural resource management practices (fisheries, forestry, livestock) and/or result in exceeding carrying capacity. For example, is their development happening in areas where little up-to-date information exists on sustainable yield/carrying capacity? (GS 4, 5 and 6)	No	
37. Would the project develop large-scale ¹⁴³ aquaculture or mariculture projects, or where their development involves significant alteration of ecologically sensitive areas?	No	
38. Would the project result in significant use of agrochemicals which may lead to life-threatening illness and long-term public health and safety concerns? (GS 14)	No	
39. Does the project rely on water-based (ground and/or surface) development where there is reason to believe that significant depletion and/or reduced flow has occurred from the effects of climate change or from overutilization? (GS7)	No	
40. Does the project pose a risk of introducing potentially invasive species or GMOs which might	No	

¹⁴² “Sensitive areas” include: protected areas (national parks, wildlife/nature reserves, biosphere reserves) and their buffer zones; areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation and areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance) and areas with high social vulnerability.

¹⁴³ The size threshold to trigger an Environmental and Social Impact Assessment (ESIA) may vary based on the country context and fragility of specific locations. Some countries have regulations on minimum size (usually ranging from a unit area of 10 to 50 hectares) and these will be adopted where they exist. However, where there are no standards, it is proposed to use 25 hectares as an aquaculture unit size to trigger ESIA.

alter genetic traits of indigenous species or have an adverse effect on local biodiversity? (GS1)		
41. Does the project make use of wastewater (e.g. industrial, mining, sewage effluent)? (GS7)	No	
Infrastructure development		
42. Does the project include the construction/rehabilitation/upgrade of dam(s)/reservoir(s) meeting at least one of the following criteria? (GS8) - more than 15 metre high wall or - more than 500 meter long crest or - more than 3 million m ³ reservoir capacity or - incoming flood of more than 2,000 m ³ /s	No	
43. Does the project involve large-scale irrigation schemes rehabilitation/development (above 100 hectares per scheme)?¹⁴⁴ (GS7)	No	
44. Does the project include construction/rehabilitation/upgrade of roads that entail a total area being cleared above 10 km long, or any farmer with more than 10 per cent of his or her private land taken? (GS10)	No	Rehabilitation/construction of feeder roads and/or track roads will vary between 7 km to 9.50 km just to link villages to farming areas.
45. Does the project include drainage or correction of natural water bodies (e.g. river training)? (GS7)	No	
46. Does the project involve significant extraction/diversion/containment of surface water, leaving the river flow below 20 per cent environmental flow plus downstream user requirements? (GS7)	No	
Social		
47. Would the project result in economic displacement¹⁴⁵ or physical resettlement of more than 20 people, or impacting more than 10 per cent of an individual household's assets? (GS13)	No	
48. Would the project result in conversion and/or loss of physical cultural resources? (GS9)	No	
49. Would the project generate significant social adverse impacts to local communities (including disadvantaged and vulnerable groups and indigenous people) or other project-affected parties? (GS13)	No	
Other		
50. Does the project include manufacture and transportation of hazardous and toxic materials which may affect the environment? (GS2)	No	
51. Does the project include the construction of a large or medium-scale industrial plant?	No	
52. Does the project include the development of large-scale production forestry? (GS5)	No	
Rural finance		

¹⁴⁴ The size threshold to trigger an Environmental and Social Impact Assessment (ESIA) may vary based on the country context and fragility of specific locations. Some countries have regulations determining size of irrigation development requiring a full ESIA and these will be adopted where they exist. However, where there are no standards, it is proposed to use 100 hectares as an irrigation development unit size to trigger an ESIA.

¹⁴⁵ Economic displacement implies the loss of land, assets, access to assets, income sources or means of livelihoods (guidance statement 13).

53. Does the project support any of the above (Q1 to Q22) through the provision of a line of credit to financial service providers? (GS12)	No	
Category B – the following may have some adverse environmental and/or social implications which can be readily remedied.		
Location		
54. Does the project involve agricultural intensification and/or expansion of cropping area in non-sensitive areas that may have adverse impacts on habitats, ecosystems and/or livelihoods? (GS1, 2 and 12)	No	
Natural resource management		
55. Do the project activities include rangeland and livestock development? (GS6)	TBD	For nutrition and health improvement with small ruminant as IGA.
56. Does the project involve fisheries where there is information on stocks, fishing effort and sustainable yield? Is there any risk of overfishing, habitat damage and knowledge of fishing zones and seasons? (GS4)	No	
57. Would the project activities include aquaculture and/or agriculture in newly introduced or intensively practiced areas? Do project activities include conversion of wetlands and clearing of coastal vegetation, change in hydrology or introduction of exotic species? (GS4)	No	
58. Do the project activities include natural resources-based value chain development? (GS 1, 6 and 12)	Yes	Yes but only eligible activities under Category B criteria considered see (PDR and ESMF) with key mitigation measures
59. Do the project activities include watershed management or rehabilitation?	Yes	Yes but only eligible activities under Category B criteria considered see (PDR and ESMF) with key mitigation measures
60. Does the project include large-scale soil and water conservation measures? (GS 1 and 5)	No	
Infrastructure		
61. Does the project include small-scale irrigation and drainage, and small and medium (capacity < 3 million m³) dam subprojects? (GS 7 and 8)	Yes	Yes, mostly small scale socioeconomic infrastructure to support RIs and local farmers
62. Does the project include small and microenterprise development subprojects? (GS 12 and 13)	Yes	Yes but only eligible activities under Category B criteria considered see (PDR and ESMF) with key mitigation measures
63. Does the project include the development of agro processing facilities? (GS 2, 6 and 12)	Yes	
64. Would the construction or operation of the project cause an increase in traffic on rural roads? (GS10)	No	
Social		

65. Would any of the project activities have minor adverse impacts on physical cultural resources? (GS9)	No	
66. Would the project result in physical resettlement of less than 20 people, or impacting less than 10 per cent of an individual household's assets (GS13)?	No	
67. Would the project result in short-term public health and safety concerns? (GS14)	No	
68. Would the project require a migrant workforce or seasonal workers (for construction, planting and/or harvesting)? (GS13)	No	
Rural finance		
69. Does the project support any of the above (Q24 to Q37) through the provision of a line of credit to financial service providers? (GS12)	Yes	Yes but only eligible activities under Category B criteria considered see (PDR and ESMF) with key mitigation measures

Ghana

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Project Design Report

Annex 9: Integrated Project Risk Matrix (IPRM)

Mission Dates: 02/08/2021 to 20/09/2021

Document Date: 22/11/2021

Project No. 2000002673

Report No. 5864-GH

West and Central Africa Division
Programme Management Department

Overall Summary

Risk Category / Subcategory	Inherent risk	Residual risk
Country Context	High	Substantial
Political Commitment	High	Substantial
Governance	Substantial	Moderate
Macroeconomic	High	Substantial
Fragility and Security	Substantial	Moderate
Sector Strategies and Policies	Substantial	Moderate
Policy alignment	Substantial	Moderate
Policy Development and Implementation	Substantial	Moderate
Environment and Climate Context	High	Moderate
Project vulnerability to environmental conditions	Substantial	Moderate
Project vulnerability to climate change impacts	High	Moderate
Project Scope	Substantial	Moderate
Project Relevance	Moderate	Low
Technical Soundness	High	Moderate
Institutional Capacity for Implementation and Sustainability	High	Moderate
Implementation Arrangements	High	Moderate
Monitoring and Evaluation Arrangements	Substantial	Moderate
Project Financial Management	Moderate	Low
Project Organization and Staffing	Moderate	Low
Project Budgeting	Substantial	Moderate
Project Funds Flow/Disbursement Arrangements	Substantial	Moderate
Project Internal Controls	Moderate	Low
Project Accounting and Financial Reporting	Substantial	Moderate
Project External Audit	Low	Low
Project Procurement	Substantial	Moderate
Legal and Regulatory Framework	Substantial	Moderate
Accountability and Transparency	High	Substantial
Capability in Public Procurement	Moderate	Low
Public Procurement Processes	Substantial	Moderate
Environment, Social and Climate Impact	Moderate	Low
Biodiversity Conservation	Moderate	Low
Resource Efficiency and Pollution Prevention	Moderate	Low
Cultural Heritage		No risk envisaged - not applicable
Indigenous People		No risk envisaged - not applicable
Labour and Working Conditions	Substantial	Moderate
Community Health and Safety	Moderate	Low
Physical and Economic Resettlement	Low	Low
Greenhouse Gas Emissions	Substantial	Moderate

Risk Category / Subcategory	Inherent risk	Residual risk
Vulnerability of target populations and ecosystems to climate variability and hazards	Moderate	Low
Stakeholders	Substantial	Moderate
Stakeholder Engagement/Coordination	Substantial	Moderate
Stakeholder Grievances	Moderate	Low
Overall	Substantial	Moderate

Country Context	High	Substantial
Political Commitment	High	Substantial
Risk: A change of Government and Ministers in the relevant Ministries during the project cycle may result in implementation delays, lack of interest from a new elected Government, or even civil unrest. While the overall system is stable and in the past democratic elections have seen peaceful transitions, the change in Government or priorities could lead to issues. This is magnified in the significant risks related to counterpart funding, corruption perception index and quality of public administration.	High	Substantial
Mitigations: PROSPER will maintain a regular engagement with relevant Government officials to address issues on project management (communication, information sharing, reporting) throughout the entire project cycle. Political environment will be continuously monitored, and appropriate measures will be developed in case the need to deal with political changes arises, including re-alignment of project with Government agenda.		
Governance	Substantial	Moderate
Risk: The risk that the country exhibits governance failures that may undermine project implementation and achievement of project development objectives. Another risk is project level governance failure. Despite the fact that Ghana has a well-established democracy and institutions and Ghana Audit Services is a capable institution and annual budgets are discussed by the Parliament, these risks are judged to be substantial. For example risks related to corruption perception index and quality of public administration are substantial.	Substantial	Moderate
Mitigations: Supervision missions and other implementation support / follow up measures will be conducted minimum twice a year. Missions and follow up efforts will include FM and procurement specialists. The ICO will ensure that audits are conducted on time. External and internal audit findings will be assessed and followed up proactively with the project, implementing ministry and borrower representative.		
Macroeconomic	High	Substantial
Risk: Macroeconomic and global difficulties such as inflation, fuel and energy challenges, local and foreign market failures, fiscal and monetary policies affecting access to finance, government inability to provide counterpart funding, inadequate imports of hybrid seeds and fertilizers can represent a risk to PROSPER implementation. Major currency fluctuations would affect prices, demand and availability imported inputs and export markets.	High	Substantial

Mitigations: Following actions are expected to lead to addressing the above risks: (i) Strengthening community institutions and developing their internal capital and physical assets to develop resilience to external shocks. (ii) Obtaining high level government support from the early stages of project design; thus increasing potential of GoG support in case of adverse macroeconomic conditions and reducing probability of constraining inputs or any other necessary elements on PROSPER's beneficiaries. (iii) PROSPER will develop market linkages and strengthen RIs access to financial services to facilitate their access credit from financial institutions. This will contribute to building the beneficiaries resilience to shocks. (iv) Government contribution will be mostly in the form of in-kind contribution; thus reducing any potential impact of non-ability of the Government to provide cash contributions. (v) IFAD operational policy regarding re-structuring will be applied in case of evolving macro-economic situation that would require revisiting costs.		
Fragility and Security	Substantial	Moderate
Risk: The ongoing COVID-19 pandemic might result in mid-to-longer term economic difficulties or even civil unrest. Some of the response measures adopted by governments in the peak of each wave to prevent transmission of the disease, such as movement and gathering restrictions, may impact employment, rural-urban movements and have some economic impact. The duration and strength of COVID in Ghana is still uncertain. Development of vaccines and new medical protocols are contributing to reducing these risks. Despite the conflict and socio-political turmoil in a handful of neighbouring countries, (i.e. Burkina Faso, Niger, Nigeria), Ghana's global environment remains relatively calm. Nevertheless, the risk of welcoming influxes of unexpected climate and conflict related internally displaced people should not be discarded.	Substantial	Moderate
Mitigations: IFAD is actively participating in COVID-19 response dialogues, both at the UN Country Team level and in implementing its emergency operation (ESRF) with the government, to prevent and support mitigating negative impacts of the outbreak on the population (cash transfer, support Government programs). ESRF is working closely with other DPs and the Government to support measures that would help cope with post COVID realities, such as e-platforms for extension and marketing. PROSPER will continue working with the GoG and monitor these growing threats at the outskirts of its frontiers, throughout implementation. Systematic reporting on the handling of security and conflict issues will enable IFAD and PROSPER to anticipate accordingly. During project implementation, special attention will be given to such issues so the project can adequately monitor this potential exogenous risk that could hinder IFAD and PROSPER efforts, should it occur.		
Sector Strategies and Policies	Substantial	Moderate
Policy alignment	Substantial	Moderate
Risk: While national policies and strategies are generally in line with IFAD policies, some weakness in sector strategies and policies still exist, especially on subsidies and short-term focused political programmes over long-term agriculture development. This is namely related to blanket subsidies or unfavourable exports/imports policies, especially on agro-inputs. This could increase difficulty to deliver project expected outcomes.	Substantial	Moderate
Mitigations: These risks are managed through a continuous policy dialogue engagement and development partners coordination during the entire project cycle.		

Policy Development and Implementation	Substantial	Moderate
Risk: The development and implementation of agricultural sector policies could provide a challenging environment in some of PROSPER's critical areas e.g. matching grants, access by PROSPER's target group to inclusive finance, enterprise development and climate finance.	Substantial	Moderate
Mitigations: From the onset, promoting inclusive policy dialogue, integrating perspectives of different stakeholders since design, proper coordination between different stakeholders, and building institutional capacities, are elements that will contribute to the desired support for the sector, leading to PROSPER's success. From the second year of implementation, PROSPER will support the preparation of policy-relevant knowledge products based on project evidence. PROSPER's policy dialogue sub-component will address key policy areas that are relevant to the Project's objectives and implementation such as green agriculture, climate change, inclusive finance, etc. Ghana ICO will continue to participate actively in the ASWG and the private sector platform, contribute to advocate for supportive policy formulation, and will liaise with Development Partners to develop position papers aiming for increasingly effective policies in the agriculture sector during the entire project cycle.		
Environment and Climate Context	High	Moderate
Project vulnerability to environmental conditions	Substantial	Moderate
Risk: Possible environmental and climate shocks or extreme events (e.g. earthquakes, land erosion, siltation) would have significant adverse risks and/or impacts on food and nutrition security, agricultural productivity, access to markets, value-chains and infrastructure and local development perspectives. While the above mentioned natural environmental risks are not posing major threats (with the exception of occasional earthquakes), illegal mining is leading to noticeable water pollution and environmental degradation. Deforestation is another environmental risk. Climate related risks such as floods, droughts, unusual climate conditions are more probable. The potential incidence of pests and diseases would result in increased vulnerability or deterioration of the target populations' livelihoods and ecosystems.	Substantial	Moderate
Mitigations: Where these exist, special measures will be taken to adequately protect project's interventions throughout the project cycle. The project has developed an ESMF / ESMP which will contribute to address any unintended project impact, as well as externalities. PROSPER's aims at improving NR management and addressing climate risks. This will help address some of the above mentioned potential risks. With regard to climate related risks, the project will promote climate insurance. Project interventions will not lead to any tree clearing but on the contrary it will promote afforestation and forests preservation through promotion of alternative livelihoods.		
Project vulnerability to climate change impacts	High	Moderate
Risk: Unreliable and erratic rainfall, floods, long dry spells and destruction of infrastructure and productive assets due to extreme weather conditions could delay/ affect project implementation. Climate change could impact production negatively, thus affecting PROSPER's beneficiaries and reducing the potential of achieving PROSPER's objectives. Project's environmental and social category is B and the climate risk assessment is moderate to high.	High	Moderate

Mitigations: PROSPER's design is focused on improving NRM and introducing intensive climate adaptation and mitigation measures to support PROSPER's beneficiaries. This will be achieved through a range of Project's interventions such as capacity building on climate resilient agricultural practices (details and expected timeframe are referenced in the PDR); promotion of technically feasible and financially affordable soil and water management practices with farmers; facilitation of provision of weather information for decision making to farmers; provision of crop insurance to farmers. Lastly, the MG scheme and the BFF loan facility will support a wide spectrum of adaptation and mitigation measures. Additionally, foreseen socioeconomic infrastructures and other agriculture activities financed under PROSPER (small sections of feeder roads 7-9.5 km long) linking two villages, and/or agricultural land, which are mostly community owned, are expected to be small, low risks, mostly site specific and easily manageable. Consistent with IFAD Safeguards standards/policies the initial project environmental, social and climate screening, and PROSPER being a category B operation, an environment and social management framework (ESMF) has been prepared to help mitigate the Project induced impacts and external shocks in an adequate manner. The preparation was done adopting a consultative and inclusive approach. Moreover, a Gender, Social Inclusion and Vulnerability Specialist as well as Safeguards and Climate Specialist will be part of the PCU to ensure timely project compliance on safeguards, social inclusion and climate change. The GCF unit in the ARB-APEX bank will include safeguards, climate, Social Inclusion, and Vulnerability Specialists as well. A crucial part of PROSPER's intervention aims at helping beneficiaries in targeted areas to cope with climate change impacts to achieve improved and more sustainable livelihoods while participating in selected VCs schemes.		
Project Scope	Substantial	Moderate
Project Relevance	Moderate	Low
Risk: PROSPER becomes less relevant if it is not aligned with IFAD and government priorities.	Moderate	Low
Mitigations: The objectives and interventions of the project are fully aligned with national development policies and IFAD priorities and are deemed responsive to the needs and challenges of the target groups. Project relevance and the needs of the target group will continue to be confirmed further during project start-up, baseline surveys, and supervision and follow up missions. Corrective measures/adjustments such as restructuring will be taken if appropriate (even during early stages of implementation), to ensure project relevance is maintained. The M&E system will play an important role for continuous flow of information within the project and with key stakeholders, for early detection of potential difficulties.		
Technical Soundness	High	Moderate

Risk: Complexities; such as - time consuming VC surveys and situation assessments at the beginning of the project may delay project implementation - MoUs for implementation are not signed on time or project implementation does not progress according to plan - cofinancing from the Government does not materialize - FIs remains risk averse and delay implementation of the BFF - limited agribusiness expertise in the implementing agency results in priority to production (supply) aspects and supply driven implementation - the lack of participation of agribusinesses, particularly of those which are new to the concept of partnering with community institutions, might cause delay in market linkage development; and - capacity of the extension services	High	Moderate
Mitigations: PROSPER will mitigate these risks by building on prior IFAD projects experiences from the onset and through actions like: i) building on the experiences of successful VC and microenterprise development projects such as a GASIP and REP, as well as coordination with AAFORD, especially on financial linkages to formal financial institutions and micro-insurance services; ii) prioritizing the presence of agribusiness and commercial agriculture expertise in the team from the start (REP and GASIP, which are about to be completed, have experienced staff in the areas of commercial VC and microenterprise development); iii) drawing upon agribusinesses which already proven to partner successfully with other projects such as GASIP, other non-IFAD projects and scale up their outreach to the PROSPER target group, as well as by developing marketing linkages through government supported initiatives such as 1D1F and PERD; iv) capacity building of AEAs and provision of TA to backstop BRCs during implementation; v) phasing approach is developed to allow addressing any potential issues with implementation arrangements; vi) Government funding is mostly in form of in-kind contribution; vii) Key project staff ToRs include follow up on meeting the triggers and follow up / timely recording of Government in-kind contribution; viii) Institutional support will be provided to Government services including AEAs. .		
Institutional Capacity for Implementation and Sustainability	High	Moderate
Implementation Arrangements	High	Moderate
Risk: - Management unit located far away from project communities - Overburdened project management unit due to limited staff - Delays in replacement/recruitment of key staff and limited field presence might result in management constraints - Complex implementation arrangements that have several parties - Presence of several partners and service providers might result in complex implementation arrangements - MoUs delayed with Project Partners; such as APEX-Bank, BRCs, GIRSAL, etc	High	Moderate
Mitigations: (i) The PCU will be located centrally in the Project areas, close to the beneficiaries (ii) Implementation will be phased thus allowing the Project team to build their capacity and experience (iii) Phased implementation will allow taking corrective measures at an early stage through restructuring and / or any other corrective measures (iv) Introducing clarity on the roles of different parties of the implementation structure as well as roles of different partners, thus reducing complexity (v) Ensuring strong support by the implementing ministry through project implementation to allow filling any gaps and addressing any staffing constraints (vi) Once implementation commences, PROSPER will recruit TA to support implementation.		

Risk: Non-effective Market Linkages for Project Beneficiaries: Risk: -The risk that PROSPER's efforts to create marketing linkages for RIs and MSMEs does not succeed due to lack of interest by agribusinesses - Failure of smallholders producers to meet market requirements with regard to quantity and quality	Substantial	Moderate
Mitigations: Since the beginning of the project activities will focus on building capacity of RIs and MSMEs not only on climate risks and NR degradation but also with regard to FAB and improved production and financial literacy. It will also strengthen the extension teams to ensure state of the art knowledge is accessible to the beneficiaries. The RIs and MSMEs will also have access to financial services such as VSLAs, matching grants and BFF. This will help farmers to continue credit worthy and credible partners to agribusinesses under formal market linkages arrangements. Consciousness efforts will be made to link farmers' groups and MSMEs to VC actors. In addition to incentives such as increased opportunities for expanding their businesses, incentives such as access to know how and concessional BFF loans is expected to encourage agribusinesses to have strong links to the target groups.		
Risk: Poor farmers Performance due to Climate Impacts Risks High climate high risks would lead to sub-optimal production and failure of the smallholders to meet their commitments to the partnering agribusinesses and financial institutions.	High	Moderate
Mitigations: Since start-up, the project will raise smallholders' awareness on climate risks and how to climate proof their farming operations. Under component 2, farmers will be supported to develop green and climate resilient business plans to access MGs and the BFF facility. The project will make arrangements to link the farmers to GIRSAL (agricultural risk mechanism) and GAIP (agricultural climate insurance) to mitigate any loss due to climate risks or any other shocks.		
Risk: PFI are Risk Averse and not Willing to lend to PROSPER's Target Group Risks: PFI consider PROSPER's target group high risk and does not agree to engage in business relationship with most of them.	Substantial	Moderate
Mitigations: Since its start-up, the project will build the organisational capacity of the beneficiaries groups and take them through a gradual graduation approach, starting with financial literacy, saving mobilisation, matching grant support for the poorest groups, and access to low interest rate BFF. These actions, coupled with intensive efforts to create market linkages, introduce Ag risk mechanism and climate insurance as well as building the capacity to the PFI through training and developing products suitable for PROSPER's target group, are expected to address possible risks for the PFI.		
Risk: - The risk that the investments under the MG fund and BFF does not comply with green financing requirements - The risk that project implementation does not focus sufficiently on nutrition activities	High	Moderate

Mitigations: <ul style="list-style-type: none"> - IGREENFIN Operational Manual for green investments will be included in PROSPER PIM. - Project staff ToRs will include specific focus on ensuring green investments and compliance with the IGREENFIN Operational Manual - Project design include significant focus on nutrition including farmers training, specific MG category for nutrition - Specific TA for nutrition is included in the design - Partnerships with line Government departments to support implementation of nutrition activities 		
Monitoring and Evaluation Arrangements	Substantial	Moderate
Risk: <p>Weak M&E processes and systems could lead to inadequate Project's capacity to deal with complexity, monitor, validate, analyse and communicate results, capture lessons, and adjust implementation to seize opportunities and take corrective actions in a timely manner.</p> <p>Risk of inadequate flow of information from the districts, APEX Bank to the PCU.</p>	Substantial	Moderate
Mitigations: <p>M&E risks are mitigated by a clear structure from the onset, by leveraging existing M&E expertise within host agency, and by maintaining a participative-collaborative approach for the definition of specific tools with main stakeholders.</p> <p>The project will have a dedicated M&E team, who will derive the M&E plan collaboratively with the line ministry, district staff and with relevant stakeholders, farmers organisations and agribusinesses. M&E focal points at regional, district levels and in APEX Bank will be established.</p> <p>The key responsibilities of the M&E system will rely on the M&E Unit at the PCU, composed of an M&E manager and M&E officers. All other implementation agencies at regional level will play important roles in collecting and analysing data to assess outcomes and impact of project activities. The M&E unit will set up a monitoring-evaluation manual and a computerized monitoring-evaluation data system to provide periodic, GIS based system, complete and reliable data. Several M&E tools and guidelines will be incorporated in the M&E system along with the Core Outcome Indicators (COI) Survey, which would allow for effective monitoring of the project situation at baseline, mid-term and completion.</p> <p>PROSPER's M&E system aims for continuous information flow among relevant stakeholders and will allow the development of corrective measures as soon as issues are identified, from the beginning of implementation. PROSPER also feeds from other IFAD operations' experiences, lessons, knowledge and products (REP, GASIP, AAFORD), including what regards to project evaluation and monitoring.</p> <p>The institutional arrangement for implementation will ensure that PROSPER's M&E is fully integrated into the MoFA planning, M&E, and policy formulation processes, which turns the PROSPER's M&E system into an important element of project's sustainability and exit strategy.</p>		
Project Financial Management	Moderate	Low
Project Organization and Staffing	Moderate	Low
Risk: <p>The implementing entity has excess number of qualified and experienced financial management staff thereby increasing cost significantly.</p>	Moderate	Low
Mitigations: <p>The entity has three chartered Accountants and one finalist. All have experience in managing IFAD project. Two junior Accounts Assistants will be engaged to replace two senior accountants on completion of GASIP. PROSPER will make complete and appropriate staffing a condition precedent to disbursement and throughout project cycle</p>		
Project Budgeting	Substantial	Moderate

Risk: 1) IFAD disbursement cap may result in funds not being available when needed 2) Disbursement cap Information may not be readily available at the time of AWPB preparation 3) The use of GIMFIS implies that the AWPB is integrated in the national budget, which could cause delays in budget approval	Substantial	Moderate
Mitigations: 1) Project must obtain disbursement cap before completion of AWPB. 2) Project must liaise with FMD and PMD through the Country Director 3) The PMU will work toward an early submission of the AWPB. Any setback caused by the use of national systems will be discussed and mitigated by negotiating with government authorities.		
Project Funds Flow/Disbursement Arrangements	Substantial	Moderate
Risk: Delays in justifying prior advances, particularly, MoFA Directorates of District Agriculture due to the use of the revolving fund mechanism	Substantial	Moderate
Mitigations: Programme Accountants and Technical Specialists shall constantly remind implementing partners to justify advances at least once a month. Restriction rule of minimum 80% of advances justified before the release of any new advance shall be applied. The amount of the advances should be kept low. ·		
Project Internal Controls	Moderate	Low
Risk: 1) Internal control systems will not allow for an effective control system to be put in place. 2) Low capacity and performance of government and private implementing partners	Moderate	Low
Mitigations: 1) The arrangement proposed for staffing will guarantee proper segregation of duties. The Internal Auditors of the lead implementing agency shall conduct ex-post review of PROSPER at least twice a year, and each expenditure will be validated by the internal audit system of GIMFIS 2) Contractual arrangements and reporting templates and guidelines for project finances shall be spelt out in MOUs/MOAs with implementing partners and service providers. Quarterly reports shall be required of implementing partners to feed into the Project IFRs.		
Project Accounting and Financial Reporting	Substantial	Moderate
Risk: 1) Lack of experience in using the national accounting platform – GIMFIS resulting in late submission and poor quality of the financial reports 2) Difficulties to meet the reporting requirement of all co-financiers	Substantial	Moderate
Mitigations: 1) Sensitization and migration is planned for the staff to use in the current programme before PROSPER start-up to enhance experience before implementation of the new project 2) Careful definition of reporting requirement per financier at project start-up phase		
Project External Audit	Low	Low

Risk: No major risk is identified for external audit given the good track record of the GAS in auditing IFAD financed projects	Low	Low
Mitigations: ,		
Project Procurement	Substantial	Moderate
Legal and Regulatory Framework	Substantial	Moderate
Risk: The procurement regulations are out of tune with the Amended PPA Act 914 of 2016 which can make the interpretation of the law difficult. Procurement monitoring received a "D" rating from PEFA, due to the incomplete nature of the procurement information published by the Public Procurement Authority (PPA). Specifically, the information from the PPA database is provisional for FY2016 and FY2017, has not updated regularly and had not been independently verified by PPA or the Auditor General.	Substantial	Moderate
Mitigations: IFAD prior review thresholds will take into account the CPI score for Ghana. Additionally, all procurement entities, as well as bidders, suppliers, contractors, consultants and service providers, shall observe the highest standard of ethics during the procurement and execution of contracts financed under IFAD funded Projects, in accordance with paragraph 69 of the Procurement Guidelines. The Revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations shall apply to all projects, vendors and third parties, in addition to the relevant national anticorruption and fraud laws. The Procuring Entity should establish a review panel at the level of the implementing agency, which will provide the first level of review for procurement complaints before eventually submitting them to the PPA. All NCB documents should have a Notice of Intention to Award provision/template and should be used. Use of standard bidding documents, use of procurement plan, and clear procurement arrangements from the onset.		
Accountability and Transparency	High	Substantial
Risk: Transparency International assigned a corruption perception index (CPI) score of 43/100 to Ghana, thus falling within the "medium" bracket. There is only a single level system to handle procurement complaints. In fact, although an appeals authority (ACB) exists at national level, it is not independent and there is no appeals review panel at the level of the implementing agency. The absence of Notice of Intention to Award and standstill period in Bidding documents/Request for Proposals do not enable bidders know when a contract is to be awarded so they should decide whether to complain or not. No debarment system. PPA's list of debarred suppliers refers to the World Bank debarred list. Ghana's Commission of Human Rights and Administrative Justice (CHRAJ) is an independent anti-corruption agency. Ghana has a one level system to handle complaints. PPA is responsible for the administrative review process and inauguates a 7-member Appeals and Complaints Panel that reports back to PPA. No debarment system. PPA's list of debarred suppliers refers to the World Bank debarred list. Ghana's Commission of Human Rights and Administrative Justice (CHRAJ) is independent anti-corruption agency	High	Substantial

Mitigations: IFAD prior review thresholds will take into account the CPI score for Ghana. Additionally, all procurement entities, as well as bidders, suppliers, contractors, consultants and service providers, shall observe the highest standard of ethics during the procurement and execution of contracts financed under IFAD funded Projects, in accordance with paragraph 69 of the Procurement Guidelines. The Revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations shall apply to all projects, vendors and third parties, in addition to the relevant national anticorruption and fraud laws. The Procuring Entity should establish a review panel at the level of the implementing agency, which will provide the first level of review for procurement complaints before eventually submitting them to the PPA. All NCB documents should have a Notice of Intention to Award provision/template and should be used. Use of standard bidding documents, use of procurement plan, and clear procurement arrangements from the onset.		
Capability in Public Procurement	Moderate	Low
Risk: The current implementation arrangement provides that the PCU of PROSPER will be embedded within the existing structures of the GASIP. GASIP has a Procurement Unit with 1 staff member, which could result in procurement delays and hamper project implementation. There is room for improving the quality of the bidding document. Procurement staff have full access to the PPA website. Procurement and financial management functions are separated.	Moderate	Low
Mitigations: Strengthen the procurement unit through the recruitment of an additional procurement staff (Procurement Officer) and training in IFAD procurement guidelines during the first year of implementation. S/He will be monitored to ensure adherence to IFAD procurement procedures and processes while at the same time serves as a back up to the PROSPER Procurement Manager. GASIP's staff member has about 13 years general procurement experience, and 8 years specific donor-funded procurement experience.		
Public Procurement Processes	Substantial	Moderate
Risk: -The PPA stipulates 2 - 6 weeks of Bidding for NCB contracts. There is the likelihood that Bidders may not have sufficient time to submit competent bids which could result in either adverse selection or retendering with attendant delays to project implementation. -The NCB document for works procurement and the Bidding document does not include a template for Environmental, Social, Health and Safety (ESHS) Performance Security. There is the risk that ESHS procedures may not be followed during implementation, which could cause delays if the rights of individuals are violated. -Procurement plans are not updated regularly. This could make procurement process monitoring difficult. -Contract registers at MoFA and GASIP are not updated regularly. The country procurement methods for goods, works and services are consistent and congruent with IFAD's Access by foreign firms to bidding documents is not known.	Substantial	Moderate

Mitigations: -PROSPER will ensure that the Procurement Plan includes the minimum bidding period, suitable for the different procurement methods, from the onset. -The Works Procurement methods should be strengthened to include a template in the Bidding documents for Environmental, Social, Health and Safety Performance Security so as to ensure compliance of Contractors' C-ESMP plans during construction. -PROPSPER will ensure that all procurement plans and contracts register are updated regularly throughout project implementation in the required format and submitted regularly to IFAD.		
Environment, Social and Climate Impact	Moderate	Low
Biodiversity Conservation	Moderate	Low
Risk: The risk that the project may cause significant threats to or the loss of biodiversity, availability of diversified nutritious food, ecosystems and ecosystem services, territories of the indigenous peoples, or the unsustainable use/production of living natural resources. These risks are limited, as the project will promote use of best farming practices as well as promote agricultural intensification.	Moderate	Low
Mitigations: SECAP procedures will be applied, which will lead to working closely with the Environmental Protection Agency (EPA) of Ghana to address any adverse impacts, throughout the entire project cycle. An ESMF is developed as part of the project design. All the above risks are assessed as not significant. All necessary measures are incorporated in the design to address unintended limited impacts as well as externalities. No deforestation or agriculture in forested areas. Use of chemicals will be monitored and necessary measures will be applied to address any potential impacts.		
Resource Efficiency and Pollution Prevention	Moderate	Low
Risk: The risk that the project may cause significant pollution to air, water, and land, and inefficient use of finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels.	Moderate	Low
Mitigations: SECAP procedures will be applied, thus reducing any such likelihood. Arrangements and monitoring to ensure construction works, agriculture or any other project interventions will not lead to harm to the environment or the communities.		
Cultural Heritage		No risk envisaged - not applicable
That the project will be implemented in areas of cultural heritage or lead to harming any such assets.		
Indigenous People		No risk envisaged - not applicable
There are no Indigenous Peoples in Ghana as per the UN definition; therefore, no such risk is envisioned particularly in project interventions areas.		
Labour and Working Conditions	Substantial	Moderate

Risk: Though PROSPER interventions are foreseen to be small in scale and mostly localized, the size of agriculture plots are very limited, therefore, during ploughing and/or harvesting, and/or construction of community infrastructure there is a likelihood to use labour forces during a short period of time.	Substantial	Moderate
Mitigations: Provision is made in the ESMF to adequately cope with the likelihood of engaging labour forces or the presence of labour influx in the project intervention areas. During supervision and follow up missions, close follow up will be made to ensure appropriate use of labour.		
Risk: Child labour is forcefully prohibited in Ghana, however there is likelihood that this could happen. However, in case of presence of children in tree crops production practices, resulting in Child labour, practical measure will be taken to immediately mitigate such a behaviour.	Substantial	Moderate
Mitigations: Strict adherence to government policies to prevent child labour. Facility for reporting any violation followed by prompt investigation of any reported case. The ESMF is prepared to address child labour issues.		
Community Health and Safety	Moderate	Low
Risk: During project implementation, although most activities will be done using manual tractions, it is likely the tools and other material used could harm or threaten the safety and security of farmers, and/or workers or even visitors. Furthermore, the risk that the project may cause moderate to low adverse impacts on the physical, mental, nutritional or social health/safety status of an individual, group, or population, including as a result of gender based violence is also very unlikely and thus, significantly unexpected.	Moderate	Low
Mitigations: The project will be nutrition sensitive, will ensure gender and youth mainstreaming, as described in PDR. The project interventions are designed to improve income, livelihoods, and nutrition status of the target groups. It is not envisioned that there will be significant environmental, social, or physical impacts and SECAP provisions, especially ESMF recommendations, will be applied from the onset to ensure that any such impacts are addressed as part of project interventions.		
Physical and Economic Resettlement	Low	Low
Risk: The risk that the project may cause significant adverse physical, social, cultural, or economic impacts (especially for marginalized groups), from land acquisition, and involuntary loss of land, assets, and restriction to access to assets, income sources, or means of livelihoods is limited simply because (i) all agriculture lands will occur on community owned lands; (ii) feeder/truck roads connecting two villages and/or agricultural fields are very short (7-9.50 Km of length); (iii) construction of socioeconomic community infrastructure will occur on communally owned pieces of land.	Low	Low
Mitigations: The project is not envisioned to pose such risk. SECAP policies, and specifically ESMF recommendations will be applied to ensure that any such impacts are addressed as part of the project interventions.		

Greenhouse Gas Emissions	Substantial	Moderate
Risk: Ecological damage might occur through mono-cropping, deforestation, and/or the processing/transformation of some VC crops, etc. in the process of promoting tree crop production.	Substantial	Moderate
Mitigations: Strict adherence to government environmental and natural resources management policies, throughout project cycle. The programme will focus on rehabilitation of existing planting areas, plantations in denuded land and intercropping with staple crops and planting in farmland instead of fresh plantations, unless properly evaluated.		
Vulnerability of target populations and ecosystems to climate variability and hazards	Moderate	Low
Risk: As indicated above, the rural smallholder population in the target areas (Northern and Middle belts), typically engaged in rainfed agriculture, is subject to various impacts of climate and ecosystem variability (dry spells, delayed/short rainfall, droughts, floods, pests and locusts invasion, etc.) which affects their productivity, livelihoods, and infrastructure.	Moderate	Low
Mitigations: Project interventions are designed with the goal of building resilience of target groups to climate change impacts and effects, as well as reducing greenhouse gases emissions in project's value chains. Intensive trainings and capacity buildings with regard to climate risks, adaptation and mitigation. The BPs will integrate climate adaptation and mitigation measures. A key element to deal with climate variability and help mitigating this type of risk is the climate-related financing, including providing access to agricultural insurance schemes. GAIP, the GoG's entity in charge of crop insurance, is among AAFFORD partners which will be linked to PROSPER's interventions from the onset, as previously indicated.		
Stakeholders	Substantial	Moderate
Stakeholder Engagement/Coordination	Substantial	Moderate
Risk: <ul style="list-style-type: none"> - Failure to create linkages with other IFAD projects offering complementary services - Inadequate stakeholder engagement/coordination - Gaps in roles definition - Inadequate/insufficient information disclosure - Misunderstandings or duplication/inconsistencies between partners working in the same target area might dilute project effectiveness - Smallholders' lack of access to financial resources beyond project's one time start-up support might cause lack of continuity of marketing linkages between smallholders and agribusinesses 	Substantial	Moderate

Mitigations: PROSPER will be implemented in a consultative, participatory and inclusive manner. PROSPER will therefore mitigate these risks through the following key actions: i) Strong linkages with AAFORD, GASIP and REP from the earliest stages of implementation. PROSPER will be building on the on-going IFAD projects to complement its activities where possible: working with AAFORD to provide affordable credit supply to target households; building on REP achievements such as use of BRCs for creating market linkages, business planning, capacity building of groups and micro enterprises, leveraging on the demand by 1D1F; and with GASIP for linkages to agribusiness partners. ii) PROSPER is building on ongoing and future interventions by other donors such as the World Bank, AfDB, Canada. Continuous coordination and interactions with all DPs supported programs (since start-up) will be ensured. The project implementation arrangements contain strong coordination mechanisms such as Project Steering Committees and use of existing experienced PCU. Preparation of AWPB will be done in a participatory manner, etc. Strong coordination will take place both at central level and in the field. iii) The project design addresses key gaps such as value chains weaknesses, NR degradation, lack of access to financial resources, etc. iv) The project design include sound M&E, KM and communication arrangements which will contribute to information gathering and dissemination; thus leading to better information sharing and coordination. v) As project cycle advances, development of bankable BPs that receive continuous financial support through affordable bank loans will allow target households to gradually increase acreage and profitability over successive agricultural seasons and sustain their agribusiness linkages.		
Stakeholder Grievances	Moderate	Low
Risk: As stated in the PDR and above, all participating land sites will be communally owned, small in size and free of any claim. Nevertheless, land tenure issues can de-incentivise participation of farmers -including youth and women- in PROSPER. Moreover, agriculture, construction of community activities may result in harming some people who might rightfully seek ways of claiming their rights.	Moderate	Low
Mitigations: The ESMF includes a participatory Grievance Redress Mechanism (GRM) that enables project beneficiaries and/or affected persons to freely and easily lodge their claims and seek for a peaceful reparation, throughout project implementation. On the land acquisition issues, throughout implementation PROSPER will further engage with GOG's departments responsible for land tenure policy to promote solutions to securing land access on longer-term basis or ownership transfer to those who want to farm.		

Ghana

Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

Project Design Report

Annex 10: Exit Strategy

Mission Dates: 02/08/2021 to 20/09/2021

Document Date: 22/11/2021

Project No. 2000002673

Report No. 5864-GH

West and Central Africa Division
Programme Management Department

Annex 10: Exit Strategy and Sustainability

1. The exit strategy designed for the project comes as a natural and sequential phasing out from supported activities, where high level of participation from the host agency, beneficiaries and partner institutions is planned from the onset of implementation, to ensure effectiveness and progressive leadership from local stakeholders who will be able to continue, scale-up and/or guide and monitor planned activities after project completion.
2. Important aspects designed to guarantee PROSPER's success and sustainability and the continuation of its benefits after completion, include institutional arrangements such as embedding the PCU in the host Government agency, to build capacity on project scope matters, favour collaborative problem-solving and contribute to project ownership throughout PROSPER's entire lifecycle.
3. The PROSPER design took a consultative and collaborative approach with a high level of participation from all relevant stakeholders, aiming for a tailored planning of activities, flexibility and continued sustainability. Capacity building is a key aspect in all planned activities under the three PROSPER components, including project management and policy engagement.
4. First stages of implementation will rely on key situation analysis, a strong targeting strategy and beneficiaries' differentiation according to their level of capitalization and professionalization. This gradual and differentiated approach to be adopted from the beginning of implementation gives strength to the design by providing PROSPER with the capacity to address the developmental challenges of diverse groups in the target areas. The project will cater for distinct levels of competence and ability and build necessary interventions accordingly, allowing beneficiaries classified in the lower tiers in terms of capital and professionalization to access more complex services and support tools as they progress.
5. PROSPER has the benefit of the experiences and important lessons from previous and ongoing IFAD-funded operations in Ghana, which encourages increased and faster maturity.
6. The table below presents PROSPER's Exit Strategy, indicating the activities that are expected to continue after closure, by being taken over gradually by relevant organizations and stakeholders or through scaling-up. This information is organized by project component as a reference. Details on the expected timeline, mechanism for handover, national-level commitment, justifications and necessary evaluation processes are shown.
7. During project implementation, this Exit Strategy will be revisited regularly to test the underlying assumptions and continuing validity in the light of progress. If major restructuring is required, such as reduced size of the replication phase, changing implementation arrangements, reducing and/or increase of scope of components, cancellation, the Exit Strategy will be redesigned in line of the changing context

Annex 10 Table 1: PROSPER Exit Strategy and Sustainability

Reference to PROSPER activity or outcome	Activity to continue post-project	IFAD Support end date	Who will take up the activity	Mechanisms for handover	Commitments from national actors to continue activity	Are further inputs required (funds, trainings, seeds, etc)? Who will provide them?	Can this activity reach greater scale? How?	Comments
Component 1: Development of rural institutions and socioeconomic infrastructure								
1.1 Strengthening of rural institutions and enterprises & Climate proofing smallholder production technologies.	RIs can increase their own capacity by training new members on agronomical practices and farming as a business on their own, including efforts to adopt climate-friendly practices and natural resource remediation. RIs take ownership to scale-up the capacity building experience to non-beneficiaries.	After MTR	Beneficiary RIs.	phasing over	MoFA, DAs, Cluster Committees.	Beneficiary RIs will count with the material and capacity received from PROSPER to continue the task when new members decide to join, and to share their experience with other groups. MoFA and DAs remain as links with IFAD for any necessary updates.	After MTR/towards project completion beneficiary RIs can organize knowledge and experience sharing events with other groups working on similar value chains in former project areas. This will be evaluated/ planned together with the PCU during PROSPER last years of implementation. Cluster-level surveys will serve as an asset to identify scaling-up potential. These knowledge sharing events will also include a specific module on promotion of nutrition-sensitive farming and vegetable cultivation.	Scaling-up. Requirements: Identification of "champions"/most successful cases - Resources to be provided by PROSPER, MoFA/DAs. These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.

Reference to PROSPER activity or outcome	Activity to continue post-project	IFAD Support end date	Who will take up the activity	Mechanisms for handover	Commitments from national actors to continue activity	Are further inputs required (funds, trainings, seeds, etc)? Who will provide them?	Can this activity reach greater scale? How?	Comments
	Beneficiary Economic interest groups and MSMEs can share their increased capacity learning curve on enterprise development (e.g. Value addition and support services), including efforts to adopt climate-friendly practices and natural resource remediation, with new members and non-beneficiary groups.	After MTR	Beneficiary Economic Interest Groups and MSMEs.	phasing over	MoFA, BRCs, BACs, DAs, Cluster Committees	Beneficiary economic groups will use the material and capacity received from PROSPER to continue the task when new members decide to join, and to share their experience with other non-beneficiary groups. MoFA and DAs remain as links with IFAD for any necessary updates and support.	After MTR/towards project completion beneficiary economic groups will be incentivized to share knowledge and experience gained through PROSPER with other groups working on similar value chains in former project areas. This will be evaluated and planned together with the PCU during PROSPER last years of implementation. Cluster-level surveys will serve as an asset to identify potential for scaling-up.	Scaling-up. Requirements: Identification of "champions"/most successful cases - Resources to be provided by PROSPER, MoFA/DAs. These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.

1.2 Development of socioeconomic infrastructure.	PROSPER's Natural Resources (NR) remediation infrastructures will be sustained by local authorities. These also will continue to identify the need for new infrastructure developments.	After Completion	DAs, MoFA	phasing over	MoFA, DAs/local communities	Each capital investment plan will include appropriate management, operation, maintenance and ongoing financing arrangements, with overall responsibility resting with the community. Agreements will be reached between the DAs and the cluster leadership for the post- construction management of infrastructure by various community gender-balanced committees. Resources for infrastructure maintenance and new developments might be needed. Possible sources include: GoG, local communities, development partners, and IFAD additional financing.	Towards project completion, local capacity to sustain the socioeconomic infrastructures will be assessed by the project, along with their capacity to identify the need for further infrastructure developments. In case support is needed in this area, specific sensitization activities will be organized by the PCU during PROSPER last 2 years of implementation.	Maintenance and scaling-up. NR remediation infrastructures may comprise soil and water conservation structures, as well as climate change mitigation measures in line with local conditions. The District Assembly will undertake all procedures to acquire/lease any land needed for construction. PROSPER envisages expanding and rehabilitating strategic road networks (feeder roads and farm tracks, culverts and small bridges), as well as shared domestic water supply structures (boreholes with hand or solar pumps), sanitation facilities and waste management systems, and alternative/green energy schemes (including resource and energy recovery from waste). These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.
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Component 2: Strengthening the economic benefits for smallholders and small operators around selected agricultural value chains.

2.1 Creation of sustainable marketing linkages and business development	RIs remain engaged in formal partnerships and agreements with public/private entities after PROSPER's comprehensive financial, capacity and marketing support.	After Completion	Target communities/ project beneficiaries.	Phasing down	MOFA, DAs, Partner entities & institutions, Private Sector	The deep analysis to be commissioned by PROSPER of each VC at the beginning of implementation, together with the interventions on financial literacy, capacity and marketing support to target groups, and the follow up activities, are designed to ensure mutually beneficial and enduring partnerships.	To be evaluated after MTR and regular updates.	The Promotion of linkages between producers and VC actors aims for lasting partnerships between producers engaged in climate-resilient farming and larger-scale agribusinesses. This will concentrate on those RIs and MSMEs that demonstrated interest and potential in the Component 1 capacity building interventions. PROSPER will not enter business relations with the parties at any stage. With the support of the Business Advisory Centres/Business Resource Centres and District Directorates of Agriculture, the project will engage with VC actors in each participating district with an information-gathering and analysis exercise. These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.
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Reference to PROSPER activity or outcome	Activity to continue post-project	IFAD Support end date	Who will take up the activity	Mechanisms for handover	Commitments from national actors to continue activity	Are further inputs required (funds, trainings, seeds, etc)? Who will provide them?	Can this activity reach greater scale? How?	Comments
	SMEs and Rural enterprises continue to access business development services. Marketing linkages remain active and profitable.	After Completion	Target communities/ project beneficiaries	Phasing down & phasing out	MOFA, DAs, Partner Financial Institutions, Private Sector	Capital and capacity conditions are required to access each type of supported service, to cater to various levels of capacities and professionalization, ensuring each type of enterprise is catered for accordingly.	To be evaluated after MTR and regular updates.	PROSPER design includes key elements that will contribute to the sustainability of project interventions: a sequencing approach, high level of involvement of partner institutions from the onset, a consultative and participatory process and a tailored targeting strategy, allowing a gradual and differentiated access to financial services depending on the capacity and maturity level of beneficiary groups. Development of Business Plans are also differentiated according to beneficiary maturity and capitalization. These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.

2.2 Access to rural financial services.	<p>Rural households continue using rural financial services (savings and credit facilities). After PROSPER's capacity and financial support, a portion of the MG beneficiaries will have graduated to be eligible for more complex instruments.</p>	After Completion	Target communities/ project beneficiaries	Phasing down & phasing out	MoFA, DAs, Partner Financial Institutions, Private Sector	<p>PROSPER will support the creation and strengthening of savings and credit groups (based on the proven successful VSLA model). The revolving nature of the BFF guarantees sustainability in the access to its financial services after project completion.</p>	<p>PROSPER PCU can evaluate the possibility of scaling up during the last years of implementation, using success stories and knowledge sharing within the project areas.</p>	<p>An initial assessment of the maturity of the targeted groups will be conducted from inception: Groups will be evaluated against their level of capitalization, skills in financial management and ability to establish business agreements with VC actors such as traders and processors. They will be categorized into three tiers depending on their maturity level for proper targeting and sequencing to access the different financial services (being able to be re-assessed and graduated to be eligible for more demanding/complex financial tools).</p>
	<p>The successful operation of the BFF is expected to incentivise the APEX Bank and its network to provide more resources and to crowd in additional resources from</p>	After Completion	Participating Financial Institutions	Phasing down & Phasing out	ARB APEX Bank, RCBs and private sector	<p>The BFF will increase in size due to more funds provided by the bank and private sector. Demand from the smallholders will continue to grow despite the decreased level of concessionality</p>	<p>Increased demand by smallholders for green financial services will lead to increased supply from private sector and FIs</p>	

Reference to PROSPER activity or outcome	Activity to continue post-project	IFAD Support end date	Who will take up the activity	Mechanisms for handover	Commitments from national actors to continue activity	Are further inputs required (funds, trainings, seeds, etc)? Who will provide them?	Can this activity reach greater scale? How?	Comments
	the private sector. Follow up will be made during implementation to secure more contribution from PFIs.							These arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.

Reference to PROSPER activity or outcome	Activity to continue post-project	IFAD Support end date	Who will take up the activity	Mechanisms for handover	Commitments from national actors to continue activity	Are further inputs required (funds, trainings, seeds, etc)? Who will provide them?	Can this activity reach greater scale? How?	Comments
Component 3. Project management and Policy engagement								

3.2 Policy Engagement	A conducive policy environment to address the developmental challenges targeted by PROSPER will ideally be maintained after project completion, increasing project interventions' sustainability and allowing scaling up of certain activities.	After Completion	MoFA, leading agency, in permanent dialogue with IFAD and partner organizations.	Phasing down	MoFA, Partner Institutions, ICO	Financial partner institutions and the Government will provide necessary resources in case further developments in Green/Climate finance are deemed to be planned for after PROSPER ends.	There is potential for scaling-up through policy ramifications of the new financial sector product "climate/green finance" as a development instrument in Ghana in coping with climate change. PROSPER identifies potential policy alternatives for public-private partnerships to invest in an ambitious Natural Resources recovery and reconstruction programme, which could provide employment for large numbers of people. Climate/ green finance could leverage massive public investment in adaptation and mitigation if a conducive policy framework were devised. This will start to be evaluated together with the PCU and MoFA from the beginning of implementation of Component 2.	- After project completion Ghana ICO will continue to participate in policy dialogue activities, as previewed in the COSOP, where contributions to and advocacy for the harmonisation of the sectoral policy will always be salient aspects of the agenda. - PROSPER implementation support structure embedded in the host Government agency aims for permanent involvement in sectoral policy issues identified during implementation, increased capacity to address project scope matters, ownership and solutions finding in collaboration with the PCU. This is continuation of ICO activities. In any case, these arrangements and partners will be updated regularly. If restructuring is needed, new Exit Strategy will be developed.
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Promoting Rural Opportunities Sustainable Profits and Environmental Resilience (PROSPER)

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Annex 11: Mainstreaming themes – Eligibility criteria checklist

Mission Dates: 02/08/2021 to 20/09/2021

Document Date: 22/11/2021

Project No. 2000002673

Report No. 5864-GH

West and Central Africa Division
Programme Management Department

Mainstreaming themes – Eligibility criteria checklist				
	<input type="checkbox"/> Gender transformational	<input checked="" type="checkbox"/> Youth sensitive	<input checked="" type="checkbox"/> Nutrition sensitive	<input checked="" type="checkbox"/> Climate finance
Situation analysis	<input type="checkbox"/> National gender policies, strategies and actors <input type="checkbox"/> Gender roles and exclusion/discrimination <input type="checkbox"/> Key livelihood problems and opportunities, by gender	<input checked="" type="checkbox"/> National youth policies, strategies and actors <input checked="" type="checkbox"/> Main youth groups <input checked="" type="checkbox"/> Challenges and opportunities by youth group	<input checked="" type="checkbox"/> National nutrition policies, strategies and actors <input checked="" type="checkbox"/> Key nutrition problems and underlying causes, by group <input checked="" type="checkbox"/> Nutritionally vulnerable beneficiaries, by group	
Theory of change	<input type="checkbox"/> Gender policy objectives (empowerment, voice, workload) <input type="checkbox"/> Gender transformative pathways <input type="checkbox"/> Policy engagement on GEWE	<input checked="" type="checkbox"/> Pathways to youth socioeconomic empowerment <input checked="" type="checkbox"/> Youth employment included in project objectives/activities	<input checked="" type="checkbox"/> Nutrition pathways <input checked="" type="checkbox"/> Causal linkage between problems, outcomes and impacts	
Logframe indicators	<input type="checkbox"/> Outreach disaggregated by sex <input type="checkbox"/> Women are > 40% of outreach beneficiaries <ul style="list-style-type: none"> • IFAD empowerment index (IE.2.1) 	<input checked="" type="checkbox"/> Outreach disaggregated by sex and youth	<input checked="" type="checkbox"/> Outreach disaggregated by sex and youth, and IPs (if appropriate) <ul style="list-style-type: none"> • Output level CIs <ul style="list-style-type: none"> ◦ CI 1.1.8 Mandatory • Outcome level CIs (at least one of below) <ul style="list-style-type: none"> ◦ CI 1.2.8 ◦ CI 1.2.9 	
Human and financial resources	<input type="checkbox"/> Staff with gender TORs <input type="checkbox"/> Funds for gender activities <input type="checkbox"/> Funds for IFAD empowerment index in M&E budget	<input checked="" type="checkbox"/> Staff with youth TORs <input checked="" type="checkbox"/> Funds for youth activities	<input checked="" type="checkbox"/> Staff or partner with nutrition TORs <input checked="" type="checkbox"/> Funds for nutrition activities	IFAD Adaptation Finance \$14,964,000 IFAD Mitigation Finance N/A Total IFAD Climate-focused Finance \$14,964,000
ECG Remarks	Gender Nutrition PROSPER will select nutrition sensitive VCs, increase production of highly nutritious crops and animal sourced foods, promote food conservation, post-harvest processing and value addition, and promote better dietary patterns by providing nutrition education and Social Behaviour Change Communication (SBCC).			
	Youth PROSPER will target male and female youth (each group with a minimum of 50% eligible youth), adding their access to land as a precondition for community participation in the project. PROSPER will support the establishment of youth-led enterprises along the selected VCs and will provide targeted financial inclusion, skills development and capacity building.			
	<input type="checkbox"/> No social inclusion themes			

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Annex 12: List of eligible activities to be financed by FIPS

Mission Dates: 02/08/2021 to 20/09/2021

Document Date: 22/11/2021

Project No. 2000002673

Report No. 5864-GH

West and Central Africa Division
Programme Management Department

Annex 12. List of eligible activities to be financed by FIPS

No activities to be financed by FIPS are foreseen.