



THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

FOR OFFICIAL USE ONLY

Report No: PAD3516

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED CREDIT

IN THE AMOUNT OF US\$250 MILLION

AND A

PROPOSED GRANT

IN THE AMOUNT OF SDR 174.1 MILLION
(US\$250 MILLION EQUIVALENT)

TO THE

DEMOCRATIC REPUBLIC OF CONGO

FOR A

NATIONAL AGRICULTURE DEVELOPMENT PROGRAM

June 4, 2021

Agriculture and Food Global Practice
Eastern and Southern Africa Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

CURRENCY EQUIVALENTS

(Exchange Rate Effective April 30, 2021)

Currency Unit = CDF

CDF 2,003 = US\$1

US\$1 = SDR 0.70

FISCAL YEAR

January 1—December 31

Regional Vice President: Hafez M. H. Ghanem

Country Director: Jean-Christophe Carret

Regional Director: Mark R. Lundell

Practice Managers: Shobha Shetty, Douglas Pearce

Task Team Leaders: Diego Arias Carballo, Natalia Agapitova

ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
AG	Auditor General
AgriMSME	Agriculture Micro, Small and Medium Enterprise
AS	Audit Statement
AWP	Annual Work Plan
AWPB	Annual Work Plan and Budget
BCC	<i>Banque Centrale du Congo</i> , Central Bank of the Congo
BDS	Business Development Services
BMWMP	Biomedical Waste Management Plan
CARD	Climate Adaptation in Rural Development
CAS	Country Assistance Strategy
CBA	Cost Benefit Analysis
CCTs	Conditional Cash Transfers
CERC	Contingent Emergency Response Component
CERIP	Contingent Emergency Response Implementation Plan
CMU	Country Management Unit
CNMN	National Multisectoral Nutrition Committee
COVID-19	Coronavirus Disease 2019
CPIA	Country Policy and Institutional Assessment
CPSD	Country Private Sector Diagnostic
CREWS	Climate Risk Early Warning Systems
CRPT	Climate Resilience Planning Tool
CRW ERF	Crisis Response Window Early Response Financing
CSA	Climate Smart Agriculture
DA	Designated Account
DE4A	Digital Economy for Africa Initiative
DEP	Unit of Planning and Analysis Department
DFID	UK Department for International Development
DL	Disbursement Letter
DPC	Direktorate of Civil Protection (<i>Direction de la Protection Civile</i>)
DRC	Democratic Republic of Congo
ECTs	Emergency Cash Transfers
EFA	Economic and Financial Analysis
EIRR	Economic internal rate of return
E&S	Environmental and social
EoI	Expression of Interest
ESA	European Space Agency
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESRS	Environmental and Social Review Summary
EU	European Union
FAO	Food and Agriculture Organization
FAW	Fall Army Worm
FEC	Business Federation of Congo (<i>Federation des Entreprises du Congo</i>)

FCS	Fragile and Conflict-affected Situations
FCV	Fragility, Conflict, and Violence
FI	Financial Intermediary
FIES	Food Insecurity Experience Scale
FMA	Financial Management Assessment
FSC	Food Security Cluster
GBV	Gender-based violence
GDP	Gross Domestic Product
GEMS	Geo-Enabling Monitoring & Support
GHG	Green House Gas
GIS	Geographic Information System
GOST	Geospatial Operations Support Team
GRiF	Global Risk Financing Facility
GRM	Grievance Redress Mechanism
IBM	Iterative Beneficiary Monitoring
ICTs	Information and Communication Technologies
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFI	Intermediary financial institution
IGF	General Finance Inspectorate (<i>Inspection Générale des Finances</i>)
INERA	National Institute of Agronomic Study and Research (<i>Institut National d'Étude et Recherches Agronomiques</i>)
IPC	Integrated Food Security Phase Classification
IPF	Investment Project Financing
IPPF	Indigenous Peoples Planning Framework
IPMP	Integrated Pest Management Plan
IPP	Indigenous Peoples Plan
IPV	Intimate Partner Violence
IRR	Internal Rate of Return
JICA	Japanese International Cooperation Agency
LMP	Labor Management Procedures
LOC	Line of Credit
MDTF	Multi-Donor Trust Fund
M&E	Monitoring and Evaluation
MFD	Maximizing Finance for Development
MFI	Micro Finance Institution
MIS	Monitoring Information System
MoA	Ministry of Agriculture
MOAE	Manual of Operation for Agricultural Emergencies
MOFL	Ministry of Fisheries and Livestock
MOF	Ministry of Finance
MONUSCO	United Nations Stabilization Mission in the Democratic Republic of the Congo
MOU	Memorandum of Understanding
NAIP	National Agriculture Investment Plan
NDC	Nationally Determined Contribution
NFC	Near field communication
NGO	Non-Governmental Organization

NSmartAg	Nutrition Smart Agriculture
NPCU	National Project Coordination Unit
NTCC	National Technical Coordination Committee
OP/BF	Operational Policy/Bank Financing
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OT	Technical Operator (<i>Opérateur Technique</i>)
OVDA	<i>Office des Voies de Desserte Agricoles</i>
P4P	Purchase for Progress
PARRSA	Agriculture Rehabilitation and Recovery Support Project (<i>Projet d'Appui à la Relance et à la Réhabilitation du Secteur Agricole</i>)
PBF	Performance Based Financing
PCMC	Provincial Coordination & Monitoring Committee
PDO	Project Development Objective
PDSS	Health System Strengthening Project (<i>Projet d'Appui des Services de Santé</i>)
PDPC	Western Growth Poles Project
PEFA	Public Expenditure and Financial Accountability
PEMFAR	Public Expenditure Management and Financial Accountability Review
PER	Public Expenditure Review
PFM	Public Financial Management
PFI	Participating Financial Institution
PICAGL	Regional Great Lakes Integrated Agriculture Development Project
PIM	Project Implementation Manual
PLCPP	Participatory Land Community Planning Project
PMP	Pest Management Plan
PPA	Project Preparation Advance
PPIU	Provincial Project Implementation Unit
PNDA	National Agriculture Development Program
PNIA	National Agricultural Investment Program (<i>Programme National d'Investissements Agricoles</i>)
PNSAN	National Food and Nutrition Security Policy (<i>Politique Nationale de Sécurité Alimentaire et Nutritionnelle</i>)
PPIU	Provincial Project Implementation Unit
PPR	Small ruminant pests (<i>Pestes des Petits Ruminants</i>)
PRONANUT	National Nutrition Program (<i>Programme National de Nutrition</i>)
PPSD	Project Procurement Strategy for Development
PTBA	Annual Working Plan and Budget
PTechs	Climate or Nutrition Smart Agriculture
RAP	Resettlement Action Plan
RNA	National Farmer Registry (<i>Registre National d'Agriculteurs</i>)
RF	Results Framework
RFP	Request for Proposals
RPF	Resettlement Policy Framework
RRA	Risk and Resilience Assessment
SC	Steering Committee
SCD	Systematic Country Diagnostics
SEAH	Sexual exploitation and abuse and sexual harassment
SENASEM	National Seed Service (<i>Service National des Semences</i>)
SEP	Stakeholder Engagement Plan

SH	Sexual harassment
SIGI	Subsidy Management Information System (<i>Système d'information de gestion des incitations</i>)
SMART	Standardized Monitoring Assessment of Relief & Transitions
SNV	National Agriculture Extension Service (<i>Service National de Vulgarisation</i>)
SOP	Series of Projects
SSA	Sub-Saharan Africa
STEPP	Eastern Stabilization and Peace Project
STEP	Systematic Tracking of Exchanges in Procurement
TFP	Total Factor Productivity
TOC	Theory of change
ToRs	Terms of Reference
ToT	Training of trainers
TPM	Third Party Monitoring
TTL	Task Team Leader
UN	United Nations
UTNI-RNA	<i>Unité Technique Nationale Interministérielle de gestion du RNA</i>
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
VSLA	Village Savings and Loans Associations
WBG	World Bank Group
WEIA	Women's Empowerment in Agriculture Index
WFP	World Food Programme
WHO	World Health Organization

**TABLE OF CONTENTS**

DATASHEET.....	1
I. STRATEGIC CONTEXT	7
A. Country Context	7
B. Sectoral and Institutional Context.....	8
C. Relevance to Higher Level Objectives.....	11
II. PROJECT DESCRIPTION	14
A. Project Components	21
B. Project Beneficiaries	27
C. Results Chain	28
E. Rationale for Bank Involvement and Role of Partners.....	28
F. Lessons Learned and Reflected in the Project Design	29
III. IMPLEMENTATION ARRANGEMENTS	32
A. Institutional and Implementation Arrangements	32
B. Results Monitoring and Evaluation Arrangements	34
C. Sustainability	36
IV. PROJECT APPRAISAL SUMMARY	37
A. Technical, Economic and Financial Analysis (if applicable).....	37
B. Fiduciary.....	38
C. Legal Operational Policies	39
D. Environmental and Social Standards	39
V. GRIEVANCE REDRESS SERVICES	42
VI. KEY RISKS.....	43
VII. RESULTS FRAMEWORK AND MONITORING	45
Annex 1: Implementation Arrangements and Support Plan	61
Annex 2. Detailed Component Description	73
Annex 3: Economic and Financial Analysis	93
Annex 4: Procurement.....	100
Annex 5: Financial Management	106
Annex 6: Maps.....	118
Annex 7: Assessment of the Net Carbon Balance	120



Annex 8: Gender Action Plan.....	124
Annex 9. Lessons from the rapid agriculture portfolio review in the DRC.....	130
Annex 10: Digital Innovations within the Project	133
Annex 11: World Bank COVID-19 DRC Country Program Response Note	144

**DATASHEET****BASIC INFORMATION**

Country(ies)	Project Name	
Congo, Democratic Republic of	National Agriculture Development Program	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P169021	Investment Project Financing	High

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)
<input checked="" type="checkbox"/> Series of Projects (SOP)	<input checked="" type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input type="checkbox"/> Small State(s)
<input checked="" type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
29-Jun-2021	30-Jun-2026
Bank/IFC Collaboration	Joint Level
Yes	Complementary or Interdependent project requiring active coordination

Proposed Development Objective(s)

To improve agriculture productivity and market access of smallholder farmers in selected project areas



Components

Component Name	Cost (US\$, millions)
Agriculture Productivity	290.00
Smallholder Farmer Market Access	150.00
Agriculture Public Goods and Services	80.00
Contingency Emergency Response	0.00

Organizations

Borrower: Democratic Republic of Congo

Implementing Agency: Ministry of Agriculture

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	520.00
Total Financing	520.00
of which IBRD/IDA	500.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	500.00
IDA Credit	250.00
IDA Grant	250.00

Non-World Bank Group Financing

Trust Funds	20.00
Global Facility for Disaster Reduction and Recovery	20.00

**IDA Resources (in US\$, Millions)**

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Congo, Democratic Republic of	250.00	250.00	0.00	500.00
National PBA	250.00	250.00	0.00	500.00
Total	250.00	250.00	0.00	500.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2022	2023	2024	2025	2026
Annual	50.00	100.00	130.00	120.00	100.00
Cumulative	50.00	150.00	280.00	400.00	500.00

INSTITUTIONAL DATA**Practice Area (Lead)**

Agriculture and Food

Contributing Practice Areas

Finance, Competitiveness and Innovation, Transport, Urban, Resilience and Land

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● High
2. Macroeconomic	● Substantial
3. Sector Strategies and Policies	● Substantial
4. Technical Design of Project or Program	● Substantial
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● High
7. Environment and Social	● High



8. Stakeholders	● Moderate
9. Other	● Moderate
10. Overall	● High

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[] Yes [✓] No

Does the project require any waivers of Bank policies?

[] Yes [✓] No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Relevant



NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

Section I.A.1.(b). The recipient shall no later than four (4) months after the Effective Date, or such later date as agreed by the Association, establish, and thereafter maintain, throughout Project implementation, each of the PPIUs at the provincial level, with functions, responsibilities and sufficient resources acceptable to the Association, and staffed with competent personnel in adequate numbers, with qualifications, experience, integrity and terms of reference satisfactory to the Association and as set forth in the Project Implementation Manual, each of which shall be responsible in its geographic area of responsibility for the: (i) day-to-day financial management of the Project at the provincial level; (ii) oversight of all technical, social, and environmental matters relating to Project implementation; (iii) monitoring and evaluation of Project activities; (iv) carrying out of the procurement of goods, works and services of the Project; and (v) managing any training activity carried out at the provincial level

Sections and Description

Section I.A.1.(c). The recipient shall no later than three (3) months after the Effective Date, or such later date as agreed by the Association, establish and thereafter maintain, throughout the implementation of the Project, a Project Steering Committee chaired by the MoA's Secretary General, with terms of reference, composition (including representatives from other relevant Recipient's ministries, including the Ministry of Fisheries and Livestock, the Ministry of Rural Development and the Ministry of Scientific Research and Technology, and Recipient's agencies, including SNV, INERA, SENASEM and OVDA, as well as key stakeholders from the private sector and civil society) and resources satisfactory to the Association, which shall be responsible for, inter alia, providing overall strategic guidance for the Project and validation of the Annual Work Programs of the Project, as further defined in the PIM.

Conditions

Type	Financing source	Description
Disbursement	IBRD/IDA	Section III.B.1.(d). No withdrawal shall be made for Emergency Expenditures under Category (6), unless and until the following condition has been met in respect of said expenditures: the Recipient has determined that an Eligible Crisis or Emergency has occurred, and has furnished to the Association a request to withdraw Financing amounts under Category (6); and (B) the Association has agreed with such determination, accepted said request and notified the Recipient thereof; and the Recipient has adopted the CERC Manual and Emergency Action Plan, in form and substance acceptable to the Association.



Type Disbursement	Financing source IBRD/IDA	Description <p>Section III.B.1.(b). No withdrawal shall be made under Category (3), until and unless the Association is satisfied that all the following conditions have been met: (i) the Partnership Agreement between the Recipient and the BCC, under terms and conditions acceptable to the Association, has been signed and is in full force and effect; and (ii) the BCC has established and disclosed an ESMS under terms and conditions acceptable to the Association.</p>
Type Effectiveness	Financing source IBRD/IDA	Description <p>Article 4.01. The ESMF has been approved and published, all in form and substance acceptable to the Association.</p>
Type Effectiveness	Financing source Trust Funds	Description <p>Article 4.01. This Agreement shall not become effective until evidence satisfactory to the Bank has been furnished to the Bank that the conditions specified below have been satisfied: (a) the execution and delivery of this Agreement on behalf of the Recipient have been duly authorized or ratified by all necessary governmental action; and (b) the Financing Agreement has been executed and delivered and all conditions precedent to its effectiveness or to the right of the Recipient to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled.</p>
Type Disbursement	Financing source IBRD/IDA	Description <p>Section III.B.1.(c). No withdrawal shall be made for payments under Category (4), until and unless the Recipient has prepared and adopted the contingency plan(s) referred to in Section I.C.4(b) of the Financial Agreement, in form and substance acceptable to the Association.</p>

I. STRATEGIC CONTEXT

A. Country Context

- 1. With a population of around 86 million people, the Democratic Republic of Congo (DRC) has the third-largest number of people living in poverty worldwide.¹** Despite significant economic potential, thanks to abundant and diverse natural resources, the gross domestic product (GDP) per capita in 2019 was less than its 1980 level. The national poverty headcount rate is 73.3 percent (2020 World Bank estimate), and 55 percent of the DRC's poor reside in rural areas² where the poverty headcount is 80.2 percent, compared to 56.3 percent in urban areas.³ With a land surface area of 2.345 million km², the DRC is the largest country in Sub-Saharan Africa (SSA), with over 80 million ha of fertile and arable land, and 52 percent of all freshwater resources in SSA. DRC could potentially feed the entire African continent, yet today it is unable to adequately feed its own population.⁴
- 2. Decades of unrest, punctuated by episodes of violent confrontation and civil war, have compromised social cohesion, accentuated deep social and economic inequalities, and caused a breakdown in the social contract.⁵** The resulting humanitarian crisis is considered one of the world's biggest and most complex, with the United Nations estimating 19.6 million people in need of assistance at the beginning of 2021. A 2021 update of the Risk and Resilience Assessment (RRA) for the DRC identifies drivers of fragility around the themes of governance, conflict, and people. The first theme highlights the pervasive impact of corruption in perpetuating unresponsive patterns of governance and a poorly redistributive economy. The second theme stresses the fragmented local conflict system, regional and international interference and interconnections, and how local conflict is used for political and financial gains, including through competition for access to land, minerals, and other natural resources. The third theme examines issues of inclusion and participation, finding that the majority of an increasingly younger population lacks prospects for social mobility due to a combination of conflict trauma and exclusion from services, decision-making, and economic opportunities, resulting in deep poverty. In 2019, the DRC witnessed its first peaceful transfer of power, though the first two years of President Tshisekedi's administration were characterized by a delicate cohabitation between former President Joseph Kabila and allies to President Tshisekedi. This strained political situation impeded the new president's ability to move forward on key reform agendas and often led to a deadlock in decision-making. As such, in November 2020 the President launched a national consultation process to establish a new majority in Parliament. President Tshisekedi appointed a new Prime Minister in February 2021, and a new Cabinet was announced on April 12, 2021. This solidifies President Tshisekedi's break from the former power-sharing pact with the Kabila-backed alliance, opening the way for the President to put forth his vision and get traction for the implementation of key reforms and deliver on his administration's priorities.
- 3. Increases in weather variability and natural disasters compound the negative impacts of conflict and fragility upon the population.** The DRC is witnessing extreme changes in the rainfall pattern (drought and excess rains) and an extension of the dry season. Droughts, floods, and other extreme weather events are expected to increase in frequency and severity in DRC due to more variable rainfall patterns and more common and longer-lasting heat

¹ World Bank (2018). *Piecing Together the Poverty Puzzle* and World Development Indicators.

² World Bank (2019). *Territorial Development Review, Phase 2*.

³ World Bank (2018). Systematic Country Diagnostic. Report No. 112733-ZR.

⁴ Wim Marivoet, John Ulimwengu, and Mohamed Abd Salam El Vilaly (2018) *Understanding The Democratic Republic Of The Congo's Agricultural Paradox: Based on the eAtlas Data Platform*, Addis Ababa: ReSAKSS

⁵ World Bank (2020): *DRC Risk and Resilience Assessment*. A series of multilateral peace agreements following the first Congo war (1996–1997) and second Congo war (1998–2002) have attempted to bring the conflict to an end and put the country on the path towards democracy, peace and prosperity. However, key drivers of conflict persist.

waves⁶. These events directly affect food production and lead to soil erosion and degradation. Smallholder farmers, the urban poor, and women are especially vulnerable.⁷ Due to conflict, the Coronavirus Disease 2019 (COVID-19) pandemic, and natural disasters such as recent floods, the number of food-insecure people doubled from 7.7 million in 2017 to 19.6 million in May 2021, making access to food a daily struggle for a significant part of the population.⁸ This situation led to the triggering of the IDA Crisis Response Window's Early Response Financing (CRW ERF) for DRC and the World Bank is in the process of accessing additional CRW ERF funds⁹ to support actions that would prevent further deterioration of food security.

4. Recent economic growth was affected by the COVID-19 pandemic, which is likely to increase poverty. GDP growth in the DRC has been largely insufficient to generate an increase in GDP per capita and to reduce poverty. As such, this undiversified economy, highly dependent on the extractive sector, cannot provide for a population growing at more than three percent per year. From 1960 to 2018, GDP per capita¹⁰ declined by an average of 1.6 percent per year.¹¹ This is the combined effect of a 3 percent average increase in the population and a mere 1.4 percent average increase in GDP. COVID-19 has further weakened economic activity and decelerated growth by 3.6 percentage points, to an estimated level of 0.8 percent in 2020. Moderate growth prospects are forecast for 2021 and an accelerated recovery, closer to the pre-COVID level, is projected in 2023. The economic slowdown is expected to lead to job losses and a decline in wage income, with the largest number of additional poor expected in rural areas due to an anticipated drop in agriculture production, slowdowns in national and international agriculture and food trade, and disruptions in value chains. The projected downturn in economic activity will reduce the capacity of the Government to finance fiscal policies and social safety nets needed to mitigate the impacts of the pandemic.

B. Sectoral and Institutional Context

5. The agriculture sector¹² currently accounts for about 20 percent of GDP and employs some 70–75 percent of the economically active population¹³. Related agro-industries employ another 10 percent of the population. Jobs in agriculture tend to be informal, with low value added per worker (US\$338/yr¹⁴), and subsistence farming is the dominant agricultural strategy in large parts of the country. The DRC has approximately 16 million farmers in rural areas, with an average landholding of 1.6 ha. Smallholder farmers and family farms are the backbone of agriculture and food security for rural people and accelerating the adoption of sustainable practices that have positive nutrition outcomes has the potential to deliver a pathway from poverty with multiple benefits. Diverse agroecological zones, with abundant rainfall, enable the production of a variety of staple crops, such as cassava, maize and rice, as well as dairy, livestock, and fish.

6. Rural households (accounting for 55 percent of DRC's total population) derive more than 80 percent of their income from agriculture. This makes agriculture productivity growth a necessary condition to reduce rural poverty and food insecurity in DRC in the short and medium term. Agriculture productivity in the DRC has been declining relative to neighboring countries, with the productivity of cereals at 50 percent of the SSA average, and lower than

⁶ World Bank Group Climate Change Knowledge Portal (CCKP, 2020). DRC Water Dashboard. Data Description. URL: <https://climateknowledgeportal.worldbank.org/country/congo-democratic-republic/climate-sector-water>

⁷ World Bank (2018). Systematic Country Diagnostic.

⁸ The latest Integrated Food Security Phase Classification (IPC) for DRC (May 2020) reported that about 15.6 million people are facing Crisis and Emergency levels of acute food insecurity—Phases 3 and 4, respectively, which precede the Famine level (Phase 5) in the IPC scale. IPC Phases are described at the following site: <http://www.ipcinfo.org/>

⁹ CRW ERF funds are planned to be added as Additional Financing to the Multisectoral Nutrition and Health Project (P168756).

¹⁰ In constant 2010 US\$

¹¹ World Bank (2018). Systematic Country Diagnostic.

¹² Throughout this document, agriculture refers to crop, livestock and fisheries.

¹³ World Bank (2017). DRC Agriculture Sector Review.

¹⁴ World Bank WDI (data for 2019).

the regional average of Central African countries. This situation is mainly due to under-investment at the farm-level (caused in part by insecurity and displacement) and in the delivery and sector governance of agriculture public goods and services, especially for market access. Only five percent of food-producing households use improved seeds and only four percent use fertilizers¹⁵. Among food insecure households, the situation is worse, with only 0.9 percent using improved seeds and 0.8 percent using fertilizers (*ibid*). Access to market is another challenge; 23 out of 26 provinces have a median travel time of eight hours to reach a settlement. Poor rural roads, lack of security and expensive diesel generators also increase the price of key inputs such as seeds, fertilizers, pesticides, hybrid varieties and vaccination, leading to low yields. Agriculture Micro, Small and Medium Enterprises (AgriMSMEs) suffer from a limited and unreliable agriculture product supply from farmers; weak access to information on markets and prices; lack of warehousing and agro-processing facilities resulting in large post-harvest losses; lack of access to finance, especially long-term investment capital; lack of organizational capabilities and skills; and predatory fiscal and para-fiscal environments.

7. Private sector actors have expressed that rural road and security conditions are insufficient to enable competitive agriculture, in particular horticulture. These are also the reason for the limited investments in backward agriculture linkages, thus hampering efforts to improve productivity¹⁶. There are only a few large-scale industrial players scattered along the Congo River and in North Kivu. These players are primarily producing cash crops such as palm oil, coffee, tea, cacao, and rubber. With improved river transportation, they are not far from becoming competitive.

8. The DRC is undergoing a process of decentralization to revitalize provincial services and better serve the rural population. In 2016, the number of provinces was officially increased from 11 to 26. Some new provinces still lack the structures and fiscal resources to function independently. Public sector investments, including investments at farm-level and in agriculture public goods and services are needed to enable these provinces to contribute to raising agriculture incomes and reducing rural poverty.

9. Gender gaps persist in all the areas of economic, social, cultural, and political development. In the agriculture sector specifically, the largest gender gaps are related to lack of access to new technologies, inputs, and assets. Consequently, the productivity gap between men and women in agriculture is 26 percent.¹⁷ Traditional gender norms and low levels of education restrict women's access to assets such as land, reduce their bargaining power within the household, and exclude them from decision-making processes, both in the community and at home. The division of labor (women often help men to clear land, but are required to do weeding and the rest of the tasks themselves), and the unequal distribution of work between men and women, in the fields and at home, contribute to women's lack of time and limit their visibility and participation in economic and other activities outside the home. There is also a strong relationship between gender inequality, food insecurity and malnutrition—41 percent of women of reproductive age have anemia (Demographics and Health Surveys, 2019)¹⁸.

10. For many years, forest loss rates in the DRC were relatively low compared to global levels. However, they have accelerated in recent years. In 2018, DRC lost the second-largest area of tropical primary forest of any country on Earth (after Brazil).¹⁹ From 2002 to 2019, the country lost 14.6 million ha of tree cover, equivalent to a 7.3 percent

¹⁵ Adoho, Franck M. & Doumbia, Djeneba, 2018. "Informal sector heterogeneity and income inequality: evidence from the Democratic Republic of Congo," Policy Research Working Paper Series 8328, The World Bank.

¹⁶ World Bank. Country Private Sector Diagnostic for DRC. 2020.

¹⁷ Donald, Aletheia; Campos, Francisco; Vaillant, Julia; Cucagna, Maria Emilia. 2018. *Investing in Childcare for Women's Economic Empowerment*. Gender Innovation Lab Policy Brief, No. 27.

¹⁸ Maternal iron deficiency and iron deficiency anemia are serious conditions that impact child health and cognitive development.

¹⁹ *The World Lost a Belgium-sized Area of Primary Rainforests Last Year.* World Resources Institute (2019). Available at <https://www.wri.org/blog/2019/04/world-lost-belgium-sized-area-primary-rainforests-last-year>

decrease in tree cover since 2000 and six billion tons of CO₂ emissions.²⁰ These losses are having an enormous adverse impact not only on climate change, but on rainfall patterns, water quality, and food security in the DRC and in the Congo Basin at large.²¹ Forest loss in the DRC can be mostly attributed to small-scale farming and wood energy. Slash-and-burn agriculture in a context of high population growth and low efficiency levels in farming leads to shorter fallow periods and the expansion of agricultural lands into intact forests.²² With rising demand and shrinking forests, improving agriculture production systems is critical to meeting such needs more sustainably.

11. Despite important governance sector bottlenecks, the Government has reduced rural poverty by modernizing agricultural production systems, improving nutrition and food security, and mobilizing public and private sector investments. The Government allocated eight percent of the 2016 budget²³ to the agriculture sector (up from three percent from the previous two years), close to the ten percent target of the Africa Heads of State Maputo Declaration. While several policy documents govern the agriculture sector, including the National Agriculture Investment Plan (NAIP), the Agricultural Law, and the Agro-industrial Recovery Strategy, in practice, ownership of these policies at the provincial level and even occasionally at the central level, is weak.

12. In 2010, the World Bank re-engaged in the agriculture sector in the DRC through four operations focused on different regions of the country and with different development objectives. Between 1994 and 2010, no new agriculture project was approved. Since 2010, three agriculture projects have been approved and implemented, one in the East (Regional Great Lakes Integrated Agriculture Development Project - PICAGL – P143307), one in the West (Western Growth Poles Project - PDPC - P124720), and one in the Northern Equateur Region (Agriculture Rehabilitation and Recovery Support Project - PARRSA – P092724). A fourth project, the Eastern Stabilization and Peace Project (*Projet pour la stabilisation de l'Est de la RDC*, STEPP , P145196), focused on Social Protection, also financed agriculture sector interventions across the country. Total agriculture-related financing for all four projects was close to US\$590 million²⁴. In addition, the Improved Forested Landscape Management Project (P128887) (US\$61 million) has been piloting agroforestry investment in the West (Kinshasa, Kongo Central, Kwango, Mai-Ndombe) to supply Kinshasa with more sustainable agricultural commodities and charcoal. Lessons from this agriculture portfolio have been systematized over the past decade, pointing to important successes and limitations, and have been incorporated into the design of the proposed Project.

13. The proposed Project builds on lessons learned to have impact at scale. Historically, the World Bank and donor operations in the agriculture sector have not been aligned in terms of approaches, nor have they been consistent over time. This is primarily due to the lack of a coherent and long-term focus on sustainable development. At its core, the proposed Project, like its predecessors, seeks to strengthen agricultural productivity and market access by improving priority rural roads and transport corridors. However, four factors set this Project apart from previous World Bank engagements in the sector: (a) the modality of the service provision, which gradually builds the foundation for transitioning DRC's agriculture sector and farmers to commercial agriculture practices and deeper private sector engagement; (b) the inclusion of access to finance through a line of credit (LOC) that will support market creation in rural areas; (c) the use of a territorial approach to enhance synergies by co-locating investments across sectors, notably transport, social protection, and health; and (d) the long-term engagement through a series of projects (SOP) over 15 years to maximize impact.

²⁰ Global Forest Watch. Democratic Republic of the Congo: Forest Atlas. (www.globalforestwatch.org).

²¹ *Congo Basin Deforestation Threatens Food and Water Supplies Throughout Africa*. World Resources Institute (2019). Available at <https://www.wri.org/blog/2019/07/congo-basin-deforestation-threatens-food-and-water-supplies-throughout-africa>

²² *A New Green Rural Development Deal with DR Congo 2021-2030*. Central Africa Forest Initiative (2020).

²³ No recent figures have been obtained on the overall agriculture public expenditures, so the current situation may not be as positive as it was in 2016. Furthermore, this amount is in nominal terms and the real allocation is likely to be far below 8 percent.

²⁴ Amounts include: US\$110 million PDPC, US\$150 million PICAGL, US\$270 million PARRSA, and US\$60 million (10 percent of total project costs of US\$574 million) STEPP.

14. The proposed Project will be carried out to support a long-term strategy to build decentralized agriculture development capacity and create the foundation for increased private sector investments. The proposed Project will include proven one-shot/temporary smart subsidies (vouchers and cash) for the adoption of climate and nutrition smart technologies and practices (CSA and NSmartAg). It will complement this by financing a credit line facility and technical assistance dedicated to the private sector organizations operating in agriculture value chains. The proposed Project will also invest in rural infrastructure to improve trade competitiveness. The paradigm shift from indirect support to direct smallholder farmer sector support relying on private sector actors is critical to ensure the sustainability of the investments in agriculture productivity growth. This approach will also break the dependency of the agriculture sector on externally funded projects to access quality inputs and services and to innovate. The Project has been prepared at the national and provincial levels by an inter-ministerial, interagency group (*Comité Technique Préparatoire – CTP*) including public sector officials, private sector representatives, and delegates from civil society and academia. Furthermore, implementation of the Project will be through a decentralized approach, relying on provincial-level coordination, strengthening institutions supporting the agriculture sector, and establishing strong mechanisms for civil society and beneficiary engagement.

15. Up to US\$2.5 billion of public agricultural productivity investments are needed over 10 to 15 years to raise agriculture incomes and reduce rural poverty in priority provinces.²⁵ This estimate is based on the analysis of the impact of public investments in agriculture development across the DRC (Technical File 1²⁶). In addition to investments in agricultural productivity, US\$1 billion complementary public investments are required in agriculture public goods and services and market access (i.e. transport infrastructure, animal and plant health, agriculture innovation). Based on the experience of previous agriculture development projects in the DRC and other countries, complementary investments would lower food costs for the non-farm population and promote the development of agribusiness, especially for locations isolated from major markets.

C. Relevance to Higher Level Objectives

16. The proposed Project will contribute to the Higher Level Objectives of rural poverty reduction, economic growth, addressing the drivers of fragility and conflict, building climate change resilience, and improving nutritional outcomes. Specifically, it will address two (out of six) key drivers of fragility in DRC, namely (a) a non-diversified and poorly redistributive economy, and (b) high levels of exclusion and lack of economic opportunities. Growth in agriculture production and integration of smallholder farmers into value chains will contribute to increased competitiveness and economic sector growth. Improving the resilience of agricultural communities and connecting them to markets will begin to address some of the economic and social aspects of conflict and fragility in target areas. International Finance Corporation (IFC) and the World Bank will collaborate on the analysis of the value chains and design of interventions to support market creation and a joint work plan to support implementation.

17. The proposed Project is aligned with the World Bank Group (WBG) Country Assistance Strategy for FY13-16 (Report No. 66158) for DRC and proposed directions in a forthcoming WBG Country Partnership Framework (CPF) for FY22-26, expected to be presented to the Board in October 2021. The Project is also aligned with the 2018 DRC Systematic Country Diagnostics (SCD, Report No.112733-ZR), which identifies agriculture as one of the five priority areas (SCD Priority Area 3) where policy actions could provide quick wins and build cumulative and virtuous cycles of inclusive growth, resilience and shared prosperity over the next decade. Government capacity building to effectively

²⁵ Ten out of 13 million smallholder farmers in DRC live in the 16 provinces prioritized in the agriculture sector strategy described in *Technical File 1* (77 percent of the total). The 10 priority provinces in the CPF under preparation are part of these 16 provinces where rural poverty is directly influenced by agriculture incomes.

²⁶ Technical File 1 can be found here: https://drive.google.com/file/d/1IL5enICWHtRCvzi1FGcRJOSF8SB_G5YV/view?usp=sharing

plan, manage, and supervise national programs will help strengthen governance and build stronger and more inclusive institutions (SCD Priority Area 2).

18. Sustained development in fragile, conflict and violent (FCV) countries is constrained by several interlocking characteristics: poor governance and weak institutional capacity, inadequate security, and high exposure to climate shocks. Therefore, following the guidance of the WBG IDA19 Strategy for Fragility, Conflict, and Violence (2020–2025) and the prominence of the fragility and conflict angle in the CPF under preparation, the proposed Project will intervene in areas affected by violence and conflict, in particular the East and the Kasai Region. The Project addresses these interlocking characteristics by: (a) *strengthening governance and institutional capacity* via food systems and rural development; including vulnerable people and lagging regions in programs; and repairing and strengthening national and community-based institutions; (b) *preventing and responding to food crises* via improving resilience of food production and rural incomes; (c) *creating jobs and income through agribusiness development* via support for inclusive business models; and (d) *reducing conflict risk, shocks, and environmental fragility* via resilient and sustainable natural resource management²⁷. The proposed Project will reinforce its approach to insecure areas through ongoing analysis and understanding of conflict dynamics and lessons from other ongoing operations.

19. Activities and approaches under the proposed Project will be closely coordinated with those of a forthcoming Stabilization and Recovery Project in Eastern DRC (P175834). This project is expected to be approved by the Board of Directors of the World Bank in July 2021 and it will contribute to the stabilization and recovery of communities in targeted areas of Ituri and North and South Kivu through the provision of basic community socio-economic infrastructure and reintegration of those associated with armed groups. Through investments in agriculture productivity growth, rural roads, access to finance for AgriMSMEs, reducing the pressure on forests, the proposed Project is geared towards building factors of resilience at different levels (household, community and national) and will contribute to preventing an escalation of conflict and violence. It is also consistent with major regional strategic initiatives for the DRC, including the Great Lakes regional development initiatives and SSA initiatives such as the second pillar (vulnerability and resilience) of the World Bank Africa Strategy²⁸ and Africa Climate Business Plan²⁹. By supporting the development of agricultural value chains with strong economic potential and the building of community resilience, the proposed Project is also in line with the Comprehensive Africa Agriculture Development Program³⁰.

20. Responding to the impacts of COVID-19 is an integral part of Project design and is coordinated with other World Bank investments and reform support. The proposed Project focuses on Resilient Recovery—stage three of the 2020 World Bank Group COVID-19 Crisis Response Approach Paper. It supports three of the four pillars. Under Pillar 2, “Protecting poor and vulnerable people,” the Project includes support to the adoption of CSA and NSmartAg practices by smallholder farmers, directly contributing to the income and nutrition of vulnerable groups in rural areas. Under Pillar 3, “Ensuring sustainable business growth and job creation,” the Project supports private firms (particularly Agriculture Micro, Small and Medium Enterprises—AgriMSMEs) to expand their role in agriculture input and service provision and food transformation, while smallholder farmer support activities will rapidly inject cash into the rural economy. For Pillar 4, “Strengthening policies, institutions, and investments for rebuilding better,” the Project will strengthen Disaster Risk Management in the agriculture sector; increase access to and the resilience of agriculture services and associated infrastructure, including transport; build the responsiveness and accountability of provincial governments to their communities; mainstream the use of digital solutions in agriculture development, service delivery, and governance; and address structural sources of inequality throughout, by targeting activities to empower

²⁷ Future of Food Series. World Bank (2021). Building Stronger Food Systems in Fragile, Conflict, and Violence Situations

²⁸ The strategy can be found here: <https://www.worldbank.org/en/region/afr/overview#2>

²⁹ Details on the Africa Climate Business Plan can be found here: <https://www.worldbank.org/en/programs/africa-climate-business-plan>

³⁰ For details on CADDP, please see: <https://www.nepad.org/cop/comprehensive-africa-agriculture-development-programme-caadp>

and integrate vulnerable groups, in particular women and youth. Annex 11 describes elements of the World Bank's COVID-19 response in the DRC Country Program.

- 21. The proposed Project will address malnutrition, including micronutrient deficiencies, across the intervention zones, contributing to the Human Capital Agenda³¹.** A series of NSmartAg technologies and practices have been identified during Project preparation. NSmartAg interventions will be implemented in co-location with the Multisectoral Nutrition and Health Project (P168756), which seeks to restore food production capacity of vulnerable households and prevent their relapse into food insecurity and malnutrition by providing food production kits (agricultural inputs, small livestock, and potentially fisheries support). The Multisectoral Nutrition and Health Project will also support the expansion of biofortification, a pre-identified NSmartAg technology (see Technical File 2³²).
- 22. The proposed Project seeks to bring in private sector and private financing and investments across all components and incorporates findings and lessons from the 2020 World Bank Country Private Sector Diagnostic (CPSD) for DRC.** The Project seeks to operationalize CPSD recommendations relating to crop diversification, investments in agricultural productivity and extension services and focus on fragile and poor provinces.
- 23. The proposed Project is aligned with the WBG's Digital Economy for Africa Initiative (DE4A).** DE4A aims to ensure that every individual, business, and government in Africa will be digitally enabled by 2030 in support of the African Union "Digital Transformation Strategy for Africa." Building on findings and conclusions in the 2020 DRC Digital Country Assessment, the Project will develop and use digital platforms and tools to: (a) improve the performance of public sector institutions and the services they provide to the agriculture sector (b) develop economic links between actors of the agriculture value chain; and (c) expand financial services to smallholder farmers and AgriMSMEs through digital platforms and tools (see Technical File 2³³ for more details).
- 24. The proposed Project will address the climate vulnerability of targeted communities and the sector in general by providing technical assistance and investing in research and development of locally suitable CSA practices.** The Project will also leverage private finance to substantially increase financing for the large-scale adoption of CSA practices across value chains through technical assistance and finance to AgriMSMEs in support of introducing climate-smart varieties and technologies. The approach is aligned with the current World Bank Africa Strategy and the Next Generation Africa Climate Business Plan (2020) by addressing the climate sensitivity of agriculture as one of the three main engines of growth on the continent, ramping up the adoption of climate-smart approaches. The proposed Project will also include climate mitigation objectives and reduce Greenhouse Gas (GHG) emissions across intervention areas by improving carbon sequestration and addressing deforestation caused by smallholder farming.
- 25. The proposed Project will invest in rural infrastructure to stimulate broad-based economic growth, contribute to poverty reduction and increased equality, and provide basic connectivity to disparate parts of the country.** The focus will be on improving (rehabilitation and maintenance) priority rural roads and transport corridors, including river safety measures and river ramps, which are key enablers in increasing agriculture sector output and improving internal and external trade competitiveness. Project support will also include technical assistance to the Office of Agricultural

³¹ The Project can help deliver on the Human Capital agenda through agriculture by ensuring both the amount and quality of food that matter for health. Empirical studies have shown a link between the level and composition of food energy supply and under 5 mortality and stunting rates. Initial analysis shows a significant positive correlation between food availability and the Human Capital Index (HCI), and an even stronger correlation between the availability of diverse foods and the HCI (Source: SDN VP presentation to AFR VP, November 2018).

³² Technical File 2 can be found here: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/875971596177465224/nutrition-smart-agriculture-in-the-democratic-republic-of-congo>

³³ Technical File 2 can be found here: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/875971596177465224/nutrition-smart-agriculture-in-the-democratic-republic-of-congo>

Service Routes (*Office des Voies de Desserte Agricoles* OVDA) in the implementation of its provincial strategy for the maintenance of agricultural service roads, and in the updating of its manual for rural roads and river rehabilitation.

II. PROJECT DESCRIPTION

26. **The concept for the proposed Project is based on a Series of Projects (SOP) approach.** The overall objective of the SOP is to raise the agriculture incomes of the rural poor in selected provinces. Agriculture income growth will be supported through increases in agriculture productivity, economic inclusion, and will directly contribute to reducing rural poverty by strengthening private and public sector capacity, and expanding the geographic scope and multisectoral approach of agriculture development of the country. Addressing the DRC's agriculture development challenges and opportunities in a substantial manner requires continuous investments and technical assistance, and a sustained engagement by the World Bank would support this objective. The benefits of an SOP approach, rather than a single operation, are to enable long-term, strategic, and sequential targeting of different geographical areas for maximum impact in each area. This will be done concurrently with support to a long-term strategy to build decentralized agriculture development capacity and increase revenue mobilization to meet the investment needs and service deficits, while strengthening the foundation for increased private sector investments. Given the scope of service delivery and governance improvements needed across national and provincial level institutions, the SOP approach is ideal, as it will allow sustained engagement over a longer period.

27. **The lessons learned from previous and ongoing operations in the agriculture sector in the DRC and the Africa region point to the appropriateness of the use of SOP as follows:**

- (a) An SOP approach ensures coherence of interventions at the national level and investments across development cycles financed by the World Bank and development partners. The proposed SOP will establish a medium to longer-term multi-partner sector development platform to achieve the proposed long-term outcomes.
- (b) In the FCV context, the proposed SOP will build institutional capacity and knowledge in a gradual manner from one phase to the next, anchored in adaptive lessons learned, and ensure that the capacities built and knowledge developed are institutionalized and applied during implementation. Such an approach to a challenging objective is not considered suitable under one-off standalone Investment Project Financing (IPF) or Program-for-results (PforR) project.
- (c) The proposed SOP will focus on achieving impacts throughout its implementation by integrating quick course correction and adjustments based on the findings of the learning agenda (see following paragraphs 29-31). The World Bank-financed projects in the country have fallen short in targeting rural economy objectives related to impacts such as income, competitiveness, and the sustainable use of natural resources, which cannot be achieved through a single standalone project.

28. **Therefore, the proposed SOP design builds in flexibility to ensure responsiveness to evolving needs, results, and priorities.** The SOP also includes a learning agenda mechanism for transferable knowledge and capacity building across the various components. Impact evaluations will be designed and implemented to track key Project objectives and indicators, to evaluate farm-level investments and improve interventions in future phases. Adaptive learning from operational rollout, with necessary documentation, is at the core of the Project's monitoring and evaluation (M&E) system.

29. **The first phase of the SOP begins with a focus on smallholder farmers' productivity and rural poverty reduction, and future phases will progressively build links with regional value chains and larger agribusiness investments.** Rural infrastructure and efforts to reduce malnutrition and the degradation of natural resources will also be part of future phases. The SOP will evolve towards a market-based approach to value chain development and

rural connectivity, investing deeper into the resilience strengthening of the agriculture sector and rural areas through improved natural resources management at the landscape level. This will allow agricultural incomes to increase and diversify in an integrated and sustainable way while maintaining the natural resource base which agricultural production and rural households' income depend on³⁴.

30. The proposed Series of Projects (SOP) is centered on market creation and improving competitiveness along agricultural value chains (smallholder farmers, AgriMSMEs, enabling institutions from civil society, public and private sector). The proposed SOP design acknowledges that delivering services to smallholder farmers that are not part of an organized value chain would have limited chances of sustainability without long-term programmatic approach.

31. Starting in phase 2, the proposed SOP will support the efforts of the Government of DRC to scale up successful land administration interventions, minimize the occurrence of land conflicts, and improve land tenure security. In line with SCD recommendations and focused on addressing drivers of fragility, the proposed Project will initially support the province of North Kivu in the scale up of its land registration mechanism, including by issuing customary land certificates and joint and collective titles. More secure land tenure will also incentivize the adoption of improved agriculture practices to increase productivity and provide adaptation and mitigation co-benefits. Interventions in areas beyond North Kivu will be assessed during the preparation of phase 2.

Table 1. SOP Approach

	Phase 1	Phase 2	Phase 3
PDO³⁵	Improve agriculture productivity and market access of targeted smallholder farmers in selected Project areas	Increase performance of smallholder farmers and AgriMSMEs and improve natural resources management in selected regions	Increase agriculture sector competitiveness and resilience
Geographic Areas	—Kasai Region (Provinces of Kasai and Kasai Central) —Western Region (Provinces of Kongo Central and Kwilu) —Eastern Region (Province of North Kivu)	—Broader Kasai Region —Broader Eastern Region —Northwest and southeast Regions	National
Main Activities	Direct smallholder farmer support to sustainable agriculture productivity (CSA and NSmartAg). Market access support to smallholder farmers.	Direct smallholder farmer support to sustainable agriculture productivity (CSA and NSmartAg) for new provinces. Market access support to smallholder farmers and AgriMSMEs. Enhanced natural resources	Mainly market access support to smallholder farmers and AgriMSMEs with a focus on institutional sustainability and internalizing the approach in government policies and programs. This includes land use planning that aligns agricultural development and the sustainability of

³⁴ Following the approach of the DRC Improved Forested Landscape Management Project (P128887) green and resilient rural development will be promoted in highly degraded areas and forest frontiers (for example, as Mai-Ndombe Province for the Kinshasa supply basin) through specific interventions including community-driven land-use planning to strengthen the communities' rights and capacity for sustainable management of natural resources, development of agroforestry production systems and other plantations for energy purposes, promotion of perennial crops as alternatives to slash-and-burn subsistence cropping, and promotion of natural regeneration of degraded lands and forest conservation including through payment for ecosystem services.

	Phase 1	Phase 2	Phase 3
		management practices in highly degraded environments and forest frontiers; and development of successful experiences in improving land registration.	natural resources.
Timeframe	5 years	5 years	4 years
Amount (US\$ millions)	520 (including US\$20 million non-reimbursable recipient-executed TF)	500	500
Other tentative funding	Private capital mobilization with assistance from the IFC, coordinated technical assistance from other donors (KfW, DFID).	IFC, private capital, donor co-financing investments, some client funding.	IFC, substantial private capital and client funding, donor co-financing investments.

A. Project Development Objective

PDO Statement:

32. To improve agriculture productivity and market access of targeted smallholder farmers in selected Project areas.

PDO-Level Indicators

33. PDO-level indicators will focus on measuring short-term changes that can be attributed to the first phase of the Project:

- Sales of agriculture and food products by targeted smallholder farmers (average percentage increase in sales³⁶).
- Number of smallholder farmers adopting improved agriculture technologies or practices (disaggregated by gender). [CORE SD INDICATOR: smallholder farmers adopting improved agricultural technology]
- Yield of maize from incorporating climate-smart agriculture practices/technologies, selected indicative crops (disaggregated by gender). [CORE SD INDICATOR: Average seasonal yield among targeted smallholder farmers]
- Yield of cassava from incorporating climate-smart agriculture practices/technologies, selected indicative crops (disaggregated by gender). [CORE SD INDICATOR: Average seasonal yield among targeted smallholder farmers]
- Animal mortality rates at farm level for specific livestock by targeted smallholder farmers.
- Contingency plans for agriculture sector risks (including COVID-19).
- Selected Provinces submitting annual road maintenance plans to the National Roads Development Fund (FONER).

34. **Each indicator links directly to the PDO.** The first indicator measures the sales of agriculture and food products arising from the support to productivity and the links with market opportunities and value chain development. The second, third, fourth and fifth indicator measure the adoption of technologies and impact on productivity (crop yields

³⁶ Sales will be measured by product quantity/volume or by monetary value where prices would be kept constant to avoid market forces outside project control.

and animal mortality rates) arising from the support to smallholder farmers. The sixth and seventh indicator measures the institutional strengthening activities as they relate to public services for managing agriculture risks and ensuring rural road maintenance.

Cross-cutting considerations

The COVID-19 Pandemic

35. The COVID-19 pandemic has generated a great number of global and local lessons for building back better that inform the Project design. In the context of the COVID-19 pandemic, the risks to the rural poor are significant given the reduction in demand for agriculture goods and the disruptions to agriculture value chains and access to urban markets due to lockdowns, health guidelines and restrictions in population movement. To help meet the challenges of the pandemic by protecting the poor and vulnerable and preserving their livelihoods, the proposed Project draws on lessons that include options for building back better by increasing resilience to climate and other shocks and inclusive recovery. This will include promoting approaches that strengthen the natural capital base (soil, water, and forests) in selected rural areas upon which agriculture production depends, thereby rendering production less vulnerable to climate shocks, protecting rural livelihoods, and making economic recovery more resilient and sustainable. Furthermore, the use of geospatial data to identify the intensity of erosion on rural roads and inform infrastructure designs in partnership with the European Space Agency (ESA) through the Earth Observation for Sustainable Development initiative will help develop and implement spatial planning tools and digital solutions as part of the Project, building on existing tools for remote supervision like Mapillary³⁷.

Citizen Engagement

36. This Project will continue to serve as a platform to bring together sector stakeholders at the national and local levels to address agriculture development challenges and opportunities, and to strengthen citizen engagement. The Ministry of Agriculture has established a multi-stakeholder project preparation committee (CTP) at the national and provincial levels, to serve as an information sharing and coordination platform for public sector institutions, civil society organizations, smallholder farmer groups, universities, UN agencies, private sector and donors. The investments at farm level and AgriMSMEs were designed in collaboration with future beneficiaries, and the component description in the following paragraphs details how each sub-component will serve to boost agriculture productivity and access to markets by smallholder farmers. Over the past two years, a series of workshops, technical missions, expert visits, and roundtable events during preparation brought together national and provincial institutions, private sector operators, farmer representatives, civil society, and development partners to develop the Project. Furthermore, the community of development partners in DRC supporting the agriculture sector has established a donor working group that meets regularly with the CTP and coordinates policy dialogue and investment operations. This was chaired by the World Bank for the past few years.

37. The Project will also carry out surveys on the participation of the direct beneficiaries and affected people in the citizen engagement process. The first survey will be carried out in the first year of the Project. It will establish the benchmarks and baselines for beneficiary satisfaction and participation that will be followed up at Project midterm review. The final survey will be carried out in the last year of the first phase of the SOP. Data from these two surveys will be used to assess the opinions/usefulness of the citizen engagement process. An indicator to measure the satisfaction of beneficiaries with their participation and the services provided by the Project has been included in the project results framework.

³⁷ Mapillary is a street-level imagery platform that scales and automates mapping using collaboration, cameras, and computer vision.

Maximizing Finance for Development (MFD) and Coordination With IFC

38. Project preparation has also served to develop areas of joint World Bank-IFC involvement in agriculture development and agri-finance. The objective is to create markets for agribusinesses and agro-dealer SMEs and strengthen the foundations for private sector investments along the entire value chain. A broad range of actions in various parts of the agriculture “ecosystem” will contribute to MFD in the sector: (a) joint World Bank-IFC deep dive analyses on selected value chains to help understand the cause of market failure and develop concrete MFD recommendations; (b) phase 1 Project activities to help reduce risks across the segments comprising the supply chain and open the ground for IFC engagement with the private sector clients; (c) direct collaboration and partnerships between public and private, through multi-ministerial platforms, based on MFD through workshops, roundtables, conferences, and other forums where information is exchanged.

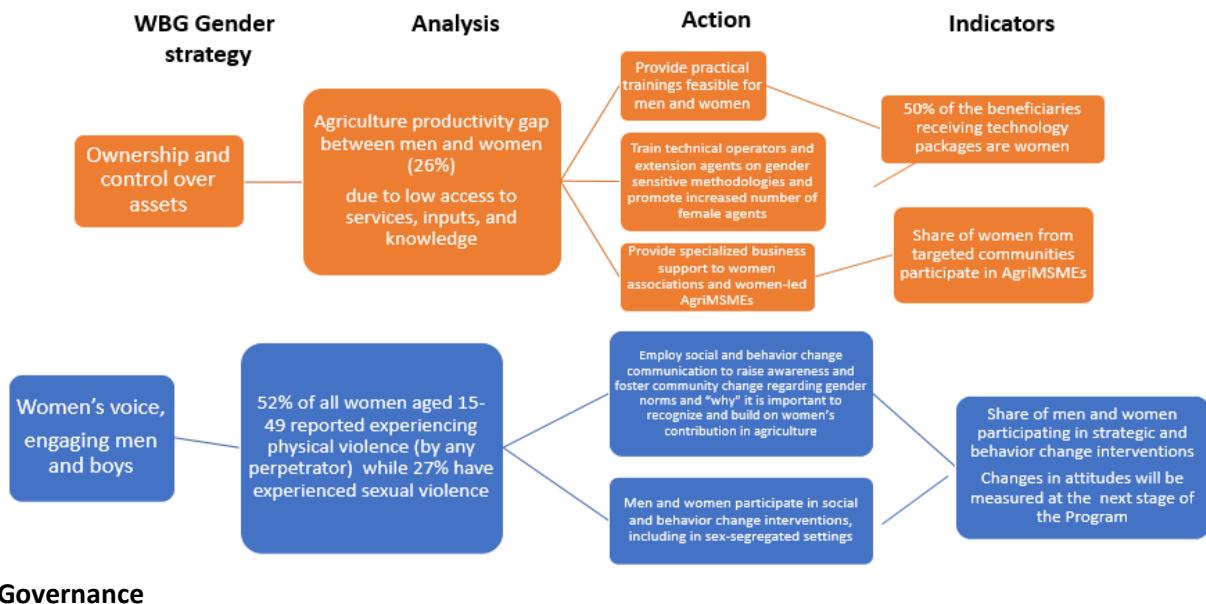
Digital

39. Digital solutions have been integrated into the proposed Project across all sub-components. Digital tools will be leveraged for: (a) project management, in particular for the remote monitoring of project implementation activities through the World Bank’s Geo-Enabling Initiative for Monitoring and Supervision (GEMS), with strategic collaborations with the European Space Agency for monitoring of deforestation and transport networks in the intervention areas; (b) promoting improvements in digital access and adoption by specific public sector institutions to deliver agriculture public goods and services; (c) access to financing by smallholder farmers, by using digital technologies and networks to deliver support to smallholder farmers and allowing their financial inclusion (electronic payment systems); and (d) supporting the adoption of and investment in digital agriculture technologies by AgriMSMEs (further details in annex 10).

Gender

40. Gender gaps in the agriculture sector will be addressed by improving women’s access to inputs, technologies, and finance, and by using approaches and methodologies that ensure women’s full participation and benefit from Project activities and financing. Gender-sensitive programming and awareness raising of the role of and significant contribution by women in the agriculture sector will be integrated into communication campaigns as well as training and behavior change interventions throughout the life of the SOP. The proposed Project will also contribute to reducing Gender-based Violence (GBV) risk by working to change underlying harmful gender norms and attitudes and to strengthen the socio-economic empowerment of women farmers. The gender gaps that this SOP aims to address have been identified using the overall framework of the WBG’s Gender Strategy 2016–2023; the Agriculture and Food Global Practice Follow up Note for fiscal years 2019–2021; and the sexual exploitation and abuse and sexual harassment (SEAH) risk screening carried out during Project preparation. The Project will adopt a phased approach where, during the SOP initiation, the focus will be to raise awareness and build stakeholder capacity (both at national and provincial levels) to identify and address the gaps and constraints faced by women to strengthen participation in and benefits realized by women from Project activities and financing. During this first phase, progress will be measured using mostly sex-disaggregated indicators. At a later stage of implementation, these indicators will be complemented by others measuring women’s economic empowerment and qualitative involvement in all activities. Investments in agriculture and value-adding skills development as well as employment opportunities will make a specific effort to address women’s needs, for example by developing gender-targeted and gender-inclusive extension and training services and adjusting schedules to facilitate their participation. The Project will implement interventions aimed at GBV prevention, in addition to the SEAH risk mitigation requirements of the World Bank’s Environmental and Social Framework (ESF). The approach is summarized in Figure 1.

Figure 1: Gender approach and results chain



41. To achieve the proposed SOP and Project level objectives, the Project seeks to improve the governance and sustainability of investments. The proposed Project supports the improvement of governance within ministries and public sector agencies at the national, provincial and local levels, particularly those responsible for supporting the development of the agriculture sector, enhancing some of the most important agriculture public goods and services functions (such as the advisory services and monitoring and evaluation of public and private interventions in the agricultural sector, improvement of rural infrastructure, animal and plant health services, agriculture research and extension services, sector M&E statistics capacity, and supporting multi-stakeholder sector dialogue platforms). Investments in transport infrastructure will be complemented by support to enhance authorities' capacity to implement a sustainable maintenance system. In addition, each sub-component will include activities to improve governance and performance for each of the supported agencies and services to ensure continued benefits beyond the life of the proposed Project. For example, the seed certification system will be supported institutionally as well as through the development of a strategy to allow fee-based services to gradually pay for seed certification costs.

Climate Change and the Environment

42. Project support will address both climate change adaptation and mitigation targets, including natural resource degradation and deforestation in project areas. Under sub-component 1.1 the proposed Project will invest in the large-scale adoption of CSA approaches, policies, programs and technologies (improved seeds for climate-resilient varieties, integrated soil fertility management, water conservation, improved fallow and agroforestry) to build resilience to climate-related hazards, such as droughts and flooding, and to support smallholder farmers in adapting to increased climate variability and change now and in the future. Technology packages (Ptechs) provided to smallholder farmers include locally adopted and proven climate-smart approaches (detailed in the CSA country profile in Technical File 3³⁸). These investments will also generate substantial climate mitigation benefits by (a) improving carbon sequestration in healthier soils and addressing negative externalities from traditional slash and burn agriculture, and (b) ensuring that activities in the targeted provinces do not lead to clearing forest areas (by excluding forested lands from the support provided under sub-component 1.1) and to ease pressure on forests overall.

³⁸ Technical File 3 can be found here: https://drive.google.com/file/d/1uXXF5SHRuU6PAy0Bur_L7aJPDEdvYUvb/view?usp=sharing

Investments in rural infrastructure, rehabilitation, and maintenance of roads, will include drainage, erosion control, maintenance and prevention, and embankment stabilization that will improve the resilience of the rural road network and help connect smallholder farmers to markets and socio-economic activities. Technical assistance to AgriMSMEs, providing improved inputs for CSA technologies, is scaled up through private sector finance under sub-components 1.2 and 2.2 to facilitate the large-scale adoption of climate resilient practices. Through the risk transfer mechanism, under sub-component 1.3, the Project can leverage disaster risk finance to cover the impact of the main agriculture risks faced by smallholder farmers and improve their adaptive capacity to weather and climate-related shocks. Innovations in agri-food systems and the development of agriculture research and development (R&D) programs in CSA and NSmartAg³⁹ under sub-component 3.1 improve the delivery of climate resilient public services and support climate resilience of rural farming communities.

Territorial Development

43. The proposed Project will seek to maximize its impact on rural incomes, food security, and nutrition by using a territorial development approach, co-locating activities with ongoing and future World Bank operations in DRC.⁴⁰ It will thus address country needs and government priorities by creating synergies that increase the inclusion of vulnerable populations and create a pathway to exit fragility. The World Bank has approved or is preparing several operations that seek to raise the incomes of low-income households, reduce transaction costs, and improve the well-being of households, particularly in rural areas. These operations include: (a) the Multisectoral Nutrition and Health Project (P168756), which includes food production kits for malnourished households and crop biofortification activities; (b) the Transport and Connectivity Support Project (P161877), supporting roads investments in the Kasai and eastern Regions (Kananga—Mbuji-Mayi, Mbuji-Mayi—Lubao, and Goma—Beni), among other transport and connectivity investments; (c) recently completed Financial Infrastructure and Markets Project (P145554), which aimed to modernize payment infrastructure and increase availability of term financing to Micro, Small and Medium Enterprises (MSMEs); (d) the MSME Development and Growth Project (P160806) supporting employment and entrepreneurship in selected urban areas; and (e) the Stabilization and Recovery Project (P175834) covering the eastern DRC provinces (forthcoming in later part of 2021). The design and implementation of the planned SME financing schemes through guarantees and investments will be closely coordinated with the IFC.

44. Based on recent analytical work on territorial development⁴¹ undertaken by the World Bank in the DRC, the proposed Project has designed the phasing of interventions across provinces following criteria based on sectoral data available (see Technical File 1⁴² for the detailed report on the selection process and methodology). This is how the total number of provinces were selected and how the five provinces that are part of the first phase were identified. The criteria include:

- the level of agriculture production (measured by satellite imagery on percentage of land use allocated to

³⁹ Technical File 2 can be found here: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/875971596177465224/nutrition-smart-agriculture-in-the-democratic-republic-of-congo>

⁴⁰ The Multisectoral Nutrition and Health Project (P168756) will finance agriculture activities in a select subset of the health zones in the Provinces of Kwilu, Kasai and Kasai Central (three out of the five targeted provinces in the first phase) to demonstrate the added value of the multisectoral convergence to improve nutrition outcomes. The Project will finance the scale up of the locally developed biofortified varieties of key crops, including vitamin-A enriched maize and cassava, iron-rich beans and/or orange-fleshed sweet potatoes. About 100,000 smallholder farmers will be producing biofortified crops by the end of the project, and the ultimate objective of the biofortification activity is to increase the utilization of biofortified crops to such an extent that they could be sustained or even could displace non-biofortified varieties. The proposed National Agriculture Development Program (P169021) can help achieve this objective by supporting the production of biofortified seeds and vines in the same provinces as part of the NSmartAg investment, thus co-locating activities in and around the same health zones as the Multisectoral Nutrition and Health Project.

⁴¹ Territorial Development Review (2018, P164860): Why Connecting Congolese Counts – A Diagnostic Note. Democratic Republic of Congo Territorial Development Phase 2 (2018, P168192). Central Africa Spatial Development (2019, P171602).

⁴² Technical File 1 can be found here: https://drive.google.com/file/d/1IL5enICWHTRCvzi1FGcRJ0SF8SB_G5YV/view?usp=sharing

agriculture production in a given area (pixel).

- agriculture areas that are closer to large urban centers (as proxy for large food consumption markets).
- regions with the highest rural poverty gap.
- regions where food insecurity has worsened (measured by the increase in numbers of people in IPC3+4)⁴³.

A. Project Components

45. Project implementation will benefit from a high level of readiness, which allows for a quick response to the effects from the COVID-19 pandemic. Due to advance preparation and the level of commitment from central and provincial governments, it is expected that 20 percent of the smallholder farmer and AgriMSMEs investments will be implemented, and about half of the transport infrastructure activities contracted during the first two years of the Project. This will lead to the disbursement of about US\$100 million in the first two years of implementation (see disbursement projection table in the datasheet). More than half of investments will be in rural roads and direct smallholder farmers support, improving livelihoods and increasing the resilience of rural households and communities. The four Project components will be implemented simultaneously and are designed with a high level of integration and continuity with other sector interventions. Investments have been selected and designed to support smallholder farmers and AgriMSMEs to mitigate and adapt to climate change impacts, making them more resilient, creating more long- and short-term jobs and reducing gender gaps. Investments in strengthening agriculture public goods and services will improve basic services to smallholder farmers and AgriMSMEs in the targeted areas. Sub-component 1.3 will strengthen the agriculture emergency response by safeguarding the investments undertaken by the smallholder farmers of component 1, while component 4 (CERC) will allow the Government to respond quickly in case of an eligible emergency across the country, including against contingencies that may arise due to the COVID-19 pandemic.

Project Costs (US\$ millions)

	IDA	GRIF	Total
Component 1. Agriculture Productivity	270	20	290
Component 2. Smallholder Farmer Market Access	150	0	150
Component 3. Agriculture Public Goods and Services	80	0	80
Component 4. Contingency Emergency Response	0	0	0
Total	500	20	520

Component 1. Agriculture Productivity (Total: US\$290 million; IDA: US\$270 million and The Global Risk Financing Facility, GRIF⁴⁴: US\$20 million)

46. Component 1 will support the increase of smallholder farmers' agriculture productivity (of crops and animal products) through the adoption of CSA and NSmartAg technologies (within the framework of national standards and directives) and practices and access to finance. This productivity boost is expected to sustainably and directly contribute to increasing agriculture incomes, and in turn reduce rural poverty and improve the food security of rural households.

⁴³ The latest Integrated Food Security Phase Classification (IPC) for DRC (May 2020) reported that about 15.6 million people are facing Crisis and Emergency levels of acute food insecurity—Phases 3 and 4, respectively, which precede the Famine level (Phase 5) in the IPC scale. IPC Phases are described at the following site: <http://www.ipcinfo.org/>

⁴⁴ GRIF is a Multi-Donor Trust Fund (MDTF), which provides grants to test, pilot, and scale up financing instruments that help developing countries better manage financial impacts from shocks and crises. This includes but is not limited to market-based solutions like insurance.

Sub-component 1.1. Direct Smallholder Farmer Support (US\$240 million)

47. This sub-component will support 1.7 million smallholder farmers through direct supports (conditional cash transfers and/or matching grants) and technical assistance. The objective of the sub-component is to promote the adoption of CSA and NSmartAg Technology Packages (PTechs) validated by technical experts and disseminated to smallholder farmers, in particular to women. The PTechs include practices, technologies and inputs (seeds, seedlings, animal breeds, advisory and extension services). A farmer registry will be established to target and manage benefits and smallholder farmer recipients. The registration process will be open to any farmer as part of the government initiative to build a National Farmer Registry (RNA) using the latest digital technology, including biometrics and digital identifiers⁴⁵. Eligibility for the direct support will include: (a) farm size; (b) socio-environmental considerations; (c) training; (d) location of the plot; (d) land tenure situation. The sub-component will finance direct smallholder farmer support for 1.7 million farmers in the form of conditional cash transfers (CCTs) and/or matching grants (to be delivered through cash payments and/or vouchers respectively) for the adoption of the PTechs. Although this number of farmers would represent the vast majority of smallholder farmers in the targeted provinces in case additional selection criteria would be added, this would include: (a) gender; (b) age (youth); and (c) farm income (focused on the rural poor). The approximate amount of the smallholder farmer support varies, depending on the PTech and minimum required plot size, between US\$50 to US\$100 per farmer. Farmers will also be required to provide cash and/or in-kind counterpart contribution towards the adoption of the PTech, varying between 10 and 50 percent of the overall cost of the adoption of the PTech. This would ensure sustainability and ownership of the scheme. The vouchers and cash will be delivered to smallholder farmers through financial intermediaries (FIs, that is, banks, microfinance institutions, and/or mobile phone service providers) using digital technology (mobile phones, e-wallets, and/or payment cards).

48. To ensure sustainability, beneficiary smallholder farmers will be able to use the direct support provided by the Project (cash or vouchers) to acquire agriculture inputs from private suppliers (that is, agro-dealer MSMEs) for the adoption of the PTechs. The vouchers to be distributed under this sub-component will be used by beneficiary farmers to acquire inputs from private AgriMSMEs which will need to register in the agro-dealer registry established with the support of the Project and which will be managed by the technical services of the Ministry of Agriculture (Directorate of Development of Agricultural Entrepreneurship, Directorate of Archives and New Information and Communication Technology). To be registered, AgriMSMEs will have to be legal entities and follow social and environmental trainings and standards. Since AgriMSMEs will have the opportunity to expand their market coverage (client-based) as the Project expands throughout the targeted provinces, direct financial and business development services assistance (BDS) support will be provided under sub-component 2.2. This approach will allow for a progressive and sustainable expansion of the size of the private market for agriculture inputs, services, and commercialization of the agriculture production of smallholder farmers in the selected provinces.

49. The delivery instruments of the direct smallholder farmer support (vouchers and/or cash) are one-shot/temporary smart subsidies, which have proven to work in World Bank-financed projects in the DRC, SSA and South Asia, and have the potential to reach large scale in a country like DRC. The instruments chosen for the delivery of the direct smallholder farmer support (cash vs. vouchers) will vary by the PTech being offered to the smallholder farmers of specific regions (PTechs are adapted to the agroecological and market conditions of the area). Given that the agriculture input market in the DRC is small, support to smallholder farmers will be rolled out gradually in each province, starting in a pre-identified reduced geographic area during the first year covering approximately 10,000 farmers. During the first year, a rapid evaluation will enable the Project to be adjusted and brought to scale in years two and three, and is expected to cover the entire smallholder farmer population in the selected provinces. The PTechs include validated CSA approaches in DRC aimed at soil fertility and moisture improvement, based on improved

⁴⁵ Personal data collection and management for the RNA will follow international standards in terms of rules and procedures and are described in the PIM.

soil conservation management and agroforestry, green manure, and better agriculture practices to build resilience against climate-related hazards such as drought and flooding. PTechs also include NSmartAg technologies and practices that increase the availability of nutrient rich foods and profitability of the farm, boosting incomes and food security. Some examples of CSA and NSmartAg PTechs that will be available for adoption by smallholder farmers in the targeted provinces during the initial rollout of the direct smallholder farmer support include: (a) biofortified seeds; (b) drought resistant seeds; (c) fruit tree cultivation (including grafting techniques); (d) improved fallow management; and (e) poultry. Furthermore, a Technical Operator (OT) will be hired (one per province) with funds from sub-component 1.1. to support the smallholder farmers in: (a) registering the 1.7 million farmers in the RNA; (b) delivering the technical assistance and training for 1.7 million farmers to choose and implement the PTechs; (c) facilitating the delivery of the vouchers/cash by liaising with the financial intermediary or mobile payment provider; (d) providing guidance and information to agro-dealer MSMEs for participating in the voucher system; and (e) linking the smallholder farmers with market opportunities (link with sub-component 2.2). The OT will support the National Project Coordination Unit (NPCU) to ensure that the Grievance Redress Mechanism (GRM) and the environmental and social risk mitigation and response measures are in place, and will be the eyes on the ground to identify risks and problems related to conflict and violence, including GBV.

Sub-component 1.2. Smallholder Farmers Technical Assistance and Financial Access (US\$10 million)

50. This sub-component will finance technical assistance to local providers of financial and non-financial services to smallholder farmers. The objective of this sub-component is to improve smallholder farmers' access to services related to the implementation of the investments of sub-component 1.1. Given that direct smallholder farmer support for adopting PTechs is a one-off event, the improvement of the technical assistance, land management (particularly for agroforestry practices), and financial services will ensure the sustainability of the results of the adoption of these improved on-farm technologies and practices. The sub-component will finance technical assistance for over 1,000 organizations (NGOs), financial institutions, mobile service providers, and agro-dealer MSMEs servicing the 1.7 million farmers benefiting from the support under sub-component 1.1. The technical assistance includes capacity building, communication training, and legal/business administration support to the ecosystem of institutions linked to the targeted smallholder farmers. It will include training and communication specifically targeted to: (a) attracting youth and women to agriculture and agribusiness, taking into consideration their specific needs and barriers; and (b) the use and adoption of digital technologies for servicing smallholder farmers. This sub-component will finance technical assistance to financial services providers supporting beneficiary farmers and agro-dealer MSMEs, for example to those financial institutions with the capacity to provide financial literacy and entrepreneurial training.

Subcomponent 1.3. Agriculture Preparedness and Emergency Response (Total: US\$40 million; IDA: US\$20 million and GRiF: US\$20 million)

51. This sub-component will finance emergency responses to safeguard the smallholder farmers' counterpart contribution during the adoption of PTechs under sub-component 1.1. It will finance emergency cash transfers in the event of an eligible agriculture sector emergency, defined as "an event that has caused, or is likely to imminently cause, a major adverse economic and/or social impact for the smallholder farmers under sub-component 1.1 associated with natural or man-made crises or disasters." The emergency cash transfers will compensate smallholder farmers for the loss of their counterpart contributions for the adoption of PTechs. The value of the sum to be provided in emergency cash transfers per farmer will be based on their counterpart contribution towards the adoption of the PTech and will be paid as a lump sum following the occurrence of a covered event of a predefined severity. This subcomponent will also finance the purchase (premiums and brokerage costs) of risk transfer products (that is, insurance, derivatives) to leverage disaster risk finance capacity to cover the impact of the main agriculture risks faced by smallholder farmers under sub-component 1.1. The IDA funds allocated to this component (US\$20 million) leverage 1:1 funds from the Global Risk Financing Facility (GRiF).

52. In the case of a payout from the risk transfer product(s) to be purchased under this sub-component, the payout money would flow into a special Designated Account (DA) and disbursements from this DA would also be in the form of emergency cash transfers to smallholder farmers. The description of the risk financing mechanism under this subcomponent is set out in a specific manual (Manual of Operation for Agricultural Emergencies - MOAE), which is an annex to the Project Implementation Manual (PIM).

Component 2. Smallholder Farmers Market Access (US\$150 million)

53. **Component 2 will support the reduction in transaction costs for smallholder farmers to access markets and the inclusion of smallholder farmers into farmer groups (cooperatives/associations) and AgriMSMEs.** The interventions supported under this component will also be beneficial to building climate resilience of the communities and supporting the adoption of CSA and NSmartAg technologies and practices.

Sub-component 2.1. Rural Transport Infrastructure (US\$110 million)

54. **The sub-component will finance the rehabilitation and maintenance of 4,000 km of unpaved feeder roads (*voies de desserte agricoles*), rehabilitation and signaling of 1000km small waterways, small river ramps, and technical assistance to the National Authority for Feeder Roads (OVDA).** The proposed Project will focus primarily on improving priority rural roads and transport corridors (including river safety measures and river ramps⁴⁶) as the key to unlocking smallholder agriculture production and trade potential in the Project area. The Project will use the spot improvement method⁴⁷ when appropriate. Planned civil works will entail constructing or reconstructing culverts, drainage structures, and small bridges to: (a) prevent road closures during the rainy season; (b) improve all-weather accessibility; (c) promote good practices for road usage (maximum load, use of rain barriers and laws and regulations); and (d) enhance the resilience of rural transport infrastructure to climate change. The sub-component will invest in small river ramps to ease the loading and unloading of passengers and cargo transported by motorized or non-motorized canoes.

55. **The roads and small river launch posts will be identified based on the following criteria:** (a) connection of agriculture production areas where smallholder farmer support (sub-component 1.1) is being delivered to operational main roads, railroads and/or waterways which are passable (safe and usable all year) and main food markets (relatively dense population); and (b) business opportunities and synergies with ongoing or future agriculture sector investments in the Project area and other transport and/or connectivity infrastructure interventions. In addition to these criteria, consultations with various stakeholders in each province (including local authorities, private sector organizations such as the Business Federation of Congo (FEC), representatives of smallholder farmers' organizations and civil society), and the technical, environmental and social considerations (identified during Project preparation) will inform the selection of transport infrastructure to be rehabilitated. The implementation of this sub-component will be delegated to one or several external agencies (*maîtrise d'ouvrage déléguée*) with a track record in implementing similar projects in fragile and conflict-affected areas.

⁴⁶ River ramps refer to small piers to allow the unloading and loading of products between cargo boats and trucks.

⁴⁷ Based on the areas of intervention, selective priority improvements to rural roads and bridges will be undertaken to ensure that the interventions at the farm and AgriMSME level can find easy access to input and output markets. Building on successful experiences from the agriculture and rural development sector, this would be focused on spot climate-resilient repairs of rural roads and bridges, ensuring all-weather connectivity between production and input/output market areas. Prioritization of investments is done based on a Climate Resilience Planning Tool (CRPT). Additionally, climate-resilient infrastructure standards will be integrated into the rural roads rehabilitation and maintenance practices.

Sub-component 2.2. Support to Smallholder Farmers' Market Access (US\$40 million)

56. This subcomponent includes financing for (a) a rollout of a credit line facility and (b) technical assistance to build the capacity AgriMSMEs providing agricultural input in the areas targeted by component 1. Incentives for the adoption of PTechs by smallholder farmers supported under sub-component 1.1 are expected to create important market opportunities for AgriMSMEs through the generation of demand from smallholder farmers and the provision of reliable information regarding the nature of that demand (type of inputs and services embedded in the PTechs). The objective of this sub-component is to provide financing and technical assistance for AgriMSMEs to expand their capacity and scale of operations in the target areas to meet the demand for PTechs by the smallholder farmers of sub-component 1.1. Beneficiaries of this sub-component will include existing AgriMSMEs (local AgriMSMEs, NGOs, farmer groups, cooperatives and other organizations) with good performance but unable to match the scale of demand for PTechs throughout the targeted provinces. This sub-component will be implemented in collaboration with IFC to identify opportunities for private investors and companies who facilitate pre- and post-harvest access to markets for smallholder farmers. This sub-component will finance:

- A dedicated line of credit channeled to participating financial institutions, for on-lending to eligible AgriMSMEs, via the SME Refinancing Window of the Central Bank of Congo (BCC). The arrangement put in place with the assistance of the World Bank through the Financial Infrastructure and Markets Project (P145554) will be used to implement this subcomponent. The credit line will start with a US\$7 million initial rollout and could be further extended if there is strong demand. A specific line of credit manual will be prepared which will detail the selection criteria and responsibilities of participating financial institutions. Potential IFC initiatives including leasing schemes and the Small Loan Guarantee Program could provide additional sources of financing for AgriMSMEs.
- Technical assistance to eligible AgriMSMEs through vouchers to strengthen their capacity to develop technical and financial proposals (business plans) to respond to the new demand for PTechs and markets of agricultural products created as a result of sub-component 1.1. The vouchers will finance BDS with prequalified BDS providers to strengthen the AgriMSMEs' capacity to engage with smallholder farmers in training and information sessions on the appropriate adoption and use of the different materials and practices, serving it as a de facto promotional tool.
- Technical assistance to private BDS providers at the provincial and local levels to enable them to better deliver services to AgriMSMEs benefiting from the line of credit and/or the electronic vouchers.
- Technical assistance for the development of agriculture input and output market information (prices, volumes) and development of pilots of agribusiness and agri-finance development interventions for potential scale up in phase 2 of the SOP.

Component 3. Agriculture Public Goods and Services (US\$80 million)

57. This component will provide national and provincial actors with capacity-building opportunities to perform support functions during Project implementation. This component encompasses support to: (a) strengthen the capacity of the key ministries (for example, Agriculture, Fisheries, Livestock, and Rural Development) at the national and provincial levels to deliver key agriculture public goods and services linked to components 1 and 2; and (b) Project management, monitoring and evaluation.

Sub-component 3.1. Capacity Building for Delivering Agriculture Public Services (US\$30 million)

58. This sub-component will finance:

- a) data collection and studies (impact evaluations, pilots, diagnostics) to scale up the Project in future phases to other provinces.
 - b) capacity building activities of public services to mainstream CSA, NSmartAg, digital technologies, youth and gender policies and interventions in the various agriculture public goods and services at the national and local levels linked to the investments under components 1 and 2. The objectives are to:
 - i. strengthen the Project planning, coordination, monitoring and evaluation capacity at the national and subnational levels, with emphasis on the Planning and Analysis Departments (DEPs) of the Ministries of Agriculture, Rural Development, and Livestock and Fisheries, conducting activities such as surveys, socio-environmental risk assessments, diagnostic studies, consultancies, policy and program reviews, and piloting new initiatives to plan for phase 2 of the SOP.
 - ii. establish a farmer registry (enabling investments under sub-component 1.1) by financing hardware, software and training of human resources for setting up and operating the registry (*Direction de Développement et Entrepreneuriat Agricole – DDEA* and *Direction Archives et Nouvelles Technologies de l'Information et de la Communication - DANTIC*).
 - iii. strengthen the agricultural research and extension system (enabling the implementation of sub-component 1.1) by financing the development of CSA and NSmartAg PTechs by the National Agriculture Research Institute (INERA) and elaboration of associated norms and directives, certifying agriculture input quality (*Service National de Semences*, SENASEM, and *Service National des Fertilisants et Intrants Connexes*, SENAFIC), providing training and developing digital technologies for the public extension agency (*Service National de Vulgarisation*, SNV) and the private (and NGO) network of agriculture extension specialists in the selected provinces.
 - iv. strengthen animal and plant health systems (supporting the investments of sub-component 1.1) financing key equipment, training, digital tools, and vaccination campaigns in the selected provinces.
 - v. provide rigorous impact evaluation evidence about the effectiveness of key interventions supported by the Project to inform future design and implementation of phase 2.
 - vi. strengthen the capacity of public sector institutions at national and provincial levels on land use planning, land tenure formalization and landscape management by providing training, developing tools, guides, and strategic documents to design phase 2 of the SOP.
59. The capacity building activities of agriculture public services described above will target national and provincial levels in the Project's intervention areas. The activities will be delivered by service providers and/or Consultative Group on International Agricultural Research (CGIAR) Group members and/or UN Agencies depending on their specific competitive advantages and the identified needs.

Sub-component 3.2. Project Management and Monitoring and Evaluation (US\$50 million)

60. This sub-component will finance:

- i. The operating costs of the NPCU.
- ii. The monitoring and evaluation of Project activities.
- iii. The communication of Project activities to different audiences.
- iv. The hiring of staff, goods, consultant services, workshops, and training. Under this sub-component, the proposed Project will ensure the proper monitoring of the environmental and social framework. Due to the fragility, instability, and recurrent conflict in the Project zone (phase 1), third-party monitoring (TPM)

could be used in some areas. This sub-component will also finance a baseline study, a fragility and conflict analysis, and an impact assessment of selected Project activities to inform current and future phases.

Component 4. Contingency Emergency Response (US\$0)

61. This component enables a swift response in the event of an eligible crisis or emergency, defined as “an event that has caused, or is likely to imminently cause, a major adverse economic and/or social impact associated with natural or man-made crises or disasters.” This zero-dollar component would finance, through reallocation of funds from other components, the immediate response to crises or emergencies. Before engaging funds from this component, an Emergency Action Plan must be developed, which would govern the use of the funds for the specific emergency or crises. Disbursements would be made based on the approved Emergency Response Implementation Plan (CERIP) following the provisions of the World Bank IPF policy, paragraph 12, regarding ‘Projects in Situations of Urgent Need of Assistance or Capacity Constraints’ and are subject to evaluation, examination, and approval by the World Bank. This CERC would also serve as a backstop to risks and events that are not covered under sub-component 1.3.

B. Project Beneficiaries

62. **The Project will directly reach various beneficiary groups including smallholder farmers, AgriMSMEs, local Monetary Financial Institutions (MFIs) and farmer groups, and private sector organizations.** The estimated number of smallholder farmers to benefit from Project investments over the three phases is estimated at 6.5 million (2/3 of the total farmers in the selected provinces) and half of the total rural farmers in DRC (table 2). The first phase is expected to reach 1.7 million smallholder farmers in five selected provinces. Women and youth are targeted beneficiaries, and the numbers reached will be monitored.

63. **Direct beneficiaries also include:** (a) contractors and locals working in rural infrastructure projects as day laborers; (b) users of roads and other rural infrastructure; (c) participating financial institutions; (d) BDS providers; (e) public agricultural support service providers. The Project will improve the capacity of BDS providers of financial and non-financial services and reach 1,280 AgriMSMEs through lines of credits and capacity development programs. The Project’s support under components 3 (Agriculture Public Goods and Services) and 4 (Emergency Response) provides services that reinforce the benefits described above. In particular, the Project’s support to public service providers (agricultural R&D, extension services and pilots) directly contributes to the development and updating of smallholder farmer support packages. Vaccination campaigns will ensure that livestock productivity gains are being preserved.

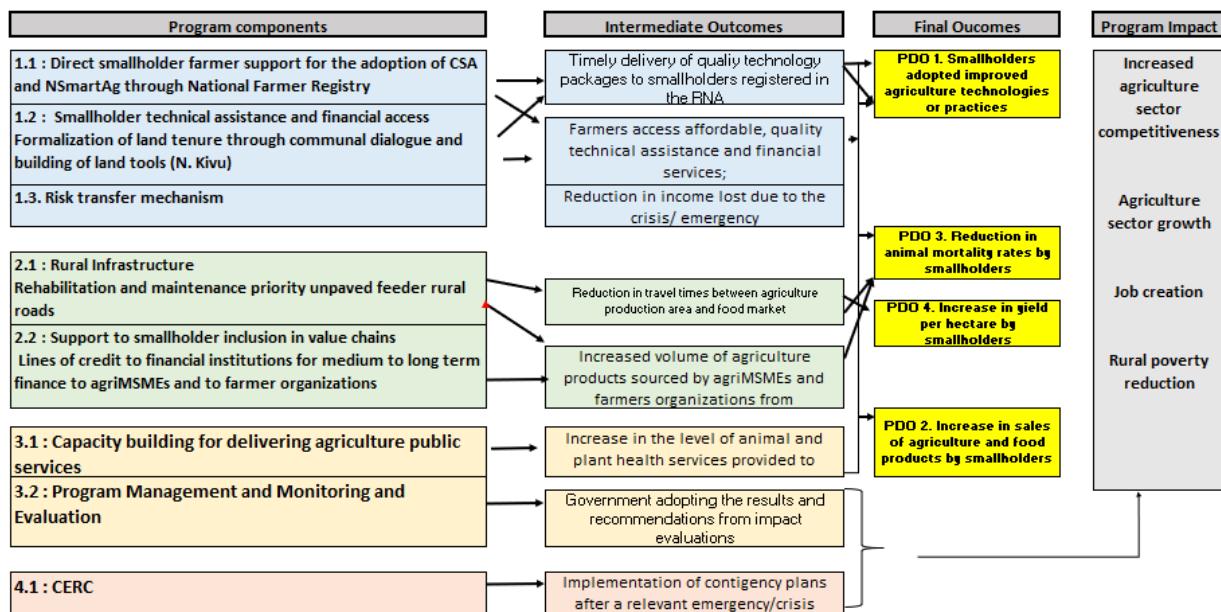
Table 2. Smallholder Farmer Beneficiaries

Province	Total number of rural poor farmers ⁴⁸	Estimated number of smallholder beneficiaries	Coverage (beneficiaries/total poor farmers)
Kwelu	897,000	562,100	63%
North Kivu	820,000	425,000	52%
Kasai Central	430,000	408,504	95%
Kasai	513,000	304,396	59%
Total	2,660,000	1,700,000	64%

⁴⁸ HarvestChoice, 2016, International Food Policy Research Institute, Washington, D.C., and University of Minnesota

C. Results Chain

Figure 2. Theory of Change



64. The proposed Project will help the Government overcome systemic bottlenecks outlined in the sections above and follows the theory of change (ToC) presented in figure 2. The Project seeks to address the productivity constraints faced by smallholder farmers and enhance AgriMSMEs development in the Project areas. Each project component, while having distinct and separate functions, will have synergistic links with the other components. The components will aim to address the two principal results areas as indicated in the PDO (agricultural productivity and strengthening MSME capacity in the Project areas) as follows, (a) Component 1: providing productive assets through direct financial subsidies and technical assistance for financial inclusion; (b) Component 2: alleviating connectivity bottlenecks through rural infrastructure investments and financing to link smallholder farmers to markets; (c) Component 3: strengthening public sector capacity to better deliver agriculture public goods and services (research, extension, certification) and initiating policy reforms to create an enabling environment for agriculture productivity growth and affiliated MSME development; and (d) Component 4: enabling a swift response in the event of an eligible crisis or emergency associated with natural or man-made crises or disasters.

E. Rationale for Bank Involvement and Role of Partners

65. The World Bank's value added is high given the extensive knowledge and expertise generated under other agriculture development projects in the DRC and in the region to date. The proposed Project builds on previous implementation experience, local World Bank staff expertise, ongoing Government dialogue, and global best practices. The multisector challenge of addressing agriculture development opportunities in the DRC places the World Bank in a unique position to support the Government through a multisectoral team that includes Agriculture, Transport, Urban and Rural Development, Disaster Risk Management, Environment, Social, Land Administration, IFC, and Finance and Private Sector Development specialists.

66. The National Government of DRC and various provincial governments are committed to increasing their support to the agriculture sector and fully support a programmatic approach to sector investments, as in this proposed SOP.

The development of agriculture public services to improve the agribusiness environment, smallholder farmers' income and employment, and support to the management of agriculture emergencies, including strengthening of agroclimatic data management, are public competencies that require solid public institutions with sufficient financial and human resources. It is expected that beyond the Ministry of Agriculture and the NPCU and PPIU teams, the Project will include various local stakeholders such as line ministries and sectoral agencies, provincial governments, NGOs and CSOs representing Project beneficiaries, and the private sector (including local agribusiness and investors). Details on the list of local actors intervening in the agriculture sector, as well as a list of agriculture development initiatives by other development partners are available in the project files upon request.

67. Currently, only a few large donors and development partners directly support agriculture in DRC. Most notably, the World Food Programme (WFP) (especially in the food for progress program), the United States Agency for International Development (USAID), the Food and Agriculture Organization of the United Nations (FAO), the African Development Bank (AfDB), the International Fund for Agricultural Development (IFAD) and CGIAR centers. The proposed Project will be the first large-scale investment focused on agriculture development in DRC. Coordination and collaboration with the key partners will be essential to achieve the Project's objectives.

68. The Project will work closely with the IFC to implement MFD principles. Given the transactional nature of IFC's interventions, the latter's contribution would be predicated upon successful negotiations with IFC clients in the DRC as follows:

- **Leasing.** IFC is working with the Ministry of Finance and the central bank to modify the fiscal provisions of the Leasing Law to enable IFC support to prospective leasing companies. If successful, this would benefit Project AgriMSMEs and farmer cooperatives with limited access to collateral to purchase transport and factory equipment, tools, and so on.
- **IFC's Small Loan Guarantee Project.** In the event that one or more financial institutions participating in the financing of Project activities is (are), an IFC client(s) participating in the small loan guarantee program, then the financial institution(s) portfolio(s) (including Project beneficiary farmers and AgriMSMEs in the FIs' portfolios) would benefit from the loan guarantees.
- **Support to value chain development.** The Project offers investment opportunities in the various provincial value chains for IFC. It is expected that IFC shall lead a 'deep dive' in select value chains to identify these investment opportunities for current or prospective clients."

F. Lessons Learned and Reflected in the Project Design

69. The Project design is based on analyses and lessons learned from the implementation of past and ongoing projects in the agriculture and other sectors in the DRC and in the Africa Region. The World Bank has supported the development of the agriculture sector in the DRC for the past decades through a sub-national approach, focusing on agriculture productivity and market access in several provinces. Several lessons have been distilled from the recent analytical work (mainly the 2018 Agriculture Sector Review—P165747 and the recent rapid agriculture portfolio review for DRC, available in the project files upon request).

70. A single-project subnational approach inhibits the integration of intervention strategies by the Government and donors across DRC, making scaling up and replication more difficult. Past and current agriculture interventions have had a difficult time taking hold on the ground with farmers and communities after only a few years of technical assistance and support, and have not been fully integrated into agriculture policies, programs, and institutions. Therefore, the proposed Project seeks to develop a nationwide approach and multiple phases. This approach will allow: (a) the deployment of different types of interventions as per the conditions⁴⁹ of smallholder farming in each

⁴⁹ Conditions may include agroecological areas, conflict situations, farmer typology, presence of agribusinesses, and so on.

region of the country, but learning from each other; (b) the geographic expansion of the interventions to cover the entire country over time, building on comparative advantages and market integration; (c) co-locating agriculture development interventions with other sector interventions such as transport, nutrition, and private and financial sector development; and (d) building public and private sector capacity, which can only be done sustainably over the medium to long term, implementing national-level policies and strategies.

71. Investments in agriculture public goods, services, and smallholder farmer incentives for the adoption of agriculture technologies need to have explicit and transparent selection criteria for smallholder farmers, NGOs, and local governments. This will help align public sector, private AgriMSME, and farmer incentives and avoid the dispersion of public investments without producing sustained sector-level economic development. This Project has established selection criteria in terms of the type of technologies to be supported (prioritizing CSA and NSmartAg PTechs) as well as for selecting the agribusiness plans and rural transport infrastructure investments to be financed.

72. Incentives for the adoption of agriculture technologies by smallholder farmers need to be embedded in a solid agri-finance strategy to achieve sustainability through financial inclusion and financial education. Studies of co-financing schemes to support smallholder farmer investments have shown that although the support is justified due to rural financial market failures, there is little thought on how to leverage private agri-finance resources. Therefore, this proposed operation uses an agri-finance approach to incentivize smallholder farmers to adopt CSA and NSmartAg PTechs, to ensure sustainability of such investments beyond Project closing. Special attention will be paid to leverage opportunities that arise from digital solutions and to ensure that the barriers limiting access of female smallholder farmers to agri-finance are addressed, starting with financial literacy to be offered by participating financial institutions/payment services providers.

73. Given the weak capacity of agriculture public sector institutions in the DRC, NGOs have gained experience and capacity in filling some of these gaps, especially in the area of agriculture extension and technical assistance. There is a critical mass of ecosystem enablers (NGOs, associations, social enterprises, faith-based organizations, and others) in the DRC and in the Project area that have sufficient capacity and are already used to working with World Bank funding in several regions of the DRC.

74. Agricultural value chain support systems are building on lessons of experience of past and existing WBG operations in the DRC. For example, matching grants were considered and not retained as potential mechanism for addressing capacity and financing gaps for AgriMSMEs because of the governance challenges and lack of local skills for implementation, which lead to high implementation costs and delays in implementation and disbursements. Additionally, evaluations of matching grant programs in Africa demonstrated their limited additionality because most grant recipients reported that they would have made investments even without the matching grant. Financial Infrastructure and Markets Project (P145554 - PDIFM) implementation of the lines of credit platform provides a sustainable alternative for long-term financing of AgriMSMEs. The line of credit in this Project has been established to support AgriMSMEs and has been adapted to the sectoral context.

75. Improvements in agriculture emergency response systems need to provide institutional strengthening, capacity building and the use of a series of financial risk instruments to achieve appropriate coverage and operations. The use of ex-ante measures and mechanisms for responding to agriculture emergencies often improves the fiscal situation of the Government but not necessarily the targeting and delivery of support to smallholder farmers. Both aspects need to be addressed to strengthen the agriculture emergency system, so the proposed Project has a thought-out ex-ante risk financing mechanism and a clear list of potential beneficiaries (through the farmer registration process).

76. Agriculture information systems need to establish partnerships between the public sector, NGOs, universities

and private sector institutions, allowing the private sector to take on areas of data collection and analysis where there are commercial opportunities. With data, intensive agriculture technologies and services, the private sector (including NGOs, universities) has been moving forward in harnessing agroclimatic information systems (including weather, price, and agriculture statistics) for decision-making. Public sector agriculture information systems should leverage such private sector capacity, creating alliances and public-private partnerships for the development, operation and usage of agroclimatic networks and services to link the various data systems and provide the best possible risk analysis projections and simulations to smallholder farmers and sector stakeholders. The Project will support these partnerships directly or by seeking assistance from service providers, CGIAR centers, and/or UN agencies.

77. Geospatial security monitoring, progressive prioritization, and coordination with partners. Given that Project interventions are carried out in moderate to high-risk environments, a dynamic security monitoring will be implemented through an Iterative Beneficiary Monitoring (IBM) system. IBM will allow for quick responses to changing conditions and help to make rapid adjustments if necessary. While conflict-sensitivity can be provided by adopting an IBM (bottom-up) approach informed by beneficiaries, community stakeholders, and third parties, this will be complemented by top-down GIS-based remote tracking of security-related data. Moreover, systematic monitoring of the geographic footprint of Project investments will serve to facilitate coordination with development partners and to identify potential geographic overlaps with ongoing and proposed projects and programs by partners. To achieve this, the World Bank has partnered with the European Space Agency (ESA) developing decision-making tools related to rural road maintenance and rehabilitation identification and for forest cover and deforestation analysis. In turn, geographic databases will feed into gap analyses and help to make sure that Project activities complement existing public sector and development partner initiatives in the most efficient way.

78. Gender and GBV/SEAH⁵⁰. The proposed Project's behavioral and attitudinal change interventions outlined under the Gender Action Plan (see annex 8) seek to strengthen women's voice and agency within the agricultural sector and recognize the critical contributions made by women smallholder farmers and producers, especially in terms of labor and revenue. The Project will draw upon the experiences of other World Bank-financed projects in the same intervention zones in integrating GBV risk mitigation and response measures, as well as gender mainstreaming actions, into project programming⁵¹. The GBV development partner group (or GBV humanitarian sub-cluster) in DRC and its regional presence will support the knowledge management of data related to both GBV and gender mainstreaming interventions in nutrition and food security, which are new sectors for mainstreaming in DRC and sectors for which the Project seeks to improve outcomes. The development of any GBV-related indicators or collection of relevant data will be conducted in accordance with international standards and best practices.⁵²

79. The proposed Project's strategy towards SEAH risk mitigation is based on the DRC context and lessons drawn from international experiences and best practices. Recognizing that addressing SEAH risks is a highly complex and sensitive matter and that these risks can never be fully eliminated, the Project has developed an approach to management of and response to SEAH risk, which includes the development of an SEAH Prevention and Response Action Plan that will offer a description of Project activities and associated SEAH risks, and proposed risk mitigation

⁵⁰ The term gender-based violence (GBV) also encompasses sexual exploitation and abuse (SEA) as well as sexual harassment (SH).

⁵¹ See GBV Guidelines for Integrating Gender-Based Violence Interventions in Humanitarian Action (2015). The purpose of the guidelines is to assist humanitarian actors and communities affected by armed conflict, natural disasters and other humanitarian emergencies to coordinate, plan, implement, monitor and evaluate essential actions for the prevention and mitigation of GBV across all sectors of humanitarian response (see: <https://gbvguidelines.org/en/home/>).

⁵² WHO Ethical and safety recommendations for researching, documenting and monitoring sexual violence in emergencies (2007); Gender Based Violence Information Management System (GBVIMS) Best Practices, <http://www.gbvims.com/wp/wp-content/uploads/BestPractices2.pdf>.

measures, including an accountability and response framework as well as stakeholder training and awareness raising. In particular, the Project will work with existing DRC GBV sub-cluster coordination structures to ensure the availability of safe and confidential referral pathways connecting Project-affected people to needed assistance, which could include health, psychosocial, legal, or protection services.

80. The proposed Project will also take advantage of existing services for survivors of violence through cross-agency collaboration with the ongoing World Bank-funded GBV Project, which is likewise being implemented in North Kivu, as well as with the World Bank-funded emergency education project, which is also being implemented in the same provinces as this Project and is likewise putting into place SEAH risk mitigation measures. In Project areas where services are extremely limited or non-existent, options for ensuring that beneficiaries have access to safe and confidential survivor care when needed, will be reviewed. Particular attention will be paid to ensure clear communications with the Project's beneficiaries and their communities, as well as local authorities and other stakeholders, about available services, referral pathways, and grievance mechanisms.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

81. The Project implementation will be managed by the Ministry of Agriculture in close collaboration with the Ministries of Fisheries and Livestock, Rural Development, and Scientific Research and Technology. All partners are expected to play a role in Project implementation. Existing structures of the Ministry of Agriculture at central and decentralized levels have experience in implementing World Bank operations, but do not currently have the required capacity to manage the size of the proposed Project. Therefore, Project implementation arrangements will ensure that the proposed activities will be supported by an additional number of qualified staff. In addition, public sector capacity will be strengthened to sustain efforts over the medium to long term.

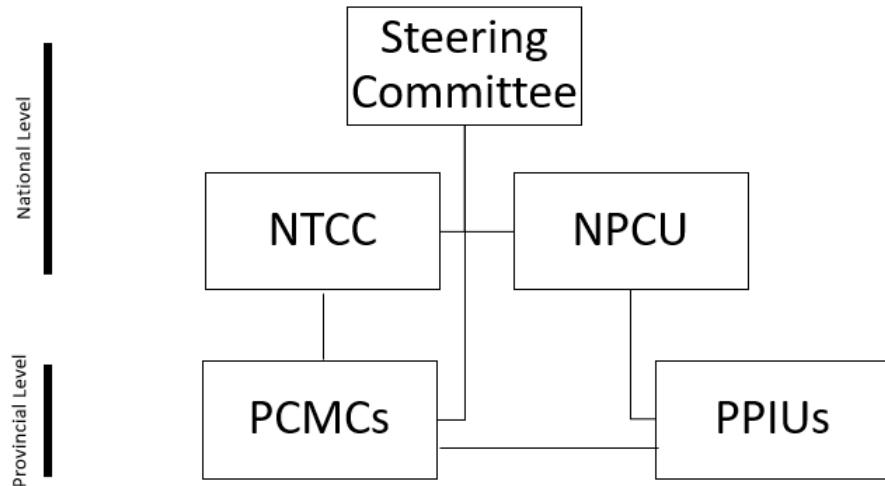
82. At the national level, the Project will be anchored at the Ministry of Agriculture, implemented by the National Project Coordination Unit (NPCU) responding directly to the Secretary General of the Ministry of Agriculture. The NPCU will be responsible for project coordination at central level liaising with units at provincial level and with technical units and departments in other Ministries (Rural Development, Livestock and Fisheries, and Agriculture). The NPCU will gradually build the capacity of the various technical departments of the Ministries of Agriculture, Rural Development and Livestock and Fisheries at the national and provincial levels to increasingly manage Project activities in future phases. For example, a newly proposed organigram of the Ministry of Agriculture is considering a *Cellule de Gestion des Projets et des Marchés Publics* (Project management and procurement unit) to be established. The NPCU will work with the relevant services at the Ministry of Agriculture to strengthen such unit when/if it is established. The PIU that currently implements the Agriculture Rehabilitation and Recovery Support Project (PARRSA - P092724) and the Regional Great Lakes Integrated Agriculture Development Project (PICAGL-P143307) will serve as the NPCU. This PIU is also currently implementing the Project Preparation Advance (PPA). In relation to the implementation of component 1 activities, the NPCU will: (a) enter into a standard matching grant agreement with each smallholder beneficiary farmer receiving vouchers; (b) ensure that matching grants, conditional cash transfers (CCTs) and emergency cash transfers (ECTs) are provided⁵³ to smallholder beneficiary farmers in accordance to the amounts and eligibility criteria and procedures described in the PIM; and (c) ensure that each CCT and ECT is paid for its intended

⁵³ In order to deliver matching grants, ECTs and CCTs, the NPCU shall enter into a payment service agreement with a selected payment service provider (financial institution or mobile payment provider) as described in the PIM. Said Payment Service Agreement shall include, inter alia, the obligation of the Payment Service Provider to provide the payment services with due diligence and efficiency and in accordance with sound technical, financial, and managerial standards and practices, including in accordance with the provisions of the Anti-Corruption Guidelines applicable to other recipients of the financing proceeds other than the recipient.

smallholder beneficiary farmer. Furthermore, for the payment of ECTs, the NPCU will need to determine that an eligible emergency or crisis has occurred according to the PIM, and prepare, adopt and implement a contingency plan related to that crisis or emergency. For component 2 activities, the NPCU will: (a) make proceeds of the Project available to the BCC under a partnership agreement set forth in the Line of Credit Manual, which is part of the PIM; (b) assist the BCC in carrying out the assessment of each participating Financial Institution (PFI), including ensuring that an ESMS is in place; and (c) ensure that PFIs comply with the requirements in their Environmental and Social Management Systems (ESMSs). Within the context of the partnership agreement with the NPCU, the BCC, upon the selection of one or more PFI pursuant to the eligibility criteria and procedures established in the Line of Credit Manual, will: (a) make part of the proceeds of the financing available to each PFI pursuant to a tripartite agreement between the NPCU, the BCC and each PFI, each under terms and conditions set forth in the Line of Credit Manual; and (b) ensure that each PFI enters into an agreement with each eligible AgriMSME.

83. There will be a Provincial Project Implementation Unit (PPIU) in each selected province. At the provincial level, qualified staff will be recruited competitively. A clear division of labor and responsibilities will be defined, for the sake of fluid and efficient decision-making processes between the central and provincial levels and it is described in annex 1. The NPCU will have general coordination functions, while implementation and technical capacity will be based at the PPIU level. Some ministries have only been recently created at provincial level, following the decentralization process (from 11 to 26 provinces). Institutional strengthening will also be provided by PPIUs.

Figure 3. Governance Structure for the Project



NPCU: National Project Coordination Unit

NTCC: National Technical Coordination Committee

PCMC: Provincial Coordination and Monitoring Committee

PPIU: Project Provincial Implementation Unit

84. The Project will be governed by a Steering Committee (SC), chaired by the Secretary General of the Ministry of Agriculture, which will include key stakeholders from the public sector, civil society, and private sector (including farmer and agribusiness representatives). The SC is composed of the Secretary General of the three line Ministries, the Ministry of Land Administration and Environment, the Ministry of Homeland, the Ministry of Gender and Family and Scientific Research, SMEs and the Ministry of Finance and Budget. The role of the SC is to ensure the quality of the annual budget and work plan, the quality of the audit reports, and any relevant orientation, to ensure the consistency and effectiveness of the Project activities with the general objectives of the Project, and any relevant adjustment it may require. The Project will receive technical support for its implementation from a National Technical Coordination Committee (NTCC) that has already been created for Project preparation support. The NTCC includes

the Secretary General and the Directorate of Studies and Planning of the three line Ministries and the representatives of the agriculture public services at the directorate level, in charge of the normative aspects of the Agriculture Public Services at the national level. At the provincial level, there is a Project Coordination and Monitoring Committee (PCMC) composed of the same line ministries in charge of Agriculture, including the Central Bank, representatives of farmers organizations and the Rural Advisory Council and Management. The PCMC has already been created to support project preparation activities. Finally, the Head of NPCU and/or his Deputy, will be the Secretariat of the SC and will ensure regular communication and coordination with the NTCC, and with the PCMCs through its PPIUs.

85. The agriculture public services financed by the Project will be delivered by the technical departments of the various national agencies and services anchored in the provincial Ministry of Agriculture. For example, the agriculture advisory and extension services will be supervised by the *Service National de Vulgarisation* (SNV), the agriculture research by the National Agriculture Research Institute (INERA) from the Ministry of Scientific Research, and the monitoring of rural transport infrastructure investments by the OVDA from the Ministry of Rural Development. The NPCU and PPIUs will rely on the NTCC and PCMCs respectively to review technical documents and guide project supervision and monitoring activities as described in the PIM. Each PCMC will be closely working with the PPIUs. The NTCC and the PCMC will have a consultative role, while the executive role will be devoted to the NPCU and to the PPIUs.

86. The Project's institutional capacity building will focus on strengthening local capacity at the local level in each Province, to avoid bottlenecks observed in Kinshasa in other operations. The implementation approach will defer from previous and ongoing operations in the sector, by increasingly and gradually relying on public systems and institutions, in particular for the delivery of public goods and services. Building public sector capacity will be done in partnership with key international institutions and development partners such as CGIAR Group members⁵⁴ and UN Agencies. For the implementation of activities with smallholder farmers and AgriMSMEs, the approach will be to rely mainly on private sector institutions (financial institutions, BDS providers) and civil society (NGOs, academic institutions, federations and associations of smallholder farmers and agribusinesses). The Project's modality of delivering direct support to smallholder farmers, and linking them directly with AgriMSMEs (rather than the indirect farmer support modality of other projects) will (a) relieve pressure from direct project implementation activities; (b) leverage private investments into the agriculture sector under the MFD approach; and (c) build the capacity of public institutions to move from direct intervention towards a more normative and regulatory role.

B. Results Monitoring and Evaluation Arrangements

87. Overall responsibility for M&E of Project activities will lie with the NPCU. The NPCU will be responsible for consolidating Project reports and the overall coordination of outcomes and decisions from the steering and technical committees. As part of their role as specialized suppliers to be contracted by the Government, different firms and agencies will be responsible for data collection and reporting to the NPCU and responsible government agencies (ministries, provincial governments)⁵⁵. The NPCU will collate and aggregate the entities' reports into comprehensive quarterly implementation progress reports. The NPCU will also conduct periodic monitoring visits to Project sites (jointly with the responsible government agencies, in particular the DEPs of the Ministries of Agriculture, Rural Development and Livestock and Fisheries) and will hire counter verification consultants or agency to support the Government in Project monitoring, evaluation and supervision. The consultants or an agency will conduct, in coordination with the DEPs, technical audits at least twice a year (selecting a sample of beneficiary farmers and

⁵⁴ An example is the support that HarvestPlus, CGIAR's biofortification program, has been providing to the Government of DRC to develop and release locally-adapted nutritionally enhanced crops such as Vitamin A cassava and maize, and iron beans, working with agencies such as INERA, SENESAM and SNV providing breeding material, supporting seed production, seed producer training and quality control measures.

⁵⁵ At national level, the responsible government agencies would be mainly the Directorates of Studies and Planning (DEP) and at Provincial level the Ministries of Agriculture.

AgriMSMEs) to ensure that the direct smallholder farmer supports and AgriMSME supports under components 1 and 2 are reaching the intended beneficiaries and are being used for the intended technical purposes. The results framework is composed of indicators linked to the interventions in phase 1. M&E activities will include a process evaluation and an impact evaluation using rigorous research methods to generate high-quality evidence on the effectiveness of alternative approaches implemented through the Project. Project-level indicators, such as farmer income and food security will be monitored as part of the impact evaluations and assessments to be supported under Component 3.

88. Routine data: Data on several results framework indicators will be obtained from the OTs to be hired by the NPCU under sub-component 1.1 to facilitate the delivery of smallholder farmer support and the registration of farmers in the farmer registry and incentive system. To further strengthen the data collection at the national level, the Project will contribute to the financing of the expansion of the agriculture surveys, beneficiary satisfaction surveys, and census to be conducted in the selected provinces.

89. Registry and Information Systems: The Project will finance the development of an online and offline information system in two versions: web and (Android) app. The *Registre National d'Agriculteurs* (RNA) will register smallholder farmers (including crop farmers, fishers, cattle ranchers) and suppliers of agriculture inputs and services. Registration in the RNA will be carried out on a single, individual, and voluntary base, but will be mandatory to benefit from the incentives of the Project and possibly other projects and programs managed by the national and provincial governments. Each producer will be issued a card (laminated, professional, near field communication - NFC⁵⁶ contactless smart card) with the holder's photo and a unique identification number. The number of farmers registered in the RNA may reach several tens of millions of people. The Project will deploy the direct smallholder farmer support under sub-component 1.1 in four provinces of the DRC (North Kivu, Kwilu, Kasai and Kasai Central)⁵⁷. The registration of smallholder beneficiary farmers in the RNA and the implementation of the Incentive Management Information System (*système d'information de gestion des incitations - SIGI*) are the first steps before the delivery of the direct smallholder farmer support under sub-component 1.1. The maintenance of the RNA will be the responsibility of the Ministry of Agriculture, and will have the support of the Ministry of Fisheries/Livestock and Rural Development and of the provincial governments. A technical team for the RNA at the national level (*UTNI-RNA*) will be established under the Ministry of Agriculture with staff from the different Information and Technology Directorates (DANTICs) of the three Ministries in Kinshasa and will be responsible for the storage, management, development of the RNA and the SIGI and of local data collection agencies.

90. Information and communication technologies for Project monitoring: The Project will collaborate with the World Bank's GEMS initiative. GEMS has already been providing support to establish an online platform consisting of a cloud-based database, a web portal, and mobile data collection applications based on the Kobo ToolBox—an open-source software that enables the collection and reporting of real-time data to facilitate Project monitoring and supervision⁵⁸. GEMS platforms have been successfully deployed in other FCV settings (Mali, Niger), and an effort to establish a system for monitoring the overall World Bank Group portfolio in DRC is underway. The Project team has engaged the GEMS team and has completed the training for the NPCU staff hired with the PPA funds. This training will be concluded for PPIU staff leading up to effectiveness. It will be carried out as a training of trainers (ToT) activity: once the Project staff are trained, they will be able to train others in the use of this system. It is expected that the system will also be used by all contractors, agencies and NGOs contracted to support Project activities. The data collected will feed into the Project database in real time. The Project will finance the acquisition of hand-held devices (tablets, smartphones)

⁵⁶ NFC is a technology that enables two electronic devices to communicate with each other.

⁵⁷ Kongo Central will only receive investments under Components 2, 3 and 4 as the Project will continue the investments in value chain development that begun under the recently closed World Bank operation, PDPC.

⁵⁸ Project preparation information collected with this application can be found here:

<https://kc.kobotoobox.org/nicoweb/reports/aZhW7e9UqHHUP3LQi77nW/export.html>

and the cost of training. Given the scale of the Project and the amount of data collected, the Project may also finance additional server capacity.

91. The Project will finance external process and impact evaluations to measure the implementation quality and effectiveness of key interventions, in particular for components 1 and 2. The evaluations will be used to complement monitoring data from the Project's Monitoring Information System (MIS). Process evaluations will be used to measure the quality of implementation, address analytical gaps to better understand Project performance, and improve the design of the interventions. Randomized impact evaluations will also be designed and implemented. The randomized impact evaluation will generate evidence on operationally relevant trade-offs and strategic policy questions to inform future phases of the project and ensure it maximizes impacts on key outcomes. The design of the impact evaluation will be prepared with technical support from the World Bank and partner researchers during the first year of the Project and incorporate lessons from process evaluation. The support to impact evaluation will include baseline surveys in all the provinces of intervention that will allow to update key indicators in the Results Framework (RF) as well as two household-level follow-up surveys to measure the medium- and long-term impacts of interventions, assess Project progress towards achieving the stated outcomes and the contribution of the Project to higher-level goals.

C. Sustainability

92. The Project will build the capacity of local communities to undertake basic actions to improve agriculture productivity and gain market access. By financing OTs to support the administration by the NPCU of the direct smallholder farmer support system (SIGI) and coordinate technical assistance and other agriculture public services, local communities will be provided with knowledge, skills, and tools that will remain once the Project financing ends. Income-generating activities from the adoption of CSA and NSmartAg PTechs will also continue, as will the availability of key nutrients in deficit in the local population and resilient production practices. It is envisaged, in accordance with OVDA's strategy, that the maintenance of the rural roads rehabilitated by the Project will be carried out by rural communities and local small businesses. The Project will seek to support the OVDA and the provincial authorities to put in place the financing mechanisms for this maintenance to ensure sustainable management of the road asset after Project closing.

93. The Project will finance the development of private sector-based smallholder farmer support mechanisms and capacity strengthening to plan, implement, and manage multisectoral agriculture, environment and nutrition activities at the community, provincial, and national levels. The paradigm shift from indirect towards direct smallholder farmer support that relies on private sector actors is critical to the sustainability of investments in agriculture productivity growth, but also to break the dependency of the agriculture sector on externally funded projects to access quality inputs, services and to innovate. The public and private sector skills and capacity developed through this Project should be sustainable without the need for future substantial investments.

94. Furthermore, the Project will build the project management capacity of the key actors at the local, provincial and national levels. In past and current World Bank-funded operations supporting the agriculture sector, the centralization of project management decisions at the National level has limited the absorptive capacity of the Government for supporting the agriculture sector. Learning from operations in other sectors in DRC and in the agriculture sector in other countries, the approach will be to tackle key obstacles related to Project management and monitoring at the provincial and local levels. Ensuring that project management and agriculture public goods and services are provided at the local provincial level will bolster the sustainability of the intervention by decentralizing decisions to adapt to local constraints and evolving situations.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis (if applicable)

Technical Appraisal

95. The technical design of this Project is guided by global evidence showing that a series of packages of CSA and NSmartAg technologies and best practices (PTechs) that have been locally validated can have the multiple objectives of increasing productivity, addressing climate change mitigation/resilience, and contributing to nutritional outcomes. They can be scaled up and, if focused on promoting the private sector development of agribusinesses upstream and downstream in the supply chain, can significantly reduce rural poverty by raising incomes from agriculture. These experiences are reflected in the proposed Project through the central role of (a) the delivery of direct support to targeted one-type smallholder farmers to address market failures, and (b) agriculture public goods and services at the community level.

96. Since March 2020, the Government of DRC has been benefiting from a PPA of US\$6 million to conduct a number of activities to support project preparation and ensure implementation readiness. The PPA is managed by the PARRSA-PIU, which will also implement the Project once it becomes effective as an NPCU, thus ensuring a seamless transition from the advance funds to those of the Project. Among other activities, the PPA is also being used to recruit key additional personnel to support Project launch and initial implementation.

Economic and Financial Analysis

97. The Project development objective to improve agriculture productivity and market access of smallholder farmers is expected to lead to three quantifiable benefit streams. First, smallholder farmers will benefit from increased household incomes and improved food and nutrition, through increased yields as a result of a mixed package of direct support, better access to inputs, training and better access to finance (mostly component 1). Second, through the Project's interventions in sub-component 2.1, another set of benefits will affect the target population, as rural infrastructure improvements will lead to better access to markets to commercialize agricultural surpluses (increased household incomes) and to procure more affordable food during the lean season (increased household savings). The support to smallholder farmers' inclusion in value chains (sub-component 2.2) will provide a third benefit stream, through the development of profitable AgriMSMEs. In addition, the AgriMSME development and financing will also facilitate the realization of component 1 objectives, as the new enterprises will complement existing ones in providing a better access to agricultural inputs and in marketing and adding value to agricultural surpluses generated with the Project's support.

98. The Project will also have other positive impacts, although non-quantifiable at this stage due to lack of data availability. These include improved nutrition (through NSmartAg PTechs), improved climate change resilience (through CSA PTechs), demonstration effects (the planned large number of Project beneficiaries could result in a significant outreach), generalized better access to inputs (as the implementation of direct smallholder farmer support is to be executed through the private sector), and so on.

99. The impact of the Project's third (Agriculture Public Goods and Services) and fourth (Emergency Response) components are considered as cross-cutting and reinforcing the benefit streams described above. The Project's support to agricultural R&D and extension of CSA and NSmartAg practices will feed into the development and updating of direct smallholder farmer support packages, while support to vaccination campaigns will ensure that the livestock productivity gains are being preserved. In addition, the development of the RNA will facilitate the implementation of

direct smallholder farmer support in the current and subsequent phases of the Project.

100. Despite the difficulty of performing ex-ante Economic and Financial Analysis (EFAs) for demand-driven interventions, the present analysis has modeled the returns of several indicative crops and livestock packages and AgriMSMEs. The Project's main delivery mechanism—the direct smallholder farmer support—will be implemented by presenting beneficiaries with a menu of CSA and NSmartAg packages to choose from. These packages will include crop, livestock and aquaculture productivity-enhancing technologies and the full menu will be developed in the Project's piloting phase, in its first year of implementation. As of appraisal, as part of the preparation of the operational manual for direct smallholder farmer support (*Manuel de Procédures pour les Incitations agricoles*), five indicative packages have been developed, and the financial analysis⁵⁹ demonstrates the profitability of this type of intervention. Similarly, two examples of AgriMSMEs (processing, and transport and marketing) are confirmed as financially sound.

1. Overall, the Project is economically justified, generating a net present value (NPV, at six percent) of US\$244.5 million and an economic internal rate of return (EIRR) of 29.5 percent (over 10 years and with a budget of US\$500 million), not accounting for environmental externalities. The economic results are considered satisfactory, given that several other Project benefits (such as improved nutrition, demonstration effects, and development of networks of input suppliers and AgriMSMEs, and so on) could not be quantified at this stage, due to limited data availability. Including the environmental benefits, the Project's economic results are significantly higher, with an NPV between US\$319.1 million (low estimate shadow price of carbon) and US\$393.2 million (high estimate shadow price of carbon). In addition, these economic results are robust when testing several sensitivity scenarios, including reduced adoption rates, delays in implementation, cost overruns, and so on. Nevertheless, the interplay between these risk scenarios (in particular, lower output prices coupled with significant implementation delays) can significantly affect the Project's economic benefits.

B. Fiduciary

(i) Financial Management

101. **The overall FM risk at preparation is considered High.** The proposed financial management arrangements, including the mitigation measures for this Project, are considered adequate to comply with the provisions of the World Bank Directive: "Financial Management Manual for World Bank Investment Project Financing Operations," and the World Bank Guidance: "Reference material—Financial Management in World Bank Investment Project Financing Operations." Additional details on the FM assessment are found in annex 5.

102. Implementation arrangements of the ongoing PARRSA and PICAGL projects will be maintained under the proposed Project, which will use the existing financial management arrangements at the NPCU. The following are some additional financial management measures that will be taken under the project to reduce the FM risks: (i) requirement that Banks and non-Bank financial institutions located outside the country who issue securities (unconditional guarantees) shall have a correspondent financial institution located in the Employer's Country to make it enforceable; (ii) expanding the scope of the audit function to include technical and/or "Value for Money" audits to make it more difficult for contractors, supplies, and consultants to get away with substandard work/goods or deliverables; (iii) developing an effective and accessible complaints handling system to increase the probability of detecting irregularities in the implementation process; and (iv) training of the project staff in fraud and corruption framework as part of the institutional strengthening.

⁵⁹ Full details are available in the project files upon request.

(ii) Procurement

103. Procurement activities will be carried out in accordance with the World Bank procedures specified in the World Bank Procurement Regulations for IPF Borrowers: "Procurement in Investment Project Financing Goods, Works, Non-Consulting and Consulting Services" (dated November 2020), and any other provisions stipulated in the Legal Agreement. In addition, procurement implementation will be carried out in accordance with the "Guidelines on preventing and combating Fraud and Corruption" stipulated in 2.2a of annex IV of the Procurement Regulations.

104. All goods works and non-consulting services will be procured in accordance with the requirements set forth or referred to in "Section VI. Approved Selection Methods: Goods, Works, and Non-Consulting Services" of the Procurement Regulations. In addition, the consulting services will be procured in accordance with the requirements set forth or referred to in "Section VII. Approved Selection Methods: Consulting Services of the Procurement Regulations," the Project Procurement Strategy for Development (PPSD), and in the Procurement Plan approved by the World Bank.

105. A PPSD has been prepared with World Bank support and aims to ensure that procurement activities are packaged and prepared in such a way that they expedite implementation considering (a) the market analysis and the related procurement trends, and (b) the procurement risk analysis. The PPSD provides the basis and justification for procurement decisions, including the recommended procurement approaches that have been reflected in the approved procurement plan covering the first 18 months of implementation. Table A4.1 in annex 4 summarizes the various procurement methods to be used for the main activities financed by the proposed project

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	Yes
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social Standards

106. **Environmental risks and impacts are deemed Substantial while social risks and impacts are deemed to be High.** The Environmental and Social Risk Classification conducted under the new ESF rated the Project's overall environmental and social (E&S) risk as Substantial on the Environment and High on the social risks. The High social risk rating is due less to potential impacts from the Project itself than to general conditions of instability, conflict and fragility, particularly in Kasai Central and North Kivu, which could affect Project beneficiaries in farming communities.

107. All ten environmental and social standards are relevant (details on the evaluation of each ESS are available in project files upon request). Based on this assessment, the Borrower has prepared, adopted, and disclosed the appropriate safeguard instruments including: (a) a draft Environmental and Social Management Framework (ESMF); (b) a Pest Management Plan (PMP); (c) a Resettlement Policy Framework (RPF); (d) Indigenous Peoples Planning Framework (IPPF); (e) the Environmental and Social Commitment Plan (ESCP); (f) the Stakeholder Engagement Plan (SEP); and (g) the draft Labor Management Procedures (LMP) (all disclosed in-country and on the Bank's website on May 14, 2021). Expected impacts of the Project can be avoided and/or managed if all appropriate environmental and social measures are taken during Project implementation. Anticipated impacts (including possible acquisition/restriction of land use, labor and working conditions, and potential impacts to community health and safety) can be managed or mitigated. An initial assessment of the Project's potential SEAH risks using the World Bank's

SEAH risk assessment tool (for major civil works projects) determined the potential risk as Substantial, and as noted above, a SEAH Prevention and Response Action Plan will be developed in accordance with the Project's SEAH risk rating. This risk rating will be reviewed once potential subproject sites and specific Project activities have been further defined.

108. The nature and medium scale of anticipated adverse environmental risks and impacts of the Project activities vary under components 1, 2, 3 and 4. The risks and impacts related to the activities of smallholder farmers are likely to lead to deforestation during the clearing, the disturbance and destruction of natural habitats and sensitive ecosystems, the destruction of microfauna and organic matter with GHG emissions in the case of slash-and-burn agriculture, and to pollution due to an increase in the use of pesticides. The anticipated environmental risks and impacts related to road works and maintenance operations should include occupational health and safety, traffic management, quarrying and borrow pits. In addition, the opening of access roads and the exploitation of quarries may lead to deforestation, the risk of bushfires by uncontrolled burning and the risk of encroachment on protected areas (Mangai Hunting Area, Bushimaie, and so on). Additional potential environmental risks related to some of the above components activities may include natural hazards associated with extreme weather events, efficient use of resources (water) and soil erosion /management of topsoils, forest degradation, habitat disturbance and destruction and threat to native biodiversity (particularly if genetically modified seeds are used), as well as water pollution, crop residue and solid waste management. An Environmental and Social Management Framework (ESMF) has been prepared by the Ministry of Agriculture to address all potential environmental and social risks and impacts related to Project activities. Site specific instruments such as Environmental and Social Management Plans (ESMPs) will be developed if necessary during implementation. To cope with the use of pesticides in Project activities, a separate Pest Management Plan (PMP) was prepared and proposes to promote integrated pest management measures (based on methods of biological or environmental control of pests) and outlines measures to reduce the management of chemical pesticides while controlling their use and management.

109. The ESMF identifies child labor (children under 18) as a risk in both civil works and for agricultural activities. The Government has a Labor Code and has adopted the ILO's Convention No. 138, which sets a minimum of 18 years for hazardous work, as any type of work which, by its nature or the conditions in which it is carried out, is likely to compromise the health, safety or morals of children. The Project will apply mitigation measures in accordance with Convention No. 138 (specifying minimum age) and the World Bank's ESS 2 on Labor. The Project will ensure strict compliance with this convention. Specific measures preventing the recruitment of children proposed in the ESMF include the following: prohibit the employment of children, and minors who have not reached the age required by law to work in manual labor (any minor under 18); develop and have companies and their workers sign a code of good conduct prohibiting, among other offenses, the employment of children, and developing the applicable sanctions; solicit the full identities of candidates during recruitment with a verification system in place (list of employees, regularly shared with the NPCU and PPIUs, and logged regularly); sensitize local communities and develop leaflets and posters among other sensitization tools on the prohibition of children in construction and agricultural sites (the tools will be used and disclosed during awareness-raising); provide training on the risks related to SEAH and violence against children. In addition to the ESMF and the measures set forth in the ESMF, the Project also prepared a Labor Management Plan (LMP) per the ESS2 that outlines provisions to ensure that the project does not engage in child labor.

110. While prospective FIs and AgriMSMEs (for agro-dealer MSMEs and agribusinesses) have not yet been identified, the likelihood of adverse high risks is limited given the nature of AgriMSMEs businesses (processing, and transport and marketing). Risks faced by AgriMSMEs involved in livestock will include those related to the management of waste materials; wastewater and effluents; air emissions; hazardous materials management; and the spread of animal diseases. Across all AgriMSMEs, there is a potential for E&S issues relating to occupational health and safety, labor and community health and safety, including traffic and fire safety risks. Environmental risks with

AgriMSMEs healthcare facilities may be associated with the management of biomedical waste and hazardous materials.

111. The Environmental and Social Management Framework identifies the following social risks and impacts as a result of the planned works: potential land expropriation, involuntary displacement/resettlement of populations, but also loss of land, homes and socio-economic activities. The Project proposes specific measures detailed under ESS5 to manage the risks related to resettlement. Additionally, there are significant conflict and security risks in Kasai Central, due in part to recent influxes of Congolese returnees from Angola, and movements of other internally displaced persons due to intercommunity conflicts and the presence of armed groups. North Kivu (and adjacent Ituri province) also has conflict and security risks from armed groups, as well as an Ebola epidemic that grew unabated since first identified in the province in mid-2018, until June 25, 2020, when the end of the outbreak in the eastern provinces was declared. The Project is also likely to take place in areas where Indigenous Peoples are present in the Kasai and eastern provinces. Specific measures are proposed in the IPPF to ensure that this group is included as beneficiaries and stakeholders in Project activities, and have access to improved agricultural techniques and markets. Finally, there are SEAH risks linked largely with the civil works and rehabilitation activities, due to the planned scale of the works as well as anticipated labor influx to worksites. These risks and associated mitigation measures are outlined in the Project's SEAH Prevention and Response Action Plan (annexed to the ESMF). Security issues in some provinces, especially in parts of North Kivu and the Kasai and Kasai Central provinces where armed groups have been or continue to operate, may pose challenges for supervision at some sites. A Security Due-Diligence assessment was prepared by the World Bank prior to appraisal, and security management plans (SMPs) will be prepared by the Project during the identification of site-specific activities, as detailed under ESS4 below. The ESF is new, so the Borrower will need support and capacity building from the World Bank to gain experience operating under the new World Bank environmental and social standards.

112. To ensure the implementation of all environmental and social measures, the Recipient has already hired three safeguard specialists (environmental, social and GBV). All three specialists are operational in the NPCU. At the provincial level, the PPIU will recruit an environmental specialist and a social /GBV specialist who will be members of the PPIU to support this Project and ensure adequate risks identification, management and reporting in each province.

113. **OP 7.50 Projects on International Waterways.** Based on the initial Project design, which included irrigation investments, the Government of the Democratic Republic of Congo (DRC) notified the Republic of Congo, Central African Republic, Angola, Gabon, and Cameroon through the International Commission of Congo Basin (*Commission Internationale du Bassin Congo-Oubangui-Sangha*, CICOS), at its Headquarters in Kinshasa, and notified Rwanda through the Lake Kivu and River Ruzizi Basin Authority (*Autorité du Bassin du Lac Kivu et de la Rivière Ruzizi*, ABAKIR) of the proposed Project on October 30, 2020. After the notification was issued, the Project design changed and the irrigation investments that initially triggered the notification requirement under the Policy were removed. The investments retained under the revised Project design fall under the exception to the notification requirement in accordance to paragraph 7 (a) of the Policy. As a result, a Regional Vice Presidency (RVP) approval of the exception to the riparian notification requirement was obtained.

114. **Project-Level Grievance Redress Mechanism (GRM).** A Project-level GRM will be established to respond to Project grievances, including the safe and confidential management of SEAH claims with a response protocol to ensure timely referrals to appropriate support services. To ensure access to these redress mechanisms, the NPCU will set up GRM committees at the provincial level. Grievance redress will also be available through additional means including email, phone, or SMS, to allow citizens to ask questions, or express problems or concerns, thus allowing for the same complaint to be submitted through multiple channels. The percentage of grievances addressed within the specified amount of time will be tracked as an indicator in the proposed Project's results framework.

115. **Addressing SEAH Risks.** During the Project preparation, an initial assessment of SEAH risks was completed and rated the Project at substantial risk. The risk rating informs the identification of SEAH mitigation and response measures, which have been outlined in the SEAH Prevention and Response Action Plan mentioned above. The Action Plan will likewise contain an accountability and response framework, under which workers and Project personnel will sign a code of conduct addressing SEAH and outlining applicable sanctions. In addition, GRM complaint procedures appropriate for the safe and ethical reporting, documentation, and management of SEAH-related incidents will be put in place, including a response protocol to ensure prompt service referrals. Workers and Project personnel will likewise receive relevant trainings on SEAH and prohibited behaviors, and the Project will organize community consultations as well as awareness-raising sessions on SEAH risks, prohibited behaviors under the code of conduct, and GRM complaint procedures for SEAH claims. The appropriate SEAH mitigation and response measures will be reflected in all relevant safeguard instruments and in procurement documents for effective implementation and costing; appropriate SEAH-related indicators will likewise be developed to monitor GRM effectiveness, service referrals, as well as training and sensitization activities.

Climate Screening and Climate Co-Benefits

116. **The Project will contribute to both climate change mitigation and adaptation through the promotion of the adoption of CSA PTechs by smallholder farmers (under Component 1) and financing for the supply of CSA PTechs by AgriMSMEs (under component 2).** In addition, Project investments in rural infrastructure, through rehabilitation and upgrade, will make road transport systems more resilient to the potential impacts of climate change and extreme weather events. Climate-related hazards in DRC include floods, drought, and epidemics. The overall assessment of potential risks in the Climate and Disaster Risk Screening Report is assessed as “Moderate.” The Project aims to reduce such risks by supporting CSA practices such as stress tolerant varieties, sustainable land and water management practices (such as green manure, improved fallow, conservation agriculture), agroforestry and improving veterinary services. The uptake of these CSA PTechs will be supported by direct smallholder farmer support under component 1 and investments in R&D and extension services under component 3. Most of the proposed practices have substantial benefits in terms of carbon sequestration, including through avoided deforestation.

117. **The GHGs impact was estimated using the EX-ACT tool for the agriculture investments and by the RED and HDM-4 Models for the rural infrastructure investments.** The carbon balance is defined as the net balance from all GHGs expressed in CO₂ equivalent that were emitted or sequestered due to Project implementation (with Project) as compared to the business-as-usual scenario (without Project situation). For the Project, the GHG accounting calculations were based on the EX-ACT model’s carbon balance calculations based on (a) the dominant soil types in DRC (LAC soils); (b) the climatic conditions in the Project areas (tropical moist); and (c) land use and land management practices are described in the with and without Project situations. Overall, the estimation results show that agriculture interventions constitute a net carbon sink. Over 15 years, the gross sink for with Project scenario is 27,725,358 tCO₂e, with an annual net average carbon sink of 2,030,327 tCO₂e. The details of the analysis are shown in annex 7.

V. GRIEVANCE REDRESS SERVICES

118. Communities and individuals who believe that they are adversely affected by a World Bank supported Project may submit complaints to existing Project-level grievance redress mechanisms or the World Bank’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address project-related concerns. Project-affected communities and individuals may submit their complaint to the World Bank’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of World Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank’s attention, and Bank Management has been given an opportunity to respond. For information on

how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

119. **The overall risk rating for the Project is rated High.** This rating is based on: (a) the experience with other agriculture development projects in DRC and the unprecedented scope of this new Project; (b) the current insecurity situation in some Project regions (mainly Kasai and eastern Regions); (c) considerations of climate change risks associated with the Project; and (d) poor coordination among sector stakeholders. The key risks and proposed mitigation measures are described in the following paragraphs.

120. **The political and governance risks are rated High.** The proposed Project, and the longer-term World Bank engagement to reduce rural poverty and increase agriculture competitiveness are driven by strong political commitment from the highest levels of government. However, it is possible that changes in personnel from different Directorates and Agencies could impact the delivery of agriculture development interventions (or their effectiveness) at the community level and throughout the public sector. The Project will mitigate this risk by continuing to engage with a broad range of stakeholders at the provincial and national levels to support implementation, following on the approach during Project preparation where a multi-stakeholder project preparation committee (CTP) was established to ensure the continuity of project design despite the various changes in Government officials. Furthermore, there is an increased risk of political instability in eastern DRC following a recent increase in violence and a state of siege declared in the provinces of Ituri and North Kivu. This has led to a renewed government commitment to addressing the conflict in the region. In September 2020, there was already high-level dialogue between the Governors of the three provinces (Ituri, North Kivu, South Kivu) and representatives of the central Government, including the Presidency, Prime Minister's Office, Ministries of Plan, Interior, and Defense, as well as the Congolese Army. Partners were also included, such as the United Nations Stabilization Mission in the Democratic Republic of the Congo (MONUSCO) and the World Bank, with the aim to support an end to conflict. Following a change in government, with a new Prime Minister and subsequent ministers appointed in February and April 2021, this dialogue has continued at the central level. An important element of this dialogue, is the preparation of a national strategy addressing fragility, conflict and violence and associated milestones for eligibility to the IDA19 Prevention and Resilience Allocation. The Project will support risk mitigation efforts in eastern DRC by continuing to coordinate actions with other development partners and projects to maximize the impact of economic inclusion and its stabilization role. Currently, the Presidency continues to push the peace agenda for this Region. The declaration of a state of siege is part of the government's response to actively address the recent surge in conflict-related incidences. The situation will be closely monitored from a portfolio perspective, and appropriate adjustments made according to assessments made.

121. **Macroeconomic risk is rated Substantial.** Macroeconomic risk is substantial mainly because of high inflation, the dollarization of the DRC economy and depreciation of the local currency. This risk could be mitigated by incurring substantial portions of Project expenditures in United States dollars (international service contracts for components 1 and 2).

122. **The risk related to sector strategies and policies is rated Substantial.** Although in other parts of the DRC, similar agriculture investment activities are being implemented with good results, given the multisectoral nature of the proposed Project and the security situation in three of the five selected provinces, continued implementation of sector strategies and policies could prove challenging. This risk is being mitigated to some extent by building on what already exists with development partners and implementing agencies that have presence and capacity in the Project areas (phase 1).

123. **The risk related to the technical design of the Project is Substantial.** Activities similar to those proposed by the Project have already been implemented successfully in other provinces of DRC with support from the World Bank and other partners, but at a smaller scale. To the greatest possible extent, the proposed Project will use the delivery and implementation modalities that have already been tested and have been proven to be effective in the DRC and in similar contexts. The risk related to the technical design will be mitigated by setting up a steering committee at the national level, and technical committees at national (NTCC) and provincial levels (PCMCs) with members from each of the ministries involved. This will help coordination and information sharing among the ministries.

124. **The risks of institutional capacity for implementation and sustainability are rated Substantial** because of limited Government capacity, particularly within the national sectoral ministries and provincial governments. To mitigate this risk, Project design will prioritize the strengthening of the operational and technical coordination at the local, provincial, and central levels.

125. **Fiduciary risks are rated High.** Overall, the fiduciary environment of the country is weak, with a high probability of affecting the PDO in an adverse way. The World Bank's principal concern is to ensure that Project funds are used economically and efficiently for their intended purpose. Fiduciary risks include: (a) the possibility of a lack of coordination and consolidation of actions and information between the NPCU and public sector institutions and external service providers; (b) poor governance and slow pace of implementation of PFM reforms that might hamper the overall PFM environment; (c) the possibility of a lack of coordination since several stakeholders will be involved and may not be familiar with the new implementation modalities of the Project; and (d) weak FM capacity at different stakeholder levels and the corresponding risk of fraud and corruption. Mitigation measures include: (a) the NPCU will ensure the coordination of the Project by collaborating with other stakeholders; (b) the development of a PIM which will clarify the roles and responsibilities of the various stakeholders and provide clear definitions of implementation procedures in line with the World Bank's fiduciary requirements; (c) from inception, the necessity for seamless coordination will be integrated into the protocols/agreements between the NPCU and other external stakeholders respectively; (d) regular internal audit missions (technical and financial audit) will be conducted during the Project implementation with a focus on fraud and corruption risk during implementation; (e) the FM staff will help stakeholders in preparing realistic budgets that are consistent with the work program; and (f) the Project will acquire management accounting software and customize it to generate financial reports.

126. **Environmental and Social risks are rated High.** The environmental and social risk classification for the Project is High under the World Bank ESF. The environmental risks and impacts of the Project activities are rated Substantial and are mainly related to road maintenance works and operations, including occupational health and safety and management of invasive species, on-farm activities of rural smallholder farmers, use of pesticides, natural hazards, resource efficiency (water) and soil erosion/management of topsoils. The Project has also been given a social risk rating of High, including in relation to potential SEAH risks and has accordingly prepared an action plan to address risk factors and implement appropriate SEAH mitigation and response measures. Security issues in some provinces, especially in parts of North Kivu and Kasai provinces where armed groups have been or continue to operate may pose challenges for supervision at some sites. Expected potential negative impacts of this Project can be avoided and/or managed if all appropriate environmental and social measures are taken during Project implementation. For Project activities relevant to ESS9, FIs will be required to have an ESMS, covering policy, procedures, organizational capacity monitoring and reporting and stakeholder engagement. The Project has prepared the following required instruments: the draft Environmental and Social Management Framework (ESMF), Pest Management Plan (PMP), Resettlement Policy Framework (RPF), Indigenous Peoples Planning Framework (IPPF), Stakeholder Engagement Plan (SEP), draft Labor Management Procedures (LMP) and Environmental and Social Commitment Plan (ESCP). These instruments were consulted and disclosed prior to appraisal.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Congo, Democratic Republic of
National Agriculture Development Program

Project Development Objectives(s)

To improve agriculture productivity and market access of smallholder farmers in selected project areas

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Improve market access of targeted smallholder farmers							
Sales of agriculture and food products by targeted smallholder farmers (Percentage)		0.00	5.00	10.00	20.00		30.00
Improve agriculture productivity of targeted smallholder farmers							
Farmers adopting improved agricultural technology (CRI, Number)		0.00	2,000.00	100,000.00	700,000.00	1,300,000.00	1,700,000.00
Farmers adopting improved agricultural technology - Female (CRI, Number)		0.00					850,000.00
Farmers adopting improved agricultural technology - male (CRI, Number)		0.00					850,000.00
Yield of maize from incorporating climate-smart agricultural		0.00	10.00	30.00	60.00		100.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
practices/technologies (Percentage)							
Yield of cassava from incorporating climate-smart agricultural practices/technologies (Percentage)	0.00	10.00	20.00	30.00			50.00
Reduction in the animal mortality rate at farm level for targeted smallholder farmers (Percentage)	0.00	10.00	20.00	30.00			50.00
Strengthened agriculture public goods and services							
Contingency plans for agriculture sector risks (including COVID19) (Number)	0.00	2.00	4.00	6.00	8.00	10.00	
Selected Provinces submitting annual road maintenance plans to the National Roads Development Fund (FONER) (Yes/No)	No						Yes

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Agriculture productivity							
Farmers reached with agricultural assets or services		0.00	35,000.00	500,000.00	1,000,000.00	1,500,000.00	1,700,000.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
(CRI, Number)							
Farmers reached with agricultural assets or services - Female (CRI, Number)	0.00	17,500.00	250,000.00	500,000.00	750,000.00	850,000.00	
Agriculture input and service providers offering climate and/or nutrition smart agriculture technologies (Number)	4.00	5.00	10.00	20.00		25.00	
Climate and Nutrition Smart Agriculture technology packages offered in the project area (Number)	2.00	3.00	4.00	5.00		7.00	
Smallholder farmers registered in the National Farmer Registry (Number)	0.00	35,000.00	500,000.00	1,000,000.00	1,500,000.00	2,000,000.00	
Smallholder farmers with a formalized land document (Number)	400.00	1,000.00	2,000.00	5,000.00		10,000.00	
Area under climate smart agriculture practices in targeted provinces (Hectare(Ha))	0.00	11,000.00	105,000.00	295,000.00	485,000.00	580,000.00	
Smallholder market access							
Beneficiaries reached with financial services (CRI, Number)	0.00	10,000.00	300,000.00	700,000.00		1,000,000.00	
Number of previously unbanked adults reached with transaction accounts (CRI, Number)	0.00					0.00	



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Number of SMEs with a loan or line of credit (CRI, Number)	0.00	4.00	20.00	30.00			50.00
Number of micro-insurance policies (CRI, Number)	0.00						0.00
Number of mobile money accounts (CRI, Number)	0.00						0.00
Any other custom indicators (CRI, Number)	0.00	2.00	2.00	2.00	2.00	2.00	2.00
Roads rehabilitated (CRI, Kilometers)	0.00	200.00	1,000.00	2,000.00			4,000.00
Roads rehabilitated - rural (CRI, Kilometers)	0.00						4,000.00
Roads rehabilitated - non-rural (CRI, Kilometers)	0.00						0.00
Farmer organizations and AgriMSMEs receiving business administration TA (Number)	0.00	15.00	30.00	50.00			100.00
Share of AgriMSMEs/farmer organizations led by women (Number)	0.00						50.00
Financial service providers (e.g. VSLA) reached with technical assistance (Number)	0.00	4.00	5.00	10.00			20.00
Volume of loans through credit lines provided by the program to targeted Provinces (Amount(USD))	0.00	2,000,000.00	4,000,000.00	6,000,000.00			6,500,000.00
Agriculture public goods and services							
Animal vaccination campaigns in targeted provinces (Number)	0.00						4.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Agriculture R&D programs on CSA and NSmartAg (Number)	0.00	2.00	4.00	6.00			10.00
National Farmer Registry is Operational (Yes/No)	No						Yes
Pilot on innovative agribusiness and/or agrifinance initiatives (Number)	0.00	1.00	2.00	3.00			5.00
GRM processing of complaints (Number)	0.00	2.00	5.00	10.00	45.00	50.00	
Sexual exploitation and abuse / sexual harassment cases referred to services (Percentage)	0.00	100.00	100.00	100.00	100.00	100.00	100.00
Gender unit established at the Ministry of Agriculture (Yes/No)	No						Yes
Farmers receiving support for the adoption of PTechs are satisfied (Percentage)	0.00	30.00	50.00	60.00	65.00	70.00	
Contingency Emergency Response							
Contingency plans for agriculture risks prepared and approved (Number)	0.00	1.00	2.00				3.00



Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Sales of agriculture and food products by targeted smallholder farmers	Increase in the marketable surplus of smallholders supported by the project through Component 1	Yearly reporting by technical operators supporting farmer incentive scheme.	Report from Technical Operator to be hired by the Program and data based on forms reported by targeted farmers benefiting from support.	Survey of production from farmers receiving subsidy (random selection of beneficiaries)	NPCU
Farmers adopting improved agricultural technology	This indicator measures the number of farmers (of agricultural products) who have adopted an improved agricultural technology promoted by operations supported by the World Bank. NB: "Agriculture" or "Agricultural" includes: crops, livestock, capture fisheries, aquaculture, agroforestry, timber and	Yearly	Report from Technical Operator	Information system confirming participating farmers concluding subsidy program	NPCU



	<p>non-timber forest products.</p> <p>Adoption refers to a change of practice or change in use of a technology that was introduced or promoted by the project.</p> <p>Technology includes a change in practices compared to currently used practices or technologies (seed preparation, planting time, feeding schedule, feeding ingredients, postharvest storage/processing, etc.). If the project introduces or promotes a technology package in which the benefit depends on the application of the entire package (e.g., a combination of inputs such as a new variety and advice on agronomic practices such as soil preparation, changes in seeding time, fertilizer schedule, plant protection, etc.), this counts as one technology.</p> <p>Farmers are people engaged in farming of agricultural products or members of an agriculture</p>				
--	---	--	--	--	--



	related business (disaggregated by men and women) targeted by the project.				
Farmers adopting improved agricultural technology - Female		Yearly	Report from the Technical Operator	Information system confirming participating farmers concluding subsidy program	NPCU
Farmers adopting improved agricultural technology - male		Yearly	Report from Technical Operator	Information system confirming participating farmers concluding subsidy program	NPCU
Yield of maize from incorporating climate-smart agricultural practices/technologies	Increase in the yield of maize from incorporating climate-smart agricultural practices/technologies	Yearly	Report of Technical Operator	Survey of production from farmers receiving subsidy (random selection of beneficiaries)	NPCU
Yield of cassava from incorporating climate-smart agricultural practices/technologies	Increase in yield of cassava from incorporating climate-smart agricultural practices/technologies	Yearly	Report of Technical Operator	Survey of production from farmers receiving subsidy (random selection of beneficiaries)	NPCU
Reduction in the animal mortality rate at farm level for targeted smallholder farmers	Percentage reduction in the annual mortality rate from improved animal health services and the adoption of climate-smart agricultural practices/technologies	Yearly	Report from Technical Operator	Survey of mortality rate from farmers receiving subsidy (random selection of beneficiaries)	NPCU



Contingency plans for agriculture sector risks (including COVID19)	Increase in the number of contingency plans approved for the response to agriculture sector emergencies (including COVID19) undertaken through rigorous stakeholder consultation processes.	Yearly	Annual program reports	Program reporting on activities	NPCU
Selected Provinces submitting annual road maintenance plans to the National Roads Development Fund (FONER)	Provincial rural road maintenance plan is submitted to FONER by the required deadline and following the appropriate format provided by FONER	Annual	OVDA report	Survey of selected Provinces supported by PNDA on the submission of the road maintenance plan to FONER	OVDA

Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Farmers reached with agricultural assets or services	This indicator measures the number of farmers who were provided with agricultural assets or services as a result of World Bank project support. "Agriculture" or "Agricultural" includes: crops, livestock, capture fisheries, aquaculture, agroforestry, timber, and	Biannual	Report from Technical Operator	Data collected by the Technical Operator for the farmers that have received at least the first part of their subsidy.	NPCU



	non-timber forest products. Assets include property, biological assets, and farm and processing equipment. Biological assets may include animal agriculture breeds (e.g., livestock, fisheries) and genetic material of livestock, crops, trees, and shrubs (including fiber and fuel crops). Services include research, extension, training, education, ICTs, inputs (e.g., fertilizers, pesticides, labor), production-related services (e.g., soil testing, animal health/veterinary services), phyto-sanitary and food safety services, agricultural marketing support services (e.g., price monitoring, export promotion), access to farm and post-harvest machinery and storage facilities, employment, irrigation and drainage, and finance. Farmers are people engaged in agricultural activities or members of an agriculture-related business (disaggregated by men and women) targeted by the				
--	--	--	--	--	--



	project.				
Farmers reached with agricultural assets or services - Female		Biannual	Report from Technical Operator	Data collected by the Technical Operator for the farmers that have received at least the first part of their subsidy.	NPCU
Agriculture input and service providers offering climate and/or nutrition smart agriculture technologies	Increase in the number of private sector input suppliers and service providers offering CSA and NSmartAg technologies in the project area as part of the packages offered by the Program.	Biannual	Report from Technical Operators	Data collected by the Technical Operator for the private input and service providers that registered in the subsidy program.	NPCU
Climate and Nutrition Smart Agriculture technology packages offered in the project area	Increase in the number of CSA and NSmartAg technology packages offered in each of the Provinces targeted by the program	Yearly	Subsidy Manual (as part of the program's operations manual)	Approved packages in the Subsidy Manual	NPCU
Smallholder farmers registered in the National Farmer Registry	Number of farmers who register in the National Farmer Registry	Biannual	National Farmer Registry	Information system of National Farmer Registry	NPCU
Smallholder farmers with a formalized land document	Number of smallholder farmers with a formalized land document (activities in the Province of N.Kivu)	Annual	Land Registry and National Farmer Registry	Number of rural land documents (title or rural contract) registered in the land information system or	NPCU



				registered in the National Farmer Registry holding an official document	
Area under climate smart agriculture practices in targeted provinces	Crop field under improved practices (rotation/fallow, agroforestry, soil and water conservation, etc.)	Annual	Technical operator	Farmer interview, observation, geospatial measurement of land area	NPCU
Beneficiaries reached with financial services	The indicator measures the number of persons benefited from financial services in operations supported by the Bank, and the number of businesses that benefited from financial services.	Biannual	Fund reports	From accounts from the BCC and technical operator	BCC and NPCU
Number of previously unbanked adults reached with transaction accounts		Annual	Report from the Technical Operator	Information based on farmers registered in the National Farmer Registry and with access to an account.	NPCU
Number of SMEs with a loan or line of credit		Biannual	BCC reporting	From accounts from the BCC and from NPCU	BCC and NPCU
Number of micro-insurance policies					
Number of mobile money accounts					
Any other custom indicators		Annual	BCC	Number of FI executing loans from the credit	BCC and NPCU



				line.	
Roads rehabilitated		Annual	OVDA's (rural roads agency) reports	Reporting submitted to the NPCU every year	NPCU
Roads rehabilitated - rural		Annual	OVDA's reports	Report submitted by OVDA to NPCU	NPCU
Roads rehabilitated - non-rural					
Farmer organizations and AgriMSMEs receiving business administration TA	Increase in the number of farmer organizations (associations, cooperatives) and AgriMSMEs that receive technical assistance in business administration.	Biannual	Report from Technical Operator	Data collected on the organizations that have received technical assistance (grants) in the project area.	NPCU
Share of AgriMSMEs/farmer organizations led by women	AgriMSMEs with a women leader (administration) or in the board of the farmer coopeative.	Annual	Reportes presented by AgriMSMEs (business plans)	Reporting by operateurs techniques.	NPCU
Financial service providers (e.g. VSLA) reached with technical assistance	Quantification of the number of financial service providers supported by TA from Component 1, such as MFIs and Village Savings and Loans Associations	Annual	Reports from Technical operator providing support	Report of technical assistance provided	NPCU
Volume of loans through credit lines provided by the program to targeted Provinces	Volume of loans awarded through the credit line implemented by the	Annual	Report on credit line usage by BCC	Annual reports on usage of credit line	BCC and NPCU



	program				
Animal vaccination campaigns in targeted provinces	Vaccination campaigns undertaken in the targeted provinces by the program	Annual	Report from the Technical Operator	From the reports from the Animal Health Directorate of the Ministry of Agriculture	NPCU
Agriculture R&D programs on CSA and NSmartAg	Increase in the number of R&D program conducted by INERA and other research centers applicable to the targeted provinces.	Annual	Report from the Technical Operator	From the INERA reports and field visits from the Technical Operator	NPCU
National Farmer Registry is Operational	The National Farmer Registry is operational, accepting registration of farmers.	Annual	Report from NPCU	Program reporting on indicators presented by the NPCU	NPCU
Pilot on innovative agribusiness and/or agrifinance initiatives	Increase in the number of pilots undertaken to innovate in the area of agribusiness or agrifinance, targeting smallholder farmers.	Annual	Program reports from NPCU	Collect data from project files on the pilots undertaken	NPCU
GRM processing of complaints	Number of complaints processed (including response) by the program	Biannual	Reporting by NPCU on GRM system data	Data collected by the GRM system	NPCU
Sexual exploitation and abuse / sexual harassment cases referred to services	% of SEA/SH cases referred to services	Annual	Reporting from the Technical Operator	Data collected by the Technical Operator and the NPCU	NPCU

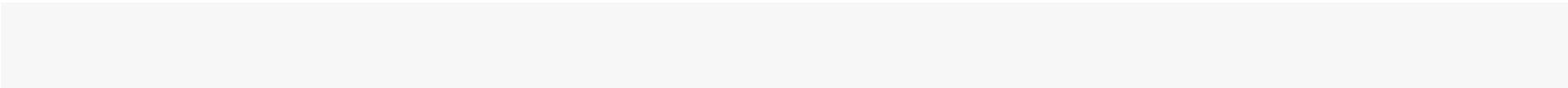


Gender unit established at the Ministry of Agriculture	Creation of a gender unit at the Ministry of Agriculture to integrate gender considerations in sector policies and investments, providing cross support across the different services and departments of the Ministry.	Annual reporting on project activities	Ministerial order	NPCU to obtain copy of the ministerial order	NPCU
Farmers receiving support for the adoption of PTechs are satisfied	Survey of a sample of project beneficiaries receiving support through Subcomponent 1.1 saying that they are satisfied with the services received by the project, in particular the Technical Operators (OTs)	Annual	Surveys undertaken each year for project beneficiaries receiving support under Subcomponent 1.1.	Sample of beneficiaries surveyed through the M&E system of the project	NPCU
Contingency plans for agriculture risks prepared and approved	Contingency plans prepared by the Government related to the management of agriculture risks, and approved by the Bank. Plans should contain all requirements needed as per the Agriculture Emergency Operations Manual (MOUA), which is part of the PIM.	Annual	Updates to the operations Manual presented by the NPCU	Presentation and confirmation of the approval of the Operations Manual by the NPCU	NPCU



The World Bank

National Agriculture Development Program (P169021)



**Annex 1: Implementation Arrangements and Support Plan**

**COUNTRY: Congo, Democratic Republic of
National Agriculture Development Program**

Implementation Arrangements

1. **Project implementation will be managed under the Ministry of Agriculture in close collaboration with the Ministries of Fisheries and Livestock, Rural Development and Scientific Research and Technology.** All partners are expected to play a role in Project implementation. Existing structures of the Ministry of Agriculture at central and decentralized levels, as well as those of the Ministries of Fisheries and Livestock, Rural Development and Scientific Research and Technology, do not currently have the required capacity to manage the Project. Therefore, Project implementation arrangements ensure the proposed activities and build public sector capacity to sustain efforts over the medium to long term.
2. **At the national level, the Project will be anchored at the NPCU within the Ministry of Agriculture.** The NPCU will be responsible for project coordination at central level liaising with units at provincial level. The NPCU will gradually build the capacity of the various technical departments of the Ministries of Agriculture, Rural Development and Livestock and Fisheries at the national and provincial levels to increasingly manage Project activities in future phases. For example, a newly proposed organigram of the Ministry of Agriculture is considering a *Cellule de Gestion des Projets et des Marchés Publics* (Project management and procurement unit) to be established, so the NPCU will work with the relevant services at the Ministry of Agriculture to strengthen such unit when/if it is established. The PIU that currently implements the Agriculture Rehabilitation and Recovery Support Project (PARRSA - P092724) and the Regional Great Lakes Integrated Agriculture Development Project (PICAGL-P143307) will serve as the NPCU. This PIU is also currently implementing the PPA. In relation to the implementation of component 1 activities, the NPCU will: (a) enter into a standard matching grant agreement⁶⁰ with each smallholder beneficiary farmer receiving vouchers; (b) ensure that matching grants, CCTs and ECTs are provided⁶¹ to smallholder beneficiary farmers in accordance to the amounts and eligibility criteria and procedures described in the PIM; and (c) ensure that each CCT and

⁶⁰ The matching grant agreement shall include, inter alia: (a) the amount to be provided in the form of a Matching Grant to the Smallholder Farmer under a Matching Grant Agreement, its terms and conditions; (b) an amount of counterpart funding (whether in cash or in-kind) provided by the Smallholder Farmer, as defined in the PIM; (c) the obligation of the Smallholder Beneficiary to procure the expenditures to be financed under the Matching Grant Agreement in accordance with the procedures set forth in the PIM; (d) the obligation of the Smallholder Farmer to carry out its activities in compliance with the Anti-Corruption Guidelines and the relevant environmental and social requirements as set forth in the ESCP, including, when applicable, prepare an environmental management plan in accordance with the ESMF, in form and substance satisfactory to the Association, and to implement said activities in accordance with the relevant environmental management plan; (e) the obligation of the Smallholder Farmer to report to the NPCU on the progress of the implementation of the activity co-financed with the Matching Grant and to enable the NPCU to visit the facilities where the co-financed activities are implemented and administered; (f) the obligation of the Smallholder Farmer to maintain records and accounts for expenditures incurred and financed with the Matching Grant, and make available such documentation to the NPCU; and (g) the right of NPCU to suspend, cancel or request a refund of the Matching Grant or a portion thereof in case of the failure of the Smallholder Farmer to perform any of its obligations under the Matching Grant Agreement.

⁶¹ In order to deliver matching grants, ECTs and CCTs, the NPCU shall enter into a payment service agreement with a selected payment service provider (financial institution or mobile payment provider) as described in the PIM. Said Payment Service Agreement shall include, inter alia, the obligation of the Payment Service Provider to provide the payment services with due diligence and efficiency and in accordance with sound technical, financial, and managerial standards and practices, including in accordance with the provisions of the Anti-Corruption Guidelines applicable to other recipients of the financing proceeds other than the recipient.



ECT is paid for its intended smallholder beneficiary farmer. Furthermore, for the payment of ECTs, the NPCU will need to determine that an eligible emergency or crisis has occurred according to the PIM, and prepare, adopt and implement a contingency plan related to that crisis or emergency. For component 2 activities, the NPCU will: (a) make proceeds of the Project available to the BCC under a partnership agreement⁶² set forth in the Line of Credit Manual, which is part of the PIM; (b) assist the BCC in carrying out the assessment of each participating FI, including ensuring that an ESMS is in place; and (c) ensure that PFIs comply with the requirements in their ESMSSs. Within the context of the partnership agreement with the NPCU, the BCC, upon the selection of one or more PFI pursuant to the eligibility criteria and procedures established in the Line of Credit Manual, will: (a) make part of the proceeds of the financing available to each PFI pursuant to a tripartite agreement⁶³ between the NPCU, the BCC and each PFI, each under terms and conditions set forth in the Line of Credit Manual; and (b) ensure that each PFI enters into an agreement⁶⁴ with each eligible AgriMSME.

3. **At the national level, the Ministry of Agriculture, as well as those of Livestock and Fisheries and of Rural Development, are strengthening their Planning Department, but technical departments are still poorly equipped and will need strengthening to fully support the proposed Project.** New staff and physical resources, especially to operate remotely, will need to be provided to ensure full participation and support from public sector Departments in the various ministries and agencies. All institutions at the provincial level have only been created recently following the decentralization process from 11 to 26 provinces.
4. **The Project will be governed by a steering committee, chaired by the Ministry of Agriculture, which will include key stakeholders from the public sector, civil society, and private sector (including farmers' organizations and agribusiness representatives).** At the provincial level, there will be five PPIUs, one for each

⁶² The Partnership Agreement will include, *inter alia*, the obligation of the BCC to: (a) carry out its operations with due diligence and efficiency and in accordance with sound technical, economic, financial, managerial, environmental and social standards and practices (including the ESCP as applicable to the BCC), including in accordance with the provisions of the Anti-Corruption Guidelines applicable to the Project; (b) provide financing in the form of Sub-Loans to Eligible AgriMSMEs in accordance with criteria and procedures set forth in the Line of Credit Manual; (c) ensure that Sub-Loans to Eligible AgriMSMEs under Component 2.2 of the Project do not include any activities included in the list of Excluded Activities, as defined in the Line of Credit Manual; (d) maintain policies and procedures adequate to enable it to monitor and evaluate its operations; (e) establish and thereafter maintain a financial management system and prepare financial statements, both in a manner adequate to reflect its operations, resources and expenditures; (f) have such financial statements audited by independent auditors, and promptly furnish the statements as so audited to the NPCU; (g) enable the NPCU to inspect its operations and any relevant records and documents; and (h) prepare and furnish to the NPCU all such information as the NPCU shall reasonably request relating to the foregoing.

⁶³ The tripartite agreement will include the obligation of each PFI to: (a) carry out its operations with due diligence and efficiency and in accordance with sound technical, economic, financial, managerial, environmental and social standards and practices (including the obligation to implement, throughout Project implementation, an ESMS), including in accordance with the provisions of the Anti-Corruption Guidelines applicable to recipients of loan proceeds other than the NPCU; (b) provide financing in the form of Sub-Loans to AgriMSMEs under Component 2.2 of the Project in accordance with criteria and procedures set forth in the Line of Credit Manual; (c) ensure that such Sub-Loans to AgriMSMEs under Component 2.2 of the Project are not used for any activities included in the list of Excluded Activities; (d) maintain policies and procedures adequate to enable it to monitor and evaluate its operations; (e) establish and thereafter maintain a financial management system and prepare financial statements in accordance with consistently applied accounting standards, both in a manner adequate to reflect its operations, resources and expenditures; (f) have such financial statements audited by independent auditors and promptly furnish the statements as so audited to the NPCU; (g) enable the NPCU to inspect its operations and any relevant records and documents; and (h) prepare and furnish to the NPCU all such information as the Recipient and the Association shall reasonably request relating to the foregoing.

⁶⁴ This agreement (Sub-Loan Agreement) will state the obligations of the eligible AgriMSME as follows: (a) ensure that the sub-loan does not finance any activity included in the list of Excluded Activities in the Line of Credit Manual; (b) carry out its activities in compliance with applicable environmental and social requirements as set forth in the Line of Credit Manual, and the provisions of the Anti-Corruption Guidelines applicable to recipients of loan proceeds other than the Recipient; and (c) maintain records and accounts for expenditures incurred and financed with the Sub-Loans, and make available such documentation to the NPCU, if requested.



province (Figure A1.1). The public services delivered by the Project will be anchored in the technical departments of the provincial Ministry of Agriculture and will be represented at the PCMC. For example, the agriculture advisory and extension services will be coordinated by the SNV, agriculture research by the National Agriculture Research Institute (INERA) of the Ministry of Scientific Research, and the monitoring of rural transport infrastructure rehabilitation by the OVDA of the Ministry of Rural Development.

5. The PPIUs will be fully equipped and staffed from the beginning of the project implementation with competent persons who will benefit from attractive packages and incentives. Those persons will be able to work autonomously, but in close coordination with the NPCU. The division of labor is outlined in the table below. Clearly defined between the two levels of implementation to address the most critical issues, like the preparation of the Environmental and Social screening and related standards documents, the financial management and procurement, monitoring and evaluation and the work on infrastructures.



Table 1.1: Division of Labor between PPIUs and the NPCU

Operations/Positions	Human Resources		Financial Resources & Equipment		Decisions Making	
	Kinshasa	Provinces	Kinshasa	Provinces	Kinshasa	
Elaboration of Working Plans & Annual Budgets (PTBA)	Central Line Ministries, NPCU	Civil Society, PPIU Provincial Line Ministries			Participatory approach - The final decision belongs to the Steering Committee.	
Project Coordinator	1	1	Packages should be the same than the one already in force.	Salary scales and benefits applicable for project consultants in DRC will be implemented. Endow the staff with autonomous equipment for their mobility and other tools of work.	.	
Expert in charge of the technical Operators (TO) & Business Development Services (BDS)	1	1	Packages should be the same than the one already in force	Salary scales and benefits applicable for project consultants in DRC will be implemented. Staff will be equipped with autonomous equipment for their mobility and other tools of work.		
Expert in Charge of Financial Institutions	1	1	Packages should be the same than the one already in force	Salary scales and benefits applicable for Project consultants in DRC will be implemented. Staff will be equipped with autonomous equipment for their mobility and other tools of work.		



	Human Resources		Financial Resources & Equipment		Decisions Making	
Operations/Positions	Kinshasa	Provinces	Kinshasa	Provinces	Kinshasa	
Expert in Charge of financial management (Accounting & Admin Issues)	1	1	Packages should be the same than the one already in force	Salary scales and benefits applicable for project consultants in DRC will be implemented. Staff will be equipped with autonomous equipment for their mobility and other tools of work.	Initiation and decision made in coordination with the province.	Initiation and decision made in coordination with Kinshasa.
Expert in charge Infrastructure works (Civil Engineering)	1	1	Packages should be the same than the one already in force	Salary scales and benefits applicable for project consultants in DRC will be implemented. Staff will be equipped with autonomous equipment for their mobility and other tools of work.	Initiation and decision made in coordination with the province.	Initiation and decision made in coordination with Kinshasa.
Procurement Specialist	1	1	Packages should be the same than the one already in force.	Salary scales and benefits applicable for project consultants in DRC will be implemented. Staff will be equipped with autonomous equipment for their mobility and other tools of work.	Remote and regular follow-up, without hindrance to the decisions made by the provinces.	<ul style="list-style-type: none">- Autonomy in the day-to-day work, in coordination with Kinshasa.- Regular Reporting and participation to regular coordination meetings with Kinshasa, either physically or virtually.- Autonomy on Procurement, according to the threshold (Expression of Interest - EoI, Request for Proposals - RFP).- Evaluation of Proposals in close coordination with Kinshasa.



	Human Resources		Financial Resources & Equipment		Decisions Making	
Operations/Positions	Kinshasa	Provinces	Kinshasa	Provinces	Kinshasa	
Environmental Safeguards Specialist	1	1	Packages should be the same than the one already in force	Salary scales and benefits applicable for project consultants in DRC will be implemented. Staff will be equipped with autonomous equipment for their mobility and other tools of work.	Initiation of decisions related to E&S due diligences, participation in the validation of standard procurement documents. - Establish a standard screening framework, based on type of activities, which will be used by the environmental specialist at provincial level. - Elaborate the ToRs of E&S Instruments. - Participate in the Planning, Coordination, Analysis and validation of the E&S Instruments. - Ensure, in collaboration with Procurement Management specialist of the NPCU, that the E&S Covenants are taken into account in the RFPs and contracts signed by companies and services providers whenever necessary. - Ensure that the ESCPs are properly implemented, and if necessary, take the initiatives to update such plan. - Analyze the environmental data which emanate from the provincial environmental specialists and propose adequate measures aimed at improving the environmental risk management of the NADP. - Elaborate and finalize, in a timely manner, the quarterly	- Screening of E&S safeguards; Monitoring & Evaluation of the implementation of safeguards instruments. - Autonomously elaborate the standard documents; The validation of those documents should be carried out with Kinshasa. - Undertake the environmental screening according to the framework adopted by the NPCU. - Carry out, on a regular basis, the environmental follow-up of Project activities. - Transmit to the NPCU, on a regular basis, the environmental follow up report related to Project activities. - Swiftly alert the NPCU, whenever an incident or accident occurs. - Follow up the FIs activities.

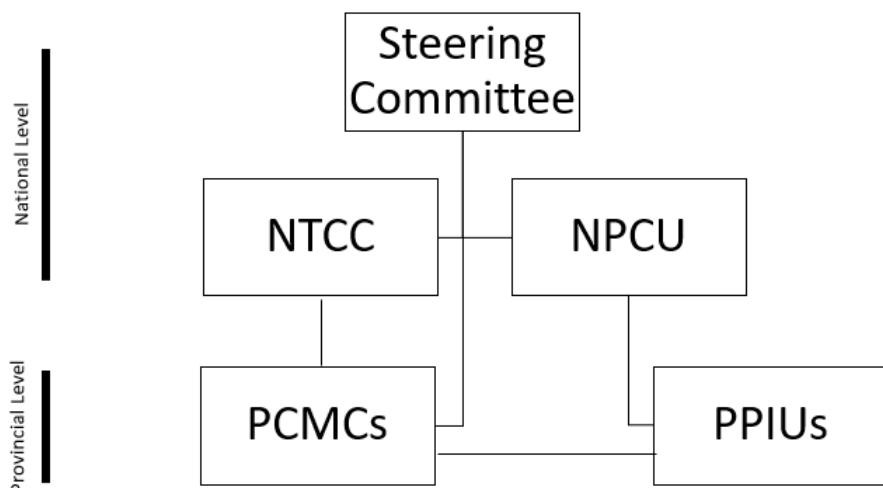


	Human Resources		Financial Resources & Equipment		Decisions Making	
Operations/Positions	Kinshasa	Provinces	Kinshasa	Provinces	Kinshasa	
					reports of the Environmental follow-up of the Project. - Elaborate the detailed and specific report in case an incident or accident occurs in the Project area. - Review and validation of the ESMS of the FIs. - Initiate the capacity building of various stakeholders in the field of E&S safeguards.	
Social Safeguards Specialist & GBV Specialist					2	
Threshold for Decision Making				Those thresholds will be decided upon, according to the evaluations which will be carried out gradually.		



6. **The Project's institutional capacity building will focus on strengthening local capacity at provincial level, to avoid bottlenecks observed in Kinshasa in other operations.** The NPCU will have general coordination functions, while implementation and technical capacity will be based at the PPIU level. However, the implementation approach will defer from previous and ongoing operations in the sector, by increasingly blending project implementation within existing public sector structures, in particular for the delivery of public goods and services. Building public sector capacity will be done in partnership with key international institutions and development partners such as CGIAR, FAO, WFP, among others. For implementation of activities with farmers and AgriMSMEs, the approach will be to rely mainly on private sector institutions (Financial Institutions, Agriculture Services/Input providers) and civil society (NGOs, academic institutions, federations and associations of farmers and agribusinesses). This new modality of delivering direct support to farmers and AgriMSMEs (rather than the indirect support modality of other projects) is expected to relieve pressure from project implementation while building capacity of public institutions towards a more normative and regulatory role.

Figure 1.1. Project Governance Structure



NPCU: National Project Coordination Unit

NTCC: National Technical Coordination Committee

PCMC: Provincial Coordination and Monitoring Committee

PPIU: Project Provincial Implementation Unit

Implementation Support Plan

7. **The Project's implementation support strategy has been informed by: (a) lessons accruing from past World Bank projects in DRC and FCV situations; (b) the risk profile of the proposed Project; and (c) considerations for the rapid speed of execution of the Project in a volatile environment.** The careful design of the World Bank's implementation support strategy addresses multiple implementation support challenges: (a) a volatile and potentially insecure operating environment in two out of the five selected provinces; (b) difficult physical access to some Project areas; and (c) potential fragmentation due to multiple sites. The North Kivu and Kasai Central provinces are served by airports (serving flights from Kinshasa and from abroad). However, these regions often have no roads connecting them to the rest of the country, and there are no roads connecting Kananga (Kasai Central) and Goma (North Kivu) due to a broken bridge. Furthermore, direct flights among



provincial cities aren't always available. This makes traditional World Bank supervision impossible given the resources allocated by the World Bank to project supervision in DRC. However, a new World Bank office in Goma and in Kananga provide additional security and project implementation support in those two key regions, extending the World Bank's reach into areas where staff isn't allowed to visit today. These operating conditions are not uncommon in FCV environments, and the World Bank has developed new practices for efficient implementation support in such settings. The implementation and supervision strategy for this Project build on the most recent advances in the field of "smart supervision" and will use the following instruments: (a) new technologies such as GEMS⁶⁵; (b) partnerships with development partners (that is, CGIAR Centers and/or UN Agencies for component 3); (c) enhanced M&E frameworks (technical audits); and (d) remote management (IBM—iterative beneficiary monitoring system).

8. **These operating conditions are not uncommon in FCV environments, and the World Bank has developed new practices for efficient implementation support in such settings.** The strategy builds on the most recent advances in the field of "smart supervision": use of new technologies; partnerships with development partners; enhanced M&E frameworks; and remote management.
9. **The Implementation Support Plan combines four interlocking supervision and monitoring tools.** Each instrument addresses a specific operational challenge on its own, but the combination of all four tools is what sets the plan apart from a "business as usual" approach to supervision. The approach will combine smart supervision (point a below) with additional tools that will allow for enhanced monitoring of the project but are not strictly considered as supervision (point b below). This approach is described in figure 2 and the four proposed instruments are as follows:
 - a. **Conduct field smart supervision missions:** Leveraging the World Bank's expertise on fragile and conflict settings and the expert support of the FCV Global Theme unit and Corporate Security, periodic field missions will be organized to areas where World Bank security allows. In addition, the field presence of MONUSCO in some regions is essential to the World Bank's risk-mitigation and security arrangements. Therefore, field-smart supervision missions will be composed of technical, fiduciary and safeguard team members, as well as FCV, Country Management Unit (CMU), and Corporate Security personnel. The Task Team Leader(s) (TTL) will be in charge of leading such missions. This field smart supervision missions will make decisions regarding adjustments to implementation support arrangements, as well as decisions whether to pivot/restructure Project activities and approaches (or even decide to halt/pause Project implementation). In case smart supervision missions are not able to be deployed to the selected area due to security concerns, a reverse mission will be planned in Kinshasa, Washington DC or an alternative location. At least two field smart supervision missions are planned per year in each region.
 - b. **Invest in enhanced M&E frameworks:** The NPCU will hire independent verification consultants or agency (NGO or firm), that will provide support to the NPCU in undertaking technical audits to evaluating project implementation progress and double-checking results as needed (this arrangement has occurred in other projects and there are experienced firms within DRC that can provide such services at affordable prices for the Project). The ToRs of such independent verification agencies are close to those of a third-party monitor in data

⁶⁵ <https://www.worldbank.org/en/topic/land/brief/geospatial-technology-and-information-for-development>

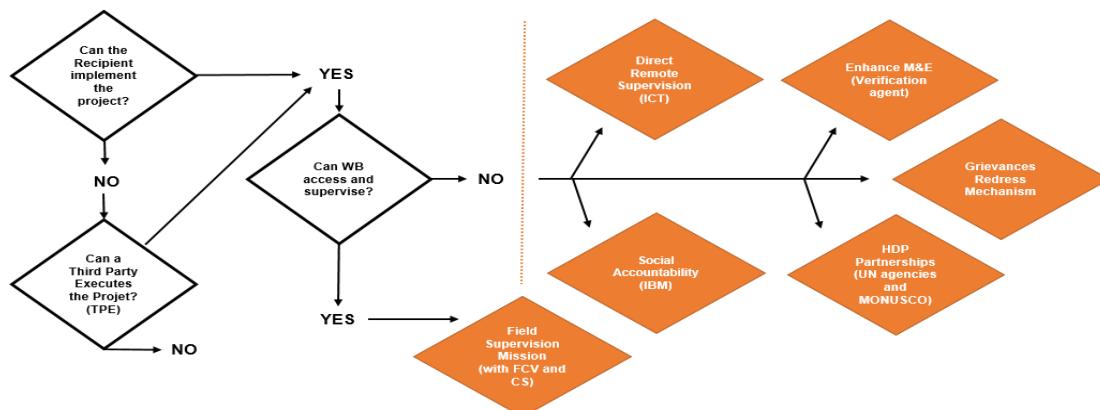


collection and analysis and they will include a requirement for simultaneous submission of reports to both the NPCU and the World Bank to allow for enhanced monitoring by the Client and remote supervision by the task team of project activities in areas where physical access is constrained.

- c. **Apply ICT-based supervision and M&E architecture.** The proposed Project will establish a customized architecture for M&E as well as supervision, based on the geo-enabling methodology. In this regard, select M&E officers of the NPCU will be provided with capacity-building training and access to dedicated software accounts for statistical and spatial M&E data analysis. Moreover, a project-specific architecture will be created that will include customized digital forms and questionnaires as well as protocols for data collection and back-office analysis. The project task team will have direct access to the analytical systems, which will allow the team to supervise infield activities remotely. Specific data collection questionnaires will be developed for (a) baseline data collection and task team supervision; (b) regular NPCU progress monitoring; (c) regular collection of indicators related to the Project's Results Framework; (d) independent verification agency; (e) ad hoc citizen feedback; (f) safeguards monitoring; and (g) randomized impact evaluation with baseline and follow-up surveys. The approach has been piloted during preparation and executing agencies and the task team have been trained accordingly.
- d. **Assess periodically Project results/impact through Iterative Beneficiary Monitoring (IBM):** The project will use IBM to collect data from direct project beneficiaries with easy access to mobile phones. IBM is a small-scale high frequency phone-based data collection mechanism, developed by the World Bank team that collects data from project beneficiaries to create a beneficiary feedback loop and serve as an alert system. The approach is expected to improve project efficiency and increase beneficiary engagement and satisfaction. It will also help examine project activities, identify challenges within the project, inform decision-making process and improve project outcomes based on the feedback from beneficiaries. IBM will allow for rapid, "progress assessment and correction." It was successfully implemented in Mali, for projects facing similar access challenges.

Figure 1.2. Implementation Support Strategy (smart supervision options)

Smart Supervision: Combining Options





10. The strategy is designed to offer timely, flexible and efficient implementation support to the client to help mitigate the risks-especially those rated as high or substantial in the Systematic Operations Risk-rating Tool (SORT) (namely the capacity of the implementing agency and fiduciary risk). The strategy also encompasses the standard areas of support including safeguards and fiduciary aspects. The strategy recognizes that specialized personnel (such as those who may work on the subcomponent on rural roads) with requisite expertise as well as fiduciary protocols acceptable to the World Bank are retained to support the Government in implementation. The strategy will be periodically reviewed and revised as deemed appropriate.

Implementation Support Plan and Resource Requirements

11. The implementation support plan is therefore based on the use of these four modular tools mentioned **above**. There will also be cross-cutting implementation support measures and themes that will require special attention and that will use the above-mentioned tools for smart supervision.
12. **Mid Term Review:** There will be a Midterm Review approximately halfway through implementation to take stock of implementation progress, and to assess performance against the agreed set of indicators and milestones. The midterm review will also provide an opportunity to reassess major design features-if necessary- to enable attainment of project objectives. At the end of the first phase of the SOP, both the client and the World Bank will conduct reviews to provide a complete and systematic account of the performance of the Project and to draw lessons for future investments.
13. Although each “smart” implementation support tool is not expensive on its own, the fact that the situation on the ground requires to use a combination of them, requires a larger than normal World Bank supervision budget (see table below). Furthermore, two additional factors make supervision relatively more expensive than other projects in DRC: (i) the multisectoral nature of the project requiring multiple staff and specialties (see table above); and (ii) the extremely costly field visits to the project areas. However, in the case in DRC the World Bank takes an approach of systematically supporting the portfolio under implementation with these instruments (IBM, information and communication technologies - ICTs, and so on), the supervision budget for this particular Project may be reduced.

Table 1.2 Smart Implementation Support Budget (BB) per year

Costs	Field Smart Supervision Missions	NPCU enhanced support	ICT	IBM	Total
Staff	\$ 180,000	\$ 10,000	\$ 10,000	\$ 20,000	\$ 220,000
Travel	\$ 240,000	—	\$ 10,000	\$ 20,000	\$ 270,000
Total	\$ 420,000	\$ 10,000	\$ 20,000	\$ 40,000	\$ 490,000

Table 1.3. Implementation support team composition

Time	Focus	Skills Needed
First 12 months	<ul style="list-style-type: none"> • Effectiveness/start of project activities • Procurement of specialized entities to support the Government in implementation 	<ul style="list-style-type: none"> • Agriculture Economist (TTL) • Agriculture Specialist • Procurement Specialist • Financial Management Specialist



Time	Focus	Skills Needed
	<ul style="list-style-type: none">• Compliance with relevant safeguards policies• Implementation of remote management system	<ul style="list-style-type: none">• Nutrition Specialist• Private Sector Development Specialist (CoTTL)• Financial Sector Specialist• Transport Specialist• SGBV Specialist• Safeguards Specialists• FCV Specialist• Corporate Security Specialist
12–48 months	<ul style="list-style-type: none">• Results monitoring against set targets• Annual work plans and budgets• Fiduciary and safeguards compliance• MTR• Project completion and ICR preparation	<ul style="list-style-type: none">• Agriculture Economist (TTL)• Agriculture Specialist• Procurement Specialist• Financial Management Specialist• Financial Sector Specialist• Transport Specialist• Nutrition Specialist• SGBV Specialist• Social Protection Specialist• Safeguards Specialist FCV Specialist• Corporate Security Specialist



Annex 2. Detailed Component Description

1. The SOP's phasing begins with a focus on smallholder farmers' productivity and rural poverty reduction, and future phases will progressively build links with regional value chains, larger agribusiness investments, rural infrastructure and efforts to reduce malnutrition and the degradation of natural resources. The SOP will evolve towards a market-based approach to value chain development and rural connectivity, investing deeper into the resilience strengthening of the agriculture sector and rural areas through improved natural resources management at the landscape level. This will allow agricultural incomes to increase and diversify in an integrated and sustainable way while maintaining the natural resource base which agricultural production and rural households' income depend on⁶⁶.
2. The proposed Project will work within four components: (a) improve agriculture (including crops, livestock, and fisheries) production and protect farmers' investments (component 1); (b) improve market access for smallholder farmers (component 2); (c) build public sector capacity, in particular of the Ministries of Agriculture, of Livestock, of Fisheries and of Rural development, in delivering basic agriculture public goods and services in the project area, and strengthen Project management and M&E at National and Provincial level in participating provinces (component 3); and (d) strengthen emergency response (component 4). All Project components are interlinked, and they are designed to begin implementing simultaneously. Components 1 and 2 address bottlenecks and catalyze the agriculture productivity potential of the intervention areas. Component 3 contributes towards building and strengthening the agriculture public goods and services essential for improving agriculture incomes. Component 4 will strengthen the capacity to respond rapidly and effectively to eligible emergencies in the country.

Component 1—Agriculture Productivity (Total: US\$290 million; IDA: US\$270 million and GRiF: US\$20 million)

3. This component will support the increase of smallholder farmers' agriculture productivity (of crops and animal products) through the adoption of CSA and NSmartAg technologies and practices and access to finance. This productivity boost is expected to sustainably and directly contribute to increasing agriculture incomes, and in turn reduce rural poverty and improve the food security of rural households.
4. *Sub-component 1.1. Direct smallholder farmer support (Estimated US\$240 million).* The objective of the sub-component is to promote the adoption of validated CSA and NSmartAg Technology Packages (PTechs) by smallholder farmers, in particular women. The PTechs include practices, technologies and inputs (seeds, seedlings, animal breeds, advisory and extension services). The intake process will use a farmer registry. The eligibility criteria will include (among others): (i) farm size; (ii) socio-environmental considerations; (iii) required training; (iv) location of the plot; (v) land tenure situation. To assure reach and scale, the delivery instruments of the direct farmer support include one-shot smart subsidies such as matching grants and/or conditional CCTs, which have proven to work in World Bank-financed projects in DRC, SSA and South Asia. The CCT and matching grants will be delivered through cash payments and vouchers respectively. The

⁶⁶ Following the approach of the DRC Improved Forested Landscape Management Project (P128887) green and resilient rural development will be promoted in highly degraded areas and forest frontiers (e.g., as Mai-Ndombe Province for the Kinshasa supply basin) through specific interventions including community-driven land-use planning to strengthen the communities' rights and capacity for sustainable management of natural resources, development of agroforestry production systems and other plantations for energy purposes, promotion of perennial crops as alternatives to slash-and-burn subsistence cropping, and promotion of natural regeneration of degraded lands and forest conservation including through payment for ecosystem services.



approaches vary by region and by agriculture technology/practice. These are described in the PIM, and will begin by an initial rollout within a pre-identified reduced geographic area in each selected province during the first year, to be rapidly evaluated, adjusted, and brought to scale in year 2 of Project implementation. CSA approaches, such as agroforestry, on-farm irrigation systems, conservation agriculture, soil conservation measures, and manure application, will be promoted within a technical assistance support to farmers to build resilience against climate-related hazards such as drought and flooding. NSmartAg interventions will also be promoted among technical assistance support to increase in availability of nutrient rich foods while increasing profitability of the farm.

5. The first promoted CSA and NSmartAg practices (PTechs) are based on:
 - a. annual crops (focusing on maize, cassava) with improved varieties and/or specific crop associations like mucuna for better soil management, restoring soil fertility, improving soil moisture.
 - b. agroforestry packages including assisted natural regeneration, alley cropping.
 - c. livestock packages (poultry).
6. PTechs are designed according to the prevailing agroecological context and farmers' preferences. They will be fine-tuned by the Technical Operators according to local characteristics. During the course of implementation, the project, with its partners' support (CGIAR Group members) will broaden the range of supported PTechs introducing other locally valued crops (peanuts, Angola peas, rice, vegetables, soy). The first proposed agriculture and agroforestry packages will cost between US\$200 and US\$700 per ha and the livestock packages will cost between US\$500 and US\$700. Beneficiaries will bear between 45 and 65 percent of the total cost, which represent the business-as-usual cost. The Project contribution will cover the extra costs of implementation of the CSA/NSmartAg PTechs to facilitate the adoption of freely selected PTech by the beneficiaries.

**Box 1—Project Approach to Forests and Agroforestry (additional details are available in the project files upon request)**

Forest loss in DRC can be mostly attributed to small-scale farming and wood energy. Slash-and-burn agriculture in a context of high population growth and low efficiency levels in farming leads to shorter fallow periods and the expansion of agricultural lands into intact forests. These drivers reflect the continued dependence of rural and urban populations on forest resources to meet basic human needs. As demand rises and forests shrink improving production systems is critical to meeting such needs sustainably. The Project's approach to forests draws on the experience of the DRC Improved Forested Landscape Management Project (P128887) which implements approaches to improve community livelihoods while addressing deforestation and forest degradation.

Farmers receiving support under sub-component 1.1 will be required to register themselves in the National Farmer Registry (RNA) and geo-locate their lands, which will be screened based on agroecological criteria and other relevant considerations. Forested lands will be excluded from support. From phase 1, PTechs will enable farmers to intensify production on existing agricultural lands which in turn will reduce the need for expanding farming into forested lands. Among them, agroforestry packages will specifically allow farmers to generate and diversify income from cash crops and/or fuelwood production, and also promote fruit crops addressing micronutrient deficiencies.

From phase 2 of the SOP, the scope will be expanded, and new approaches will be introduced along forest frontiers in the targeted landscapes. Community-based participatory mapping and land use planning will be promoted for an optimal management of space and natural resources. Local communities will receive financial incentives, including payments for ecosystem services, to improve the sustainability of forest agriculture, develop agriculture in savanna, and protect critical forest areas. Technical assistance on land-use planning and related stakeholder consultations will support Project provinces to consolidate land-use plans across administrative levels. Macro-zoning will specifically provide a spatial inventory of natural resources in provinces, including forests with high carbon, biodiversity, and social values. Preparatory activities (for example, studies, identification of targeted areas, consultations, and so on) will be carried out under component 3 to ensure a smooth implementation in phase 2.

¹ A New Green Rural Development Deal with DRC Congo 2021-2030. Central Africa Forest Initiative (2020).

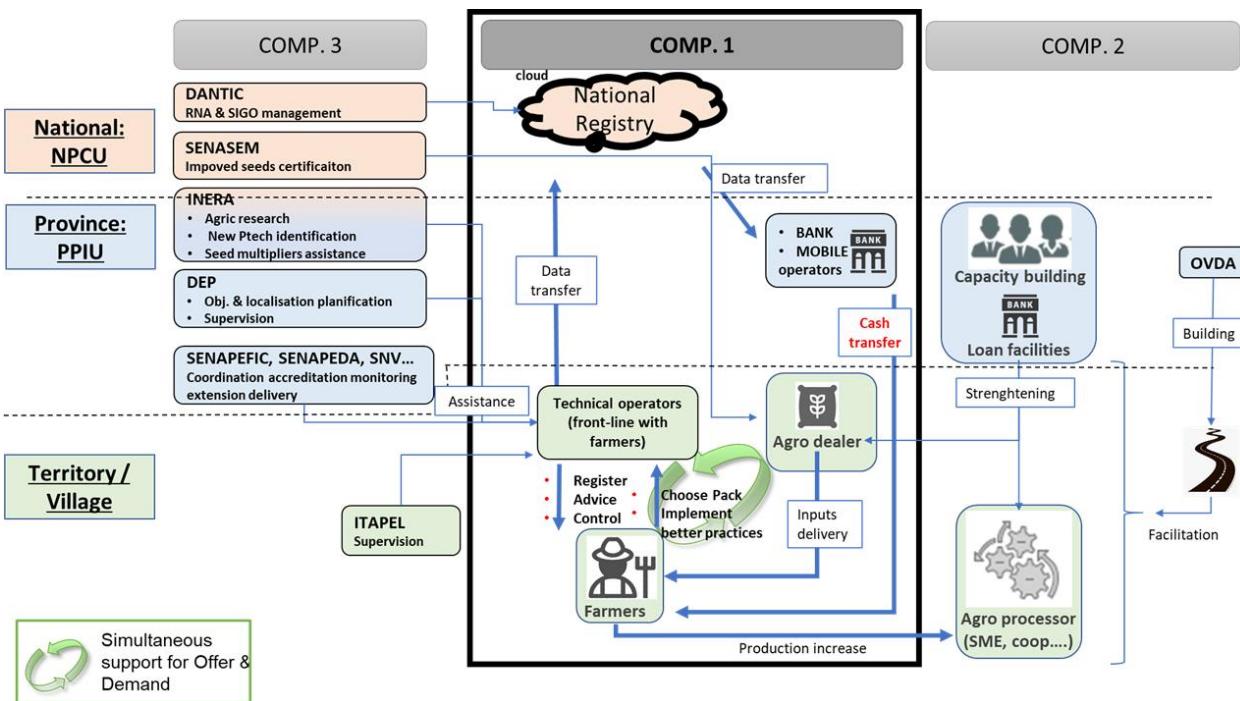
7. One of the major challenges faced by the Project is seed supply as the current chain is not yet mature. To mitigate any risks and to strengthen local capacities, a specific PTech will target improved seeds' producers. Following recommendations⁶⁷ from existing and recently closed projects in DRC, this PTech will be similar to the other PTechs to be offered to other smallholder farmers.
8. The smallholder farmers targeted by the Project on average have access to less than 0.5 ha. While the average farm size is between 1 and 2 ha per family according to the report, "Sécurité alimentaire, niveau de production agricole et Animale, Évaluation de la Campagne Agricole 2017-2018 et Bilan Alimentaire du Pays. Août 2018," targeting and capping the maximum support to 0.5 has/farmer allows to be progressive in direct farmer support and reach a larger number of beneficiaries.
9. For a few reasons and constraints (that is, investment cost, visible results after one year only, land tenure) annual crops are expected to represent the bulk of the PTechs to be adopted (around 75 percent) by smallholder farmers. Nevertheless, uptake of agroforestry and livestock PTechs are expected to be lower due to land tenure and technical constraints that disincentivize medium to long term on-farm investments. PTechs for the adoption of agroforestry and livestock activities are still expected to amount to several tens of millions of dollars.

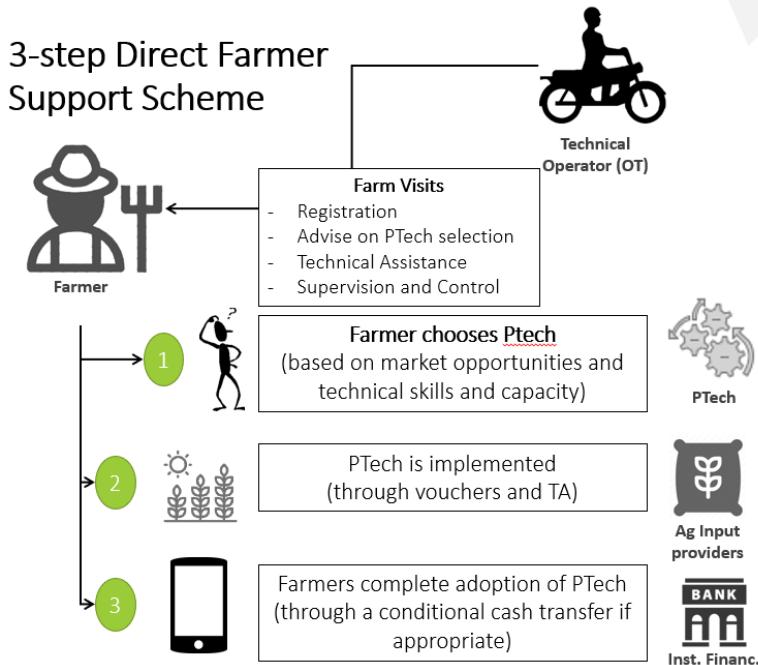
⁶⁷ Report on: « Accès durable aux semences améliorées dans la province du Kongo central : analyse de l'offre et de la demande de semences de riz, manioc et palmier à huile. » Projet de développement des Pôles de Croissance (PDPC), Date : Avril 2019.



10. Sub-component 1.1 will mainly fund direct smallholder farmer support through vouchers or cash transfers for the adoption of PTechs. Other expenditures under sub-component 1.1 include: (i) transaction fees for the vouchers and cash transfers (from financial institutions or mobile phone companies), which are estimated to cost at least 2 percent of the transferred amount; and (ii) the cost of OTs who will support the NPCU in the implementation of the Project, which is usually between 25 percent to 30 percent for a country such as DRC and will represent about US\$60 million (US\$2.5 million on average per year and per targeted provinces).
11. In addition to the support for the adoption of (demand for) improved seeds (and SENASEM, INERA support), local ownership and sustainability will be reinforced by seeking to crowd-in private agriculture input suppliers (that is, AgriMSMEs) and technical assistance providers in delivering inputs and services directly to farmers. The development of these private actors (AgriMSMEs) will be supported through sub-component 2.2, and it is expected that they will progressively expand the size of the private market for AgriMSMEs in the selected provinces. The following figure illustrates the different link between component 1 and components 2 and 3:

Figure 2.1 – Relationships among components and project activities



**Figure 2.2 Farmer support scheme (farmer perspective)**

12. From the smallholder perspective, the farmer will need to first register in the National Farmer Registry, which will be open to all farmers and will be voluntary. The registration process (as well as the rest of the process of applying for direct farmer supports and receiving technical assistance) will be facilitated by the support from an OT. The registration will be simple and will capture information from the individual farmer (not the household), such as name, basic demographic information (gender, age), location of the plot(s), size and biometric information (picture). Once registered, the farmer will receive a "Contactless Farmers Smart Card" with his/her personal data and a unique identification number. This individual card will work as an NFC card with electronic data. With this smart card, farmers will be eligible to apply for direct farmer support, and based on their location, different options of PTechs may be available. The information on choices of PTechs and training and technical assistance before and during the adoption of the PTechs will be communicated by the OT, with supervision and support by SNV, INERA and SENASEM. Once the PTech is selected, the farmer receives the direct support in the form of a digital voucher and/or cash directly in his/her smart card. In the case where inputs need to be bought, vouchers will be the main instrument, while in the case of labor costs, cash will be the support mechanism (with the OT control and the validation PPIU). Vouchers will be delivered to farmers ex ante directly in their card for them to purchase the needed inputs, while the cash will be transferred conditionally to the farmers who have already undertaken the required on-farm activities. The vouchers and cash may be delivered in tranches depending on the key milestones for the PTech adoption, while the PTechs developed for the first year vary between one and three tranches. Input suppliers will also be registered within the SIGI system. Suppliers will receive specific training and electronic devices to scan the Contactless Farmers Smart Cards. This system can also work offline with limited risk of fraud. In case of CCT, beneficiaries will be allowed to withdraw money with their smart card at the different points of sales of the financial institutions involved in the Project. The direct farmer support scheme is described in the figure 2.3 in three simple steps.

**Box 2: E-Vouchers: Lessons Learned From Africa**

Nearly a dozen Sub-Saharan countries have already implemented an e-voucher mechanism and gained valuable experience about design, operations, scale-up approaches, platform technology choices, agricultural inputs, activity subsidy support, and subsidy payment systems. An “Assessment of the Design and Delivery Mechanisms of E-Voucher Schemes in Agriculture in Sub-Saharan Africa” carried out in December 2020 provides useful insights.

E-Voucher System Efficiency

E-Voucher programs are still relatively recent and as such have limited track record to date, and few rigorous impact assessments exist. The above-mentioned assessment report recommends an adequate lead time and careful planning of preparatory steps for each year’s rollout. Therefore, the Project will first implement a 3-month “dry run” before the kick-off on the field. All key players will be involved in this “dry run” (NPCU, PPCU, MIS, financial institutions, Technical Operators, and several inputs suppliers and farmers). This “dry run” will allow for a first process evaluation (MIS, Technical Operators, financial institutions) to ensure that the mechanism works adequately. A process evaluation in real conditions will also be carried out.

The reviewed dozens of Sub-Saharan countries first undertook a pilot phase with the intent to scale up. This pilot aimed at providing an opportunity to test systems in real conditions and to identify areas to be strengthened with subsequent adjustments made primarily to the technical platform features, and to implementation partners (network, database operator, enumeration details). The Project’s first year can be considered a pilot phase, such as in Niger (PASEC, P153420—PPAAO, P122065) or Mali (PDAZAM, P164052). During this period, key players will implement the mechanism in only one territory per province, preparing for scaling up. A continuous process of evaluation will be conducted to fine-tune the mechanism.

Agro-dealers Network Capacity

In Mali and Niger, agro-dealers have faced significant problems in acquiring stock from input importers and domestic manufacturers. Because of the significant number of targeted farmers, the Project might be similarly challenged. To mitigate these kinds of risks, the above-mentioned report recommends training agro-dealers to better equip them to anticipate the demand for various inputs, to efficiently manage the needed inventories, to access finance to carry inventory, and to stock quality inputs.

The Project (component 2.2) will provide technical and financial support to inputs suppliers (and agro-processors). To facilitate this support, Technical Operators (component 1.1) who are dealing directly with the farmers, will also assist suppliers in catalyzing business links among them and in organizing inputs deliveries. The suppliers involved in the mechanism will be first registered (like in Mali) in the MIS (SIGI) and their capacity assessed to enhance the assistance under component 2.2. Upstream, component 3 will reinforce the seeds multiplications capacities. INERA, with the support of international institutions, will implement a dedicated support to stimulate the improved varieties offer in DRC thus reinforcing the inputs supply chain. Because this takes times to implement, Year 1 objectives in terms of targeted farmers are set at conservative levels.

Communication and E-Platform Components

In Burkina Faso (PAPSA, P114236), Nigeria (Fadama Project, P096572), Mali and Niger, illiteracy and poor network connections were two of the main barriers for large-scale application of the e-voucher mechanism. For example, in Niger, nearly 40 percent of the eligible farmers did not receive the necessary SMS messages due to poor network. To mitigate these issues, the Project will follow the recommendations made in the above-mentioned report, and will implement an NFC-card technology. This technology is like the Fadama Project in Nigeria; it can work offline and requires no literacy capacities. Agricultural providers will also be issued a Point of Sale tablet through which the farmers use the NFC card for the agricultural inputs they want to purchase. Point of Sale is a platform that records electronic transactions both offline and online.

In return, this technology requires regular contacts between beneficiaries and technical operators, easily provided by the frequent visits the technical operators will pay to farmers for technical advice (a recommendation from the agriculture portfolio in DRC: PARRSA, PDPC ET STEP projects).



13. *Sub-component 1.2. Smallholder technical assistance and financial access (US\$10 million).* This sub-component will finance technical assistance to local providers of financial and non-financial services to smallholder farmers. The objective of this sub-component is to improve smallholder farmers' access to services related to the implementation of the investments of sub-component 1.1. This sub-component will finance the strengthening of providers of: (i) smallholder technical assistance (public, private, NGOs), and (ii) financial service providers to make the investments under the sub-component 1.1 more sustainable. Strengthening technical assistance providers, and development of financial services for smallholder farmers will involve training, capacity building, communication/promotion, and legal/business administration support. Given that the incentives (direct farmer support) for adopting PTechs are a one-off event, the improvement of the technical assistance and financial services enables smallholder farmers to continue to reinvest in their farms, with new knowledges, skills, and land tenure security as evidence of other operations in DRC shows. Eligible private and public organizations will include providers of:

- a) Technical assistance to smallholder farmers.
- b) Financial services.
 - i. Technical assistance shall be provided under the Project to participating financial institutions and payment services providers to develop specific applications/solutions to serve the needs of beneficiaries of the Project. These shall include but not limited to providing each farmer with a transaction/"bank" account through which they can receive the subsidies under the Project, save their money, apply for a loan and generally manage their finances; providing financial education to the farmers, entrepreneurial training to farmers' cooperatives, and entrepreneurial training to AgriMSMEs to better serve their farmer clients, and so on.
 - ii. (b) Technical assistance shall also be provided to support the formalization/licensing of existing viable Village Savings and Loans Associations (VSLA) (*petites caisses villageoises autogérées* – see Box 3), in conformity with financial sector regulations. Further support to VSLAs could include: BDS; financial literacy of members; equipping eligible VSLAs with tools that would be helpful in training members, and so on.

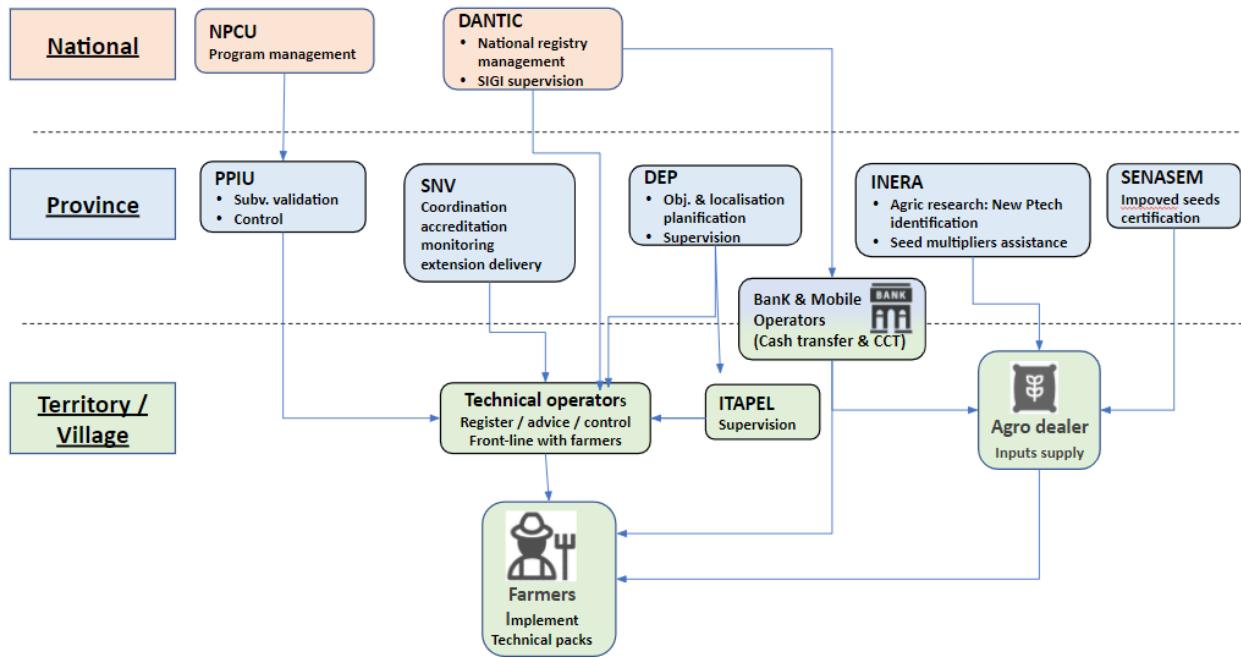
Box 3. Village Savings and Loans (VSLA) groups (*petites caisses villageoises autogérées*)

VSLAs are self-selected groups of people who pool their savings into a fund from which members can borrow. After several weeks of accumulating savings, the group becomes large enough to launch the loan function. All members have the right to take out a loan regardless of the number of shares they have contributed. The money is paid back with interest, which allows the fund to grow. The regular savings contributions to the Association are deposited with an end date in mind for the distribution of all or part of the total funds (including interest earnings) to the individual members, usually based on a formula that links payout to the amount saved.

14. Figure 2.3 presents the agricultural advisory and technology transfer system that responds to the needs of producers, private sector actors and AgriMSMEs. Based on public institutions which capacities will be reinforced, this system is deemed to be sustainable on the longer run:



Figure 2.3 Advisory and Technology Transfer System to be supported by the project



Key:

NPCU: National Project Coordination Unit

PPIU: Provincial Project Implementation Unit

INERA: Institut National d'Etudes et de Recherches agricoles (National Agricultural Research Institute)

ITAPEL: Inspection territoriale de l'Agriculture, Pêche et Élevage

SENASEM: Service National de Semences (National seed certification service)

SNV: Service National de Vulgarisation (National Extension Service)

OVDA: Office des Voies de Dessertes agricoles (Office of Agricultural Service Routes)

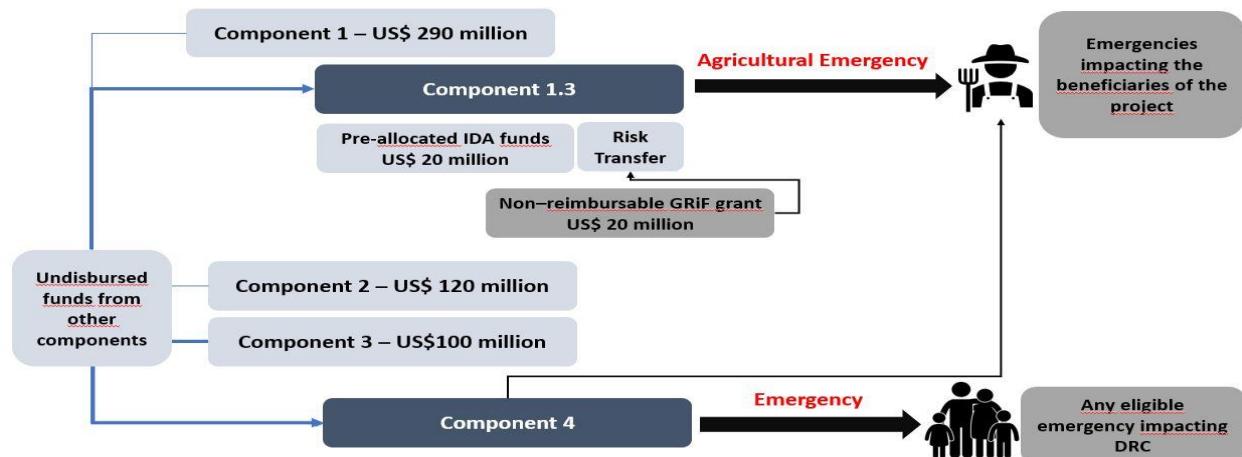
15. *Sub-component 1.3. Agriculture Preparedness and Emergency Response (Total: US\$40 million; IDA: US\$20 million and GRIF⁶⁸: US\$20 million).* This sub-component will finance emergency responses to safeguard the smallholder farmers' counterpart contribution during the adoption of PTechs under sub-component 1.1. It will finance emergency cash transfers in the event of an eligible agriculture sector emergency, defined as "an event that has caused, or is likely to imminently cause, a major adverse economic and/or social impact for the smallholder farmers under sub-component 1.1 associated with natural or man-made crises or disasters." The emergency cash transfers will compensate smallholder farmers for the loss of their counterpart contributions for the adoption of PTechs. The value of the sum to be provided in emergency cash transfers per farmer will be based on their counterpart contribution towards the adoption of the PTech being adopted and will be paid as a lump sum following the occurrence of a covered event, of a predefined severity. This sub-component will also finance the purchase (premiums and brokerage costs) of risk transfer products (that is, insurance, derivatives) to leverage disaster risk finance capacity to cover the impact of the main agriculture risks faced by smallholder farmers under sub-component 1.1. The IDA funds allocated to this component (US\$20 million) leverage 1:1 funds from the Global Risk Financing Facility (GRIF), to be used for the acquisition of risk transfer products.).

⁶⁸ GRIF is a Multi-Donor Trust Fund (MDTF), which provides grants to test, pilot, and scale up financing instruments that help developing countries better manage financial impacts from shocks and crises. This includes but is not limited to market-based solutions like insurance.



16. In the case of a payout from the risk transfer product(s) to be purchased under this sub-component, the payout money would flow into a special Designated Account (DA) and disbursements from this DA would also be in the form of emergency cash transfers to smallholder farmer beneficiaries. The description of the risk financing mechanism under this sub-component is set out in a specific manual ("Manual of Operation for Agricultural Emergencies - MOAE"), which is an annex to the PIM.
17. The risk financing structure for sub-component 1.3 to respond to agriculture emergencies includes; (i) drawdown from the US\$20 million from IDA resources; (ii) eventual payouts from the coverage (risk transfer product) purchased by the Project (and co-financed by GRiF) and (iii) resources from component 4 through the triggering of the CERC in case of additional funding needs. Figure 2.4 summarizes the interaction between the different financing sources and response mechanisms in case of an emergency.

Figure 2.4–Risk Financing Structure Emergency Response Components



18. Emergency triggers for funds disbursement under this sub-component will not necessarily require an official declaration of Emergency. An "ex ante" preparation of the response via contingency plans will allow for a rapid or even automatic triggering of the compensation mechanism. The project will develop contingency plans for the risk typologies most likely to impact farmers benefiting from sub-component 1.1 (weather shocks, animal and plant health outbreaks).
19. The contingency plans will be an integral part of the MOAE, and will include clear indicators, thresholds, and follow-up mechanisms. They will be developed throughout the life of the Project and will be able to be used for emergency support under this sub-component as long as they are approved before launch of campaigns to support farmers via sub-component 1.1.
20. Contingency plans will be the guiding documents for the response by risk typology and will include a preparation phase, a rapid response phase, and a recovery phase. They will also clearly indicate the relationship with the other components and sub-components of the project, including sub-component 1.1, components 3 and 4.
21. The risk transfer component will be designed and procured with support from the GRiF funds (US\$20 million over five years) and it will provide direct support (via emergency cash transfers) to beneficiary farmers that



are part of the NADP (and have invested in the PTechs) if they face a loss due to a weather shock. The support will be to partially compensate them for the loss of their counterpart contributions for the adoption of PTechs. The value of the sum to be covered (insured) per farmer will be based on their counterpart contribution towards the PTech to be adopted and will be paid as a lump sum following the occurrence of a covered event, of a predefined severity.

Component 2—Smallholder Farmers Market Access (US\$150 million)

22. This component will support the reduction in transaction costs for smallholder farmers to access markets, and the inclusion of smallholder farmers into farmer groups (cooperatives/associations) and AgriMSMEs. The interventions supported under this component will also be beneficial to building climate resilience of the communities and supporting the adoption of CSA and NSmartAg technologies and practices. The component will focus on the following two areas.
23. *Sub-component 2.1. Rural Transport Infrastructure (US\$110 million).* The subcomponent will finance the rehabilitation and maintenance of 4,000 km of unpaved feeder roads (*voies de desserte agricoles*), small river ramps, and technical assistance to the OVDA. The Project will focus primarily on improving priority rural roads and transport corridors (including river safety measures and launching sites in waterways⁶⁹) as the key to unlocking the smallholder agriculture production and trade potential in the Project area based on following criteria: (a) connection of agriculture production areas where smallholder farmer support (sub-component 1.1) is being delivered to operational main roads, railroads and/or waterways which are passable (safe and usable all year) and main food markets (relatively dense population); and (b) business opportunities and synergies with ongoing or future agriculture sector investments in the Project area and other transport and/or connectivity infrastructure interventions. This sub-component will build on the successful experiences in DRC and the region, in particular using a bottom-up approach for identifying investments, building local institutional capacity and focusing on a sound technical approach for rural roads rehabilitation programs to ensure proper and sustainable rural roads network management and maintenance system⁷⁰. Rural roads to be rehabilitated will be selected based on (i) the criteria above (ii) consultations with various stakeholders in each province (including local authorities, private sector organizations such as FEC, representatives of farmers' organizations and civil society), and (iii) technical, environmental and social considerations identified in specific studies to be conducted in advance of the beginning of rehabilitation works. The implementation of this sub-component would be delegated to one or several external agencies (*maîtrise d'ouvrage déléguée*) with a track record in implementing similar projects in fragile and conflict-affected areas.
24. Contracting with (an) external agency (ies) has been favored by OVDA (ex-DVDA) in all past donor-funded programs due to the lack of capacity in contract management at the Ministry of Agriculture. It is proposed to continue this arrangement of delegated management (*maîtrise d'ouvrage déléguée*) while assisting the OVDA to gradually build its capacity in work planning and road contract management. The objective is for OVDA to assume full management of road projects (as does Office des Routes for its own network), if not at the end of SOP's first phase, then at least in the near future. The technical assistance to OVDA will focus on technical, administrative and financial management of road projects. It will also provide support for (i) the implementation of OVDA's provincial strategy for the maintenance and financing of agriculture service roads

⁶⁹ Launching sites refers to small piers to allow the unloading and loading of products from between cargo boats and trucks.

⁷⁰ The Program will take advantage of the existing rural roads management and maintenance strategy, developed under the PARRSA.



with a focus on sustainability of investments and for (ii) the updating of its Manual for rural roads and river rehabilitation which will include prescriptions for climate change adaptation.

25. Rehabilitation works will follow OVDA's guidelines and thus include social and community benefit clauses, such as targeted employment, training, apprenticeship requirements, local sourcing, or local SME participation in the works. These clauses will help maximize local participation in rehabilitation works, training of local labor force and capacity development of local SMEs for the maintenance of rural roads and other infrastructure. This subcomponent aims at addressing one of the drivers of fragility in DRC with high youth unemployment.

26. *Subcomponent 2.2. Support to smallholder farmers' market access (US\$40 million). This sub-component will finance (a) a rollout of a credit line facility and (b) technical assistance to build the capacity of AgriMSMEs providing agricultural input in the areas targeted by component 1.* Incentives for the adoption of PTechs by smallholder farmers under sub-component 1.1 create important market opportunities for AgriMSMEs through the generation of demand from smallholders and the provision of reliable information regarding the nature of that demand (type of inputs and services embedded in the PTechs). The objective of this sub-component is to provide financing and technical assistance for AgriMSMEs to expand their capacity and scale of operations in the target areas to meet the demand for PTechs by the smallholder farmer beneficiaries of sub-component 1.1. Beneficiaries of this sub-component will include existing AgriMSMEs (local AgriMSMEs, NGOs, farmer groups, cooperatives and other organizations) that have good performance but will not be able to match the scale of demand for PTechs created throughout the targeted provinces. This sub-component will be implemented in collaboration with the IFC to identify opportunities for private investors and companies who facilitate pre- and post-harvest access to markets for smallholder farmers:

- The dedicated line of credit will be channeled to participating financial institutions, for on-lending to eligible AgriMSMEs, via the SME Refinancing Window of the BCC put in place with the assistance of the World Bank through the Financial Infrastructure and Markets Project (P145554). The credit line will start with a US\$7 million initial rollout and could be further extended if there is a strong demand. Additionally, potential IFC initiatives including leasing schemes and the Small Loan Guarantee Program could provide additional sources of financing. Credit line to agriculture value chain organizations will follow the same basic principles as the existing SME Credit line facility, but the Project's loans will be dedicated primarily to respond to the demand for inputs and services by the smallholder beneficiaries in the geographic locations of the Project. To be eligible, the beneficiary organizations will need to be working with a significant number of farmers targeted by sub-component 1.1. and meet basic capacity criteria (for example, quality and safeguards criteria, economic and financial sustainability, capacity to reach the minimum threshold of the targeted farmers, track record of activities in local markets, and so on). The financing to AgriMSMEs and farmer groups will prioritize the membership and participation of women and young farmers (18–35 years old) in such activities. Examples of investments by smallholder farmer groups and AgriMSMEs to be financed include (among others): storage facilities, transport equipment, infrastructure and machinery for pre-harvest processes and services, digital trading and technical assistance platforms, technical and business administration capacity. To ensure that only qualified SMEs are granted loans under the Project's credit line, participating financial institutions prequalify all sub-loan applications before submitting them to the Refinancing Window. The credit Committee at the Refinancing Window, which includes a representative of the NPCU, then proceeds to verify all the eligibility criteria of each sub-loan before final approval. The final tally of approved sub-loans for each PFI reflects the loan amount to the PFI and a request for disbursement is sent by the Refinancing Window to the NPCU indicating the PFI's



designated account. The NPCU then sends a request for non-objection to the World Bank for the disbursement of the loan directly to the account of the PFI. Once fully disbursed, the funds continue to support the Project in a revolving manner (that is, reimbursed facilities are re-lended to other agri-SMEs). In the event that the credit line is not fully disbursed by the closing of the project, the funds would be returned to the World Bank.

- To strengthen the pipeline of creditworthy AgriMSMEs, vouchers will be provided to eligible AgriMSMEs to strengthen their capacity and develop technical and financial proposals (business plans) to respond to the new demand for PTechs and markets of agricultural products created as a result of sub-component 1.1. The vouchers will finance BDS with only prequalified providers to strengthen the AgriMSMEs' capacity to offtake the agriculture surplus produced by smallholder farmers and deliver an increased volume of inputs and services, by engaging smallholder farmers in training and information sessions on the appropriate adoption and use of the different materials and practices, serving it as a de facto promotional tool. This will in turn increase the creditworthiness of the agriculture value chain organizations and improve their capacity to apply for the credit line facility. The vouchers will be used with prequalified BDS partners selected based on their competencies, quality and range of services provided. The BDS partners could be reputable local, regional or international organizations with established BDS operations in the DRC that will be able to provide a full line of BDS services. An evaluation system of the BDS providers will be used to certify and recertify them periodically to assure quality. They BDS providers could include lead firms (wholesalers and processors who provide TA on their quality standards and technical requirements for inputs). A master contract agreement will allow the beneficiary agriculture value chain organizations to secure a fair BDS agreement.
- The Project will also support the capacity of private and public actors in delivering BDS. BDS are defined as those non-financial services and products offered to AgriMSMEs to address their technical capacity gaps. BDS are important because they can assist AgriMSMEs capture market demand opportunities created in component 1.1. for agricultural inputs, and subsequently also the improved supply of agricultural produce. The BDS provider can help assess the new market demand, develop a business plan to capture market opportunities, develop growth plans and improve productivity by building the technical skills of their employees, improving operational and production systems. Based on these growth plans, the BDS suppliers will also help the eligible AgriMSMEs develop credit applications to apply for the credit line. High-quality BDS providers will:
 - i. Support the pipeline of quality proposals for the credit lines.
 - ii. Help maximize the return on investment from investments.
 - iii. Enhance access to finance by improving creditworthiness of applications.
 - iv. Expand the client base for BDS services in agricultural value chains.
 - v. Contribute to creation of sustainable BDS markets that will support agricultural value chains beyond the funding of the project.
- The Project will also finance technical assistance for the development of agriculture input and output market information (prices, volumes) and development of pilots of agribusiness and agri-finance development interventions for potential scale up in phase 2 of the SOP.

**Table A2.1. Key Actors: roles and responsibilities under Sub-component 2.2**

Actor	Role
Eligible beneficiary organizations of Sub-component 2.2	
The target beneficiaries for this sub-component are the private sector organizations operating in the agriculture value chain. To be eligible, these organizations will need to be working with farmers targeted by the sub-component 1.1. and meet basic capacity criteria (for example, quality and safeguards criteria, economic and financial sustainability, capacity to reach the minimum threshold of the targeted farmers, track record of activities in local markets, and so on). Eligible organizations are expected to be mainly farmer groups (cooperatives/associations) or AgriMSMEs upstream and/or downstream in the supply chain: (i) input suppliers (to provide inputs needed for the adoption of technology packages) and (ii) service providers (technical assistance, training, business administration services); they can also be value chain integrators.	
Upstream; Input suppliers and service providers	Legally registered AgriMSMEs, producer groups, cooperatives and associations who will deliver quality inputs (seeds, fertilizers, fry, roosters, pesticides, small equipment, animal feed, and so on) and technical services to smallholder farmers. The inputs and services will be delivered according to specifications provided by the Project's PTechs offered to smallholder farmers as part of the Operational Manual.
Technical Operators (OTs)	OT are responsible for the field operations of the component 1.1. They are supposed to identify needs and challenges of the different value chains for the adoption of the PTechs. They will be able to identify potential beneficiaries of the component 2.2.
Instrument 1: Credit Lines	
Credit line to agriculture value chain organizations will follow the same basic principles as the existing SME Credit line facility, [1] but the Project loans will be dedicated primarily to respond to the demand for upstream and downstream goods and services by the Project's targeted smallholder beneficiaries in the selected provinces (5). The credit facility for agriculture value chain organizations (AgriMSMEs) will allow them to borrow investment capital and working capital to expand their capacity in order to respond to the new market opportunities created by the smallholder subsidies financed by sub-component 1.1.	
Refinancing Window of the Central Bank of Congo	<p><i>The Guichet the Refinancement de la Banque Centrale du Congo (BCC) (or the "Refinancing Window") shall play the role of the intermediary financial institution (IFI) via which the Project US\$7 million line of credit shall transit to eligible participating financial institutions (PFIs).</i></p> <p>The Refinancing Window shall be responsible for selecting the eligible PFIs for the Project and shall approve Each agro-dealer loan submitted by the PFIs under the Project line of Credit (after screening for the eligibility criteria—purpose, geographic location, E&S considerations, and so on, have all been fulfilled).</p> <p>The annual interest rate charged by the Refinancing Window to the PFIs is 3 percent.</p>
Participating Financial Institutions (commercial banks, microfinance institutions, Savings and Loans Cooperatives)	<p>PFIs are expected to extend loans to eligible agriculture value chain organizations (agro-dealer MSMEs and other agriculture value chain integrators) to finance both their working capital (OPEX) and capital investments (CAPEX).</p> <p>PFIs prequalify the loan applications of the agro-dealers to whom they are willing to extend credit and submit these prequalified loans for the approval of the Refinancing Window—which does NOT share the risk with the PFI.</p> <p>The final interest rate applicable to each agro-dealer borrower shall be determined by bilateral negotiations between the PFI and the agro-dealer and generally reflects the level of risk as perceived by the PFI.</p> <p><i>The eligible PFI(s) shall be required to have a strategy for the agri sector including offering financial</i></p>

[1] The DRC Financial Infrastructure and Markets project (P145554) has a Line of Credit component for medium to long-term finance for MSMEs. The line of credit is functional and disbursed 73 percent of the planned US\$11.22 million. <https://operationsportalws.worldbank.org/Pages/RoadmapLanding.aspx?projectid=P145554>



	<i>literacy training to both the agro-dealers and beneficiary farmers, as well as entrepreneurial training to agro-dealers and farmers' cooperatives.</i>
NPCU	<p>1. The NPCU has to appoint at least two representatives to participate in the deliberations of the Refinancing Window during (a) the selection of the PFIs for the line of credit, and (b) the approval of loans submitted by the PFIs under the line of credit. One of the representatives of the NPCU to the Refinancing Window during these deliberations should be the E&S Expert of the NPCU who has to ascertain that the E&S policies are being respected in the choice of the PFI and by the agri-MSMEs benefiting from the loans.</p> <p>2. Following the approval of the loans submitted by the PFIs, the Refinancing Window submits the list to the NPCU which in turn submits the same to the WB with the non-objection request for the loans to be disbursed to the PFI directly.</p>
Technical Operators (OTs)	OT will be able to promote links between the <i>Guichet de Refinancement</i> and the potential beneficiaries. If any organization involved within component 1.1 (up or downstream) needs to be upgraded, OT will orientate them to the <i>Guichet de Refinancement</i> .
Instrument 2: Capacity Enhancement Grants	
<p>Non-cash grants (electronic vouchers) will be provided to eligible agriculture value chain organizations to develop technical and financial proposals (business plans) to respond to the new demand for technology packages and markets of agricultural products created as the result of sub-component 1.1. These grants will be used by the agriculture value chain organizations upstream or downstream from targeted smallholder farmers and will finance only BDS with the prequalified providers. The BDS will be exclusively linked to the training and promotion of services and inputs for the adoption of identified technological packages under component 1 (including the application of environmental measures as per safeguards requirements). This grant funding for BDS will allow the agriculture value chain organizations to strengthen the capacity to deliver an increased volume of inputs and services by engaging smallholder farmers in training and information sessions on the appropriate adoption and use of the different materials and practices, serving it as a de facto promotional tool. This will in turn increase the creditworthiness of the agriculture value chain organizations seeking credit under Instrument 1 above. The non-cash grants will be allocated in a form of vouchers that can be used with prequalified BDS partners selected based on their competencies, quality and range of services provided. The BDS partners could be reputable local, regional or international organizations with established BDS operations in the DRC that will be able to provide a full line of BDS services. An evaluation system of the BDS providers will be used to certify and recertify them periodically to assure quality. The BDS providers could include lead firms (wholesalers and processors who provide TA on their quality standards and technical requirements for inputs). A master contract agreement will allow the beneficiary agriculture value chain organizations to secure a fair BDS agreement.</p>	
Upstream; Input suppliers and service providers	AgriMSMEs, producer groups, cooperatives and associations who will deliver quality inputs (seeds, fertilizers, fry, roosters, pesticides, animal feed, small equipment, and so on) and technical services to smallholder farmers. The inputs and services will be delivered according to specifications provided by the Project's technology packages offered to smallholder farmers as part of component 1.
Opérateurs techniques (OT)	OT will be responsible to identify training and promotion needs for organizations (up and downstream of the value chains) to strengthen the adoption of technological packages (component 1.1). This needs pre-identification will help selection of BDS.

Table A2.2. Synergies between Sub-components 1.1 and 2.2

Sub-component 1.1	Information/Data flow	Sub-component 2.2.
1. Identified (i) area of intervention (training and promotion needs) and (ii) eligible smallholder beneficiaries (responsibility: OT from Sub-component 1.1).	→ Market data on new demand from farmer beneficiaries, requirements of the PTechs.	3. Information sharing campaign to explain the new market opportunities created by the Project to local agriculture value chain organizations.
2. Design of PTechs (value and technical specifications).	→	
5. Capacity assessment and pre-qualification of eligible agriculture value chain organizations	← Database →	4. Mapping of eligible agriculture value chain organizations. 7. Non-cash BDS grants to help eligible



Sub-component 1.1	Information/Data flow	Sub-component 2.2.
(by an independent evaluator).	List of organizations eligible to receive the TA grants and specific capacity needs for each organization.	agriculture value chain organizations develop technical and financial proposals (business plans) for inputs and services to the Project's smallholder farmers.
6. Identification and pre-qualification of BDS providers (by an independent evaluator).	List of BDS providers pre-qualified for implementing the grants.	8. Master contract for BDS services with BDS providers.
10. Evaluation of the technical proposals by the Project's technical committee (to make sure that they satisfy quality and standards required by sub-component 1.1).	Technical proposals for services to farmer beneficiaries.	9. Beneficiary agriculture value chain organizations sign the individual agreements with the BDS providers and receive support in preparation of business plans.
	List of organizations whose technical plans are approved by the Project for credit line funding.	11. Submission of the business plans by agriculture value chain organizations approved by the technical committee to the financial institutions (Banks) involved in the credit lines.
12. Continuous verification of results by the independent evaluator (to make sure that the credit lines are used for the eligible activities and the Project's smallholder farmers receive the planned technology packages/services).	Due diligence information	13. Assessment of the business plans by the Banks, credit allocation and supervision.
	Data on beneficiaries served and services delivered.	14. Agriculture value chain organizations implement business plans.

Component 3—Agriculture Public Goods and Services (US\$80 million)

27. Component 3 will provide national and provincial actors with capacity-building opportunities to perform support functions during Project implementation. This component encompasses support to: (a) strengthen the capacity of the key ministries (for example, Agriculture, Fisheries, Livestock, and Rural Development) at the national and provincial levels to deliver key agriculture public goods and services linked to components 1 and 2; and (b) Project management, monitoring and evaluation.
28. *Sub-component 3.1. Capacity building for delivering agriculture public services (US\$30 million).* This sub-component will finance (a) data collection and studies (impact evaluations, pilots, diagnostics) to scale up the Project in future phases to other provinces; and (b) capacity building activities of public services to mainstream CSA, NSmartAg, digital technologies, youth and gender policies and interventions in the various agriculture public goods and services at the national and local levels linked to the investments under components 1 and 2. The sub-component will:
- a) establish a farmer registry (enabling investments under sub-component 1.1) by financing hardware, software and training of human resources for setting up and operating the registry.
 - b) strengthen the agricultural research and extension system (enabling the implementation of sub-component 1.1) by financing the development of CSA and NSmartAg PTechs by the National Agriculture Research Institute (INERA), certifying agriculture input quality (SENASEM), providing training and developing digital technologies for the public extension



- agency (SNV) and the private (and NGO) network of agriculture extension extensionists in the selected provinces.
- c) strengthen animal and plant health systems (supporting the investments of sub-component 1.1) financing key equipment, training, digital tools, and vaccination campaigns in the selected provinces.
 - d) strengthen the Project planning, coordination, monitoring and evaluation capacity at national and subnational levels, with emphasis on the Planning and Analysis Departments (DEPs) of the Ministries of Agriculture, Rural Development, and Livestock and Fisheries, conducting activities such as surveys, socio-environmental risk assessments, diagnostic studies, consultancies, policy and program reviews, and piloting new initiatives to plan for phase 2 of the SOP.
 - e) provide rigorous impact evaluation evidence about the effectiveness of key interventions supported by the Project to inform future design and implementation of phase 2.
 - f) strengthen the capacity of public sector institutions at National and Provincial levels on land use planning, land tenure formalization and landscape management by providing training, developing tools, guides, and strategic documents to design phase 2 of the SOP.
29. Capacity building of agriculture public services at the local level will target the Project's intervention areas, through the mobilization of CGIAR Group members, according to their specific competitive advantages and the identified needs of public sector institutions, smallholder Farmers and the relevant stakeholders. Their potential role is outlined in the following table. It is expected to build a continuous collaboration aimed at bringing solutions to evolving needs along the Project implementation. Identification of such needs and field tests will be carried out in close collaboration with the Technical Operators.

Table A2.3 CGIAR Centers potential role in supporting the Project

CGIAR Centers	Potential Role in supporting the Project
AfricaRice	Rice innovations. In particular, (i) adapted rice varieties, more efficient and tolerant to the stresses of climate change and which meet the product profiles demanded by consumers; (ii) mechanization technologies aimed at finding appropriate harvesting and cultivation technologies that reduce yield gaps in fields and increase post-harvest yields and quality; and (iii) post-harvest and processing technologies that produce diversified products of high organoleptic and nutritional quality. For example, rice fortified with iron and zinc and rice products highly valued by urban and rural consumers, low glycemic rice for diabetics, and so on.
Harvest Plus	NSmartAg, in particular biofortified crops and food, including: (i) continued development and release of high-yielding, climate-smart and nutrient-dense varieties of iron beans, vitamin A maize and cassava and national (public and private) capacity strengthening in basic seed production, rapid seed multiplication techniques, post-harvest approaches, processing systems and quality control support pertaining to biofortified crops and food; (ii) development of local markets, including access to finance, guidance on product development and marketing, and establishment of low-cost easy to implement and verify quality control/standardization mechanisms iv) training of trainers for technical operators and extension service providers in biofortification, and in collaboration with Alliance OF Bioversity International and CIAT (iv) promotion of vitamin A plantain cultivars, suitable in mid-altitude regions.



CGIAR Centers	Potential Role in supporting the Project
International Center for Potatoe (CIP)	Orange fleshed sweet potato: (i) technical support to INERA and the private sector in the use of innovative techniques (sandpony, stem cuttings, and so on) for the production of first generation seeds of varieties at INERA, high-yielding potato varieties adapted to local conditions and resistant to most important potato diseases; (ii) conduct of variety selection trials for potatoes with a higher iron content as well as continuation of trials for the selection of adapted varieties of orange-fleshed sweet potato (OFSP); (iii) development of the potato seed production sector with a public-private sector partnership; (iv) introduction of the “Healthy Baby Tool Kit” to improve the use of OFSP for complementary feeding of children under 2 years old; (v) post-harvest and processing technologies including the production of OFSP puree and its use in local processed foods
World Agroforestry Centre (ICRAF)	Use of trees in agricultural landscapes by smallholder farmers to improve their security: not only in terms of food, nutrition, income and health. Assistance will consist of technical support to farmers to build their resilience to climate risks such as drought and floods by introducing sustainable land management interventions such as agroforestry, soil and water conservation, and green manures that will help improve soil nutrients and soil organic carbon.
International Institute for Tropical Agriculture (IITA)	Technical support for (i) improved varieties and hybrids (including bio-fortified) of maize, cassava, cowpea, banana, and high-yielding soybean resistant to pests, adapted to agro-climatic conditions (short cycle; climate resilient; (ii) rapid multiplication technologies (semi-auto-trophic hydroponics SAH ™) for virus-free seed production; (iii) inoculant for legumes; (iv) Aflasafe - which reduces the aflatoxin content of crops by 80 to 100 percent compared to untreated crops; (v) mechanization, processing and storage, such as planters, harvesters, gins, peelers, drying machines, milling machines, etc. will be introduced to reduce tedious work in production and processing systems, reduce costs and create opportunities for engaging a new generation of farmers.
International Livestock Research Institute (ILRI)	Small ruminants focus: development of animal value chains: (i) genetic improvement of livestock breeds (cattle, poultry, small ruminants, etc.) as well as their management systems; (ii) improved diet through better use of crop residues by substituting varieties and incorporating the nutritional value of crop residues into crop improvement programs (iii) processing of crops, animal products, and (iv) interventions to improve animal health, including “One Health” aspects (a concept that links animal health to human health).
International Food Policy Research Institute (IFPRI)	Analysis of long-term trends in production, supply and demand, as well as threats, opportunities and adequate policy responses. Formulating and implementing effective policies and strategies to support the transformation of agricultural value chains requires a solid understanding of the short- and long-term dynamics governing the production, supply and demand of agricultural products. As part of this activity, IFPRI and its partners will use the range of national and global models and databases that have been developed by the institute over the years to produce guidance on directions, intensity and the determinants of possible major shifts between value chains and potential policy responses.
WorldFish	Aquaculture: (i) research on fish feed and fry among small, medium and large commercial aquaculturists in the DRC, in order to identify appropriate aquaculture production models based on the resources available in the various regions offered in the DRC, and thereby reduce production costs to maximize profits. The research will build on efforts initiated through the IFAD Aquaculture Value Chain Assessment Project for DRC and Angola, which was implemented by IITA and WorldFish; (ii) development and adoption of technologies based on best practices in aquaculture, in order to reduce fish losses incurred during the transport of fry, to establish production systems adapted to the species and regions of the DRC, and promote post-harvest processing and value addition through new fish processing and preservation technologies.



30. *Sub-component 3.2. Project Management and Monitoring and Evaluation (US\$50 million).* This sub-component will finance: (a) operating costs of the NPCU; (b) monitoring and evaluation of Project activities; (c) communication of Project activities to different audiences; and (d) hiring of staff, goods, consultant services, workshops, and training. Under this sub-component, the proposed Project will ensure proper monitoring of the environmental and social framework. Due to the fragility, instability, and recurrent conflict in the Project zone (phase 1), TPM could be used in some areas. This sub-component will also finance a baseline study, a fragility and conflict analysis, and an impact assessment of selected Project activities to inform current and future phases.
31. The impact evaluation will provide evidence about the effectiveness of key interventions supported by the Project to inform future implementation during phase 2 to ensure robust identification and attribution of observed effects, and given resources and operational constraints do not allow reaching all potential beneficiaries immediately, the randomized impact evaluation will identify a relevant ‘control’ group of villages which will receive the direct farmer supports at a later date than randomized intervention villages. Aspects of the Project design will also be randomized across treatment villages to guide implementation decisions for the future stages of the SOP. These aspects will be chosen after consultation with relevant stakeholders as the impact evaluation designed is prepared with technical support from the World Bank during the first year of the Project, and will address strategic priorities on which there is limited evidence. For instance, this could include variation in Project conditionality, the design of technological packages, or incentives. The impact evaluation will build on the lessons learned through the randomized evaluation of the PARRSA project. While the focus of the impact evaluation will be component 1, synergies with component 2 of the Project will also be considered. Support for the impact evaluation will include a baseline household survey in treatment and control villages to be undertaken in the second year of the Project. Two follow-up surveys will be undertaken to measure the medium- and long-term impacts of interventions. These will assess progress towards achieving the stated outcomes and the contribution of the Project to higher-level goals. The evaluations will be used to complement monitoring data from the Project MIS. Qualitative research will also be undertaken before and during the impact evaluation to guide the evaluation design and interpretation of results.

Component 4—Contingency Emergency Response (US\$0)

32. A Contingency Emergency Response Component (CERC) with zero allocation will be created to allow the Government to respond quickly in case of an eligible emergency. Particular attention would be paid to ensuring the best possible alignment of the approaches and instruments used under CERC with those rolled out by the Project, and especially in coordination with the Agriculture Emergency Response component (component 1.3) which aims to quickly reimburse the participation of farmers who are beneficiaries of the incentives (component 1.1) and who will have been affected by a shock. Should an eligible emergency occur, the inclusion of this component would provide a conduit for the use of uncommitted funds from the unallocated expenditure category and/or allow the government to request the World Bank to re-categorize and reallocate financing from other Project components to partially cover emergency response via implementation of key activities by the appropriate agencies to respond to the emergency. The CERC could also be used to channel additional funds should they become available as a result of an eligible emergency.
33. The CERC mechanism will be further defined in a CERC Operational Manual attached to the PIM which will include triggers and conditions for the use of funds. This Manual will clearly outline the triggers, eligible expenditures and procedures for tapping into the CERC. Furthermore, a CERIP will be prepared for each

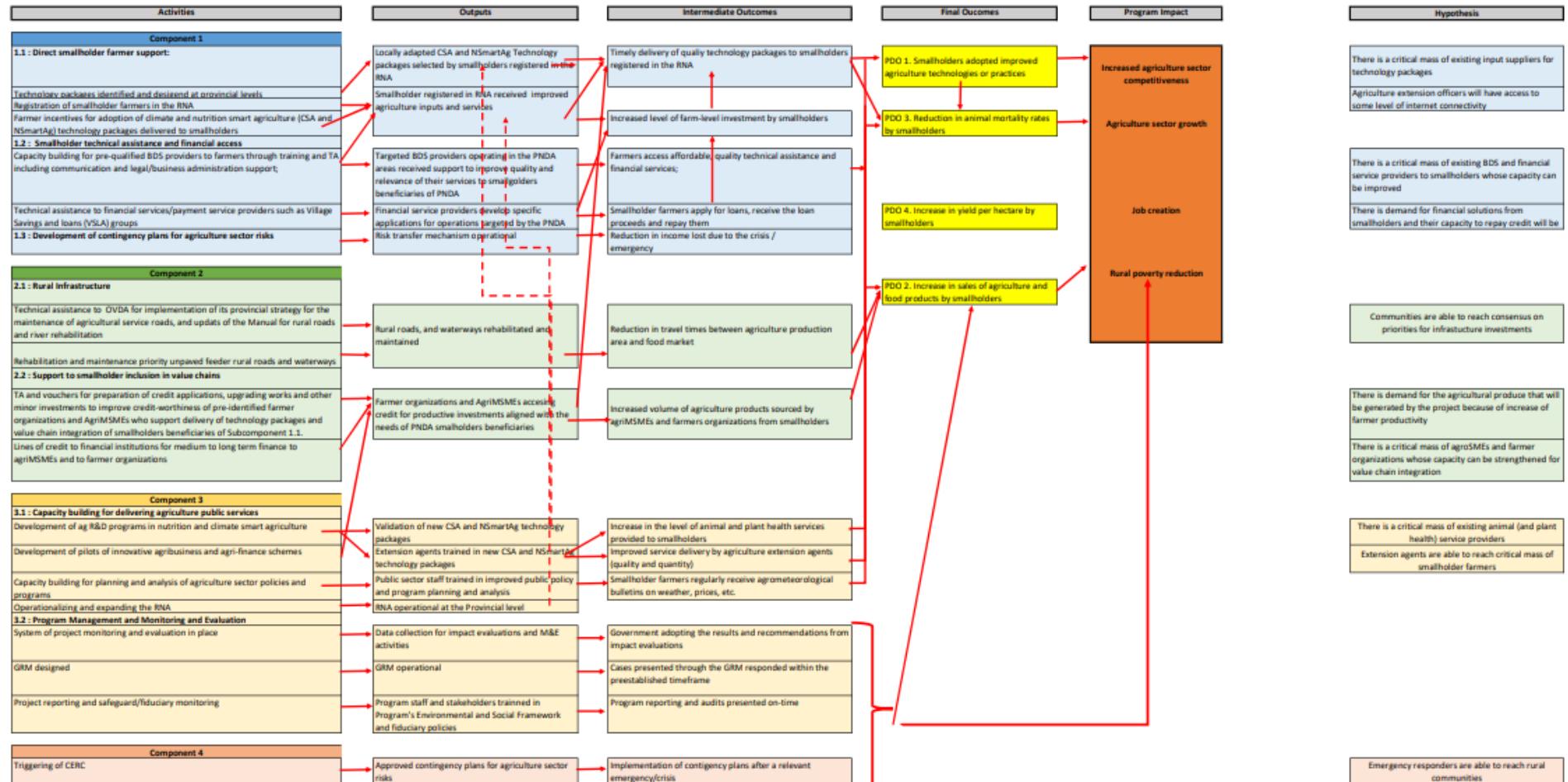


proposed emergency response. The CERIP is prepared in accordance with the CERC operation Manual and the CERC Operation Manual is revised in the context of the specific emergency. This will be submitted to the World Bank for a no objection.

34. Most investment projects in FCV countries do include a CERC, in keeping with the recommendations of the 2011 World Development Report (WDR) on Conflict, Security and Development. Should the CERC be triggered, all expenditures will be made in accordance with paragraph 12 of the Investment Project Financing Policy and will be reviewed and accepted by the World Bank before any disbursement is made. In accordance with the Investment Project Financing Policy, this component would provide immediate, rapidly disbursing support to finance goods (positive list agreed with the government), works, and services needed for response, mitigation, and recovery and reconstruction. Operating costs that are eligible for financing would include the incremental expenses incurred for early recovery efforts arising from the impact of a major crisis.



Figure A2.5. Detailed Theory of Change



**Annex 3: Economic and Financial Analysis**

1. **This annex presents the economic and financial analysis (EFA) for the first phase of the proposed World Bank-financed National Agriculture Development Program (PNDA) in the DRC.** The evaluation is built on the cost-benefit analysis (CBA) approach applied to an indicative range of improved agricultural production systems (including livestock and aquaculture) and agri-small and medium enterprises (AgriMSMEs). The analysis also incorporates the estimated benefits resulting from the rehabilitation and maintenance of rural roads and other rural transport infrastructure. Part I of this annex introduces the identification of benefit streams, followed by Part II which describes the methodology and assumptions used for the CBA analysis, while Part III summarizes the financial results of the main models. The rural road rehabilitation and maintenance impact estimates are presented in Part IV and finally Part V summarizes the economic results of the project, including the valuation of environmental externalities and a sensitivity analysis under different scenarios.
2. **Overall, the Project is economically justified, generating an NPV, at 6 percent of US\$244.5 million and an EIRR of 29.5 percent (over a 10-year period and on a budget of US\$500 million), not accounting for environmental externalities.** The economic results are very satisfying, given that several other project benefits (such as improved nutrition, demonstration effects, development of networks of input suppliers and agri-SMEs, and so on) could not be quantified at this stage, due to limited data availability. Including the environmental benefits, the project's economic results are significantly higher, with a NPV between US\$319.1 million (low estimate shadow price of carbon) and US\$393.2 million (high estimate shadow price of carbon). In addition, these economic results are robust when testing several sensitivity scenarios, including reduced adoption rates, delays in implementation, cost overruns, etc. Nevertheless, the interplay between these risk scenarios (in particular, lower output prices coupled with significant implementation delays) can significantly affect the project's economic justification.

I. Identification of benefits

3. **The project's development objective to improve agriculture productivity and market access of smallholder farmers in selected project areas is expected to lead to three quantifiable benefit streams.** First, agricultural producers will benefit from increased household incomes and improved food and nutrition, through increased yields as a result of a mixed package of direct farmer support, better access to inputs, training and better access to finance (mostly component 1). Second, through the Project's interventions in sub-component 2.1, another set of benefits will impact the target population, as rural infrastructure improvements will lead to better access to markets to commercialize agricultural surpluses (increased household incomes) and to procure more affordable food during the lean season (increased household savings). The foreseen support to smallholder inclusion in value chains (sub-component 2.2) will provide a third benefit stream, through the development of profitable agri-SMEs. In addition, the agri-SME development and financing will also facilitate the realization of Component 1's objectives, as the new enterprises will complement existing ones in providing a better access to agricultural inputs and in marketing and adding value to agricultural surpluses generated with the Project's support.
4. **The Project will also have other positive impacts, non-quantifiable at this stage due to data availability.** These include improved nutrition (as direct farmer support packages will include nutrition smart agriculture practices (NSmartAg), improved climate change resilience (similarly, support packages will include climate-smart agriculture (CSA) practices), demonstration effects (the planned large number of Project beneficiaries



could result in a significant outreach), generalized better access to inputs (as the implementation of direct farmer support is foreseen to be executed through the private sector), and so on.

5. **The impact of the Project's third (Agriculture Public Goods and Services) and fourth (Emergency Response) components are considered as cross-cutting and reinforcing the benefit streams described above.** In particular, the Project's support to agricultural R&D and extension of CSA and NSmartAg practices will feed directly in the development and updating of direct farmer support packages, while support to vaccination campaigns will ensure that the livestock productivity gains will be preserved. In addition, the development of a national farmers' registry will facilitate the implementation of direct support in the current and subsequent phases of the SOP. The pre-allocated CERC budget will finance initial contingent capacity, as part of a broader risk financing strategy to enable the swift response in the event of an eligible agriculture sector emergency. As such, risks and shocks to the project's beneficiaries are expected to be mitigated and reduced, while ensuring preparedness to safeguard the household development gains realized with project support.

II. Methodology and assumptions

6. **This CBA analysis follows the standard methodology recommended by the World Bank, as described in Gittinger (1982), Belli et al. (2001) and is aligned to the recent guidelines for economic and financial analysis.** The financial analysis was conducted to assess the profitability of the proposed project activities, modeled from the perspective of the target beneficiaries, and compared with the without-project situation. Crop and activity budgets have been prepared for five indicative crops and livestock packages, with computed costs and benefits experienced by the beneficiaries with and without the project intervention, using market prices (full list in the Excel file). Two agri-SMEs have also been modeled, based on available data and experiences of other projects. The economic analysis followed a similar approach, but using economic prices and aggregating the results at the level of the project and from the society viewpoint. The economic analysis uses the incremental benefits, adoption rates and expected total number of beneficiaries (aligned to the results framework), and subtracting the total project economic costs to determine the overall economic viability of the project. The discount rates used are in line with the World Bank guidelines, the practice of recent project and in-country discussions: 12 percent for the financial analysis and 6 percent for the economic analysis.
7. **The present analysis had to include some strong assumptions about the overall mix of agricultural and agribusiness activities that will be financed by the Project, given the difficulty to perform ex-ante EFAs for demand-driven interventions.** The Project's main delivery mechanism, the direct farmer support, will be implemented by presenting beneficiaries with a menu of CSA and NSmartAg packages to choose from. These packages will include crop, livestock and aquaculture productivity-enhancing technologies and the full menu will be developed in the Project's first year of implementation. At appraisal stage, as part of the preparation of the operational manual for direct farmer support (*Manuel de Procédures pour les Incitations Agricoles*), five indicative packages have been developed, which are presented below.
8. **Package 1—Improved cassava production.** The first indicative CSA package targets improving cassava production through the introduction of improved varieties, coupled with better agronomical practices, including mucuna intercropping for better soil fertility. Proper adoption of this package is expected to increase yields from the current average of 10 t/ha to 17 t/ha (+70 percent increase). The estimated cost of the package (per hectare), to be fully subsidized by the Project, is approximately US\$395 (about half for seed costs and half for additional labor costs).



9. **Package 2—Improved maize production.** Similar to cassava, this second indicative package proposes a mix of improved seed, intercropping and better agronomical practices. Yields are expected to increase from 1 t/ha currently to 3 t/ha (+200 percent increase). The estimated cost of the package (per hectare), to be fully subsidized by the Project, is approximately US\$320 (about one third for seed costs and the rest for additional labor costs).
10. **Package 3—Improved fallow intercropped with maize.** The third package will propose replacing traditional fallow practices (letting soil fertility recover without any intervention) with improved fallow practices (mucuna planting, intercropped with maize). The expected gains are increased soil fertility and a harvest of maize of 3 t/ha. The estimated cost of the package (per hectare), to be fully subsidized by the Project, is approximately US\$300 (about one third for seed costs and the rest for additional labor costs).
11. **Package 4—Improved poultry production.** This package aims to improve poultry productivity by addressing the main problems of the current production practices (including high mortality), which limit the development of smallholder poultry farming in rural areas. The main limiting factors include (i) the absence of a chicken coop and/or poultry shelters; (ii) the presence of predators; (iii) rudimentary traditional breeding practices, without any direct food provision; and (iv) poor animal health. As such, the proposed package will improve breeding conditions by financing (i) the construction of chicken coops and the establishment of protected areas; (ii) vaccination and deworming of poultry; (iii) introduction of better genetic material (improved race roosters); and (iv) better protection of chicks in the early stages. This package will be targeted in priority to beneficiaries with prior poultry rearing experience (at least ten chickens) and will require the adoption of the new improved animal genetics, to be distributed in the local communities through the sale of hybrid roosters. The estimated cost of the package is approximately US\$1,090, with the Project subsidizing US\$535 (or about half) of the total.
12. **Package 5—Improved aquaculture.** This package will support traditional aquaculture, which faces several constraints, including (i) genetic degradation due to poor resource management; (ii) poor maintenance of fish ponds; and (iii) insufficient fish feeding. Fish farmers will be supported to acquire quality juvenile fish (fry) and poultry, whose droppings will improve lithosols and fish nutrition. Support will also include starter and additional feed and veterinary products. The beneficiary farmers will be required to rehabilitate their ponds and have the necessary tools and equipment, as well as the additional feed. Package specific eligibility criteria will include previous fish farming experience and having a pond of at least 500 m², located less than 2 km from a road and less than 15 km from a fry/juvenile fish provider. Overall, the aquaculture package will ensure more protein availability for households and additional surpluses for commercialization, resulting in higher incomes. The estimated cost of the package is approximately US\$1,530, with the Project subsidizing US\$710 of the total.
13. **Other parameters.** The present analysis has assumed learning curves for each of the models prepared for the indicative packages, assuming that it would take three years to gradually reach the target yields (for crops) and two years for livestock to reach full capacity. The value of family labor has been included in the analysis, at the same cost as hired labor. As such, both home consumption and marketable surpluses have been valued at current market prices. In the absence of accurate time series for the yields of key crops, it was not possible to forecast the yield evolution without project intervention. As such, the without project situation is considered static. Yet, as presented below, climate change is expected to slowly erode the current yields.



14. **Two AgriMSMEs have been modeled as examples of the type of investments that could be financed by the Project's second component.** The two models are derived from the approved matching grant proposals under the World Bank-financed DRC Western Growth Poles (Projet de Développement des Pôles de Croissance) (P124720). The first AgriMSME is a small-scale rice milling unit, with two revenue streams: the buying-milling-selling of rice and the milling-as-service. The total cost of the investment is estimated at US\$10,590, with three quarters representing the cost of the milling equipment. The second AgriMSME is a transport and marketing business (collector of cassava), with a proposed investment of US\$58,216, mostly represented by the cost of a truck. It is envisaged that the project will be financed through a matching grant mechanism similar types of business in the segments of input provision, transport and marketing, and processing, to complement the support to agricultural production.

III. Financial results

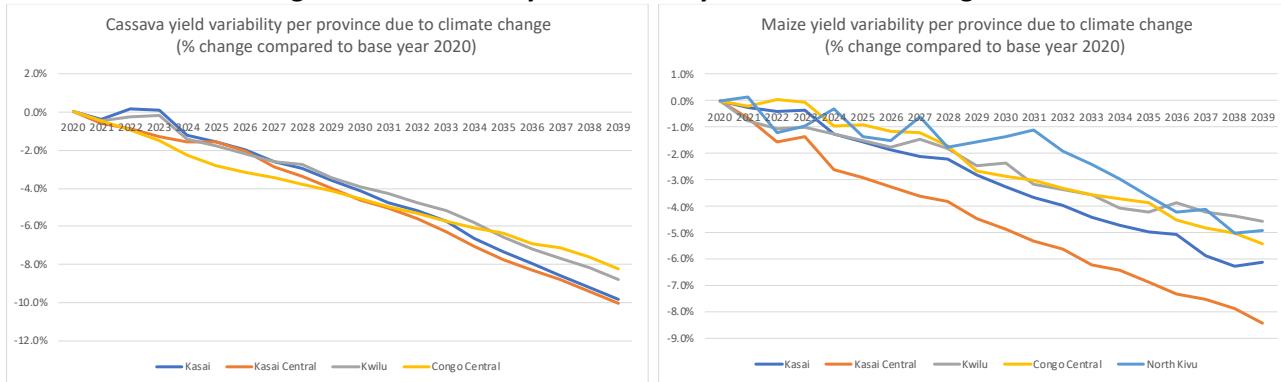
15. **Based on the parameters described above, the indicative project activities are estimated as financially profitable, as summarized in Table 3.1.** At the peak of benefit realization (years 2 to 4, depending on the model), all packages generate significant additional revenues, ranging from US\$379/ha/year for maize to US\$545 per pond per year for aquaculture. Similarly, over a 10-year period, discounted at 12 percent, the NPV of the additional benefits is positive for all five packages, in the range of US\$906 (poultry) to US\$2,612 (pond aquaculture). Benefit-cost ratios for all packages are further demonstrating the financial justification of the proposed packages.

Table 3.1 Financial Results for Indicative Packages

	Package 1 Cassava	Package 2 Maize	Package 3 Improved fallow	Package 4 Improved poultry	Package 5 Improved pond aquaculture
Estimated package cost (US\$/hectare or unit)	395	320	320	1,115	1,696
Producer support (US\$)	395	320	320	500	710
Net Additional income (US\$) at peak	459	379	492	424	545
NPV (@12%, 10-year, US\$) Add. Benefits	1,269	1,613	2,248	906	2,612
B/C Ratio	1.91	1.32	1.56	1.23	1.17

16. **It is important to stress that from a medium to long-term perspective these results are conservative, given the expected yield variability induced by slow onset climate change.** The International Fund for Agricultural Development (IFAD) has developed the Climate Adaptation in Rural Development—Assessment Tool (CARD)⁷¹ as a platform to explore the effects of climate change on the yield of major crops. CARD is intended to support the quantitative integration of climate-related risks in agricultural and rural development investments and strategies, including economic and financial analyses (EFA). When extracting the available information for the Project's target provinces and two indicative crops (cassava and maize) (Figure 3.1), the estimates are that—without the adoption of CSA practices and technologies—yields are expected to decrease over the next two decades (due to the gradual changes in temperature and precipitation). Cassava trends in the target provinces are very similar, with an estimate yield decrease of 5 percent by 2030 (the endpoint of the present analysis) and of 10 percent by 2039 (relative to base year 2020). Maize estimates present more variability, but a general downward trend: Kasai Central is expected to be most affected, with almost decrease over the next 20 years. Overall, the project proposed CSA interventions have a dual impact: productivity increases as well as reversing or attenuating these future trends of climate change-induced yield declines.

⁷¹ <https://www.ifad.org/en/web/knowledge/publication/asset/41085709>

**Figure 3.1 Estimated yield variability due to climate change**

Source: Author's calculations using the IFAD Climate Adaptation in Rural Development (CARD) tool

17. Similarly, the two examples of AgriMSMEs demonstrate the profitability of processing and transport and marketing activities, as summarized in Table 3.2. Small-scale cereal milling could generate about US\$3,563 revenue per year at peak, while financial returns over a 10-year period are satisfying: an internal rate of return (IRR) of 28 percent and an NPV (@12percent) of US\$6,543. The transport and marketing business could generate more than US\$11,000 per year in revenue, with a 10 year IRR of 17 percent and an NPV of US\$8,400.

Table 3.2 Financial results for indicative AgriMSMEs

	MSME 1 Processing	MSME 2 Transport and Marketing
Estimated total investment (US\$)	10,590	58,216
Project contribution (US\$)	7,413	40,751
Net Revenue (US\$) at peak	3,563	11,403
IRR (%)	28%	17%
NPV (@12%, 10-year, US\$) Add. Benefits	6,543	8,398

IV. The impact of rural infrastructure rehabilitation and maintenance

18. The full impact of the productivity gains proposed by the project is expected to be reinforced by better market access, as a result of the Project's investments in rural infrastructure rehabilitation and maintenance. At appraisal, the detailed list of targeted rural infrastructure is not yet available, but the project is targeting the rehabilitation of 4,000 km of rural roads (while making provisions for the maintenance of 6,000 km) and the improvement of 1,000 km of rural waterways and the rehabilitation of 1,000 units of river infrastructure. With limited data availability, the present analysis has focused on estimating the economic impact of the rural roads, while extrapolating the results to match the project's targets and budget. As such, based on the information from previous analyses in DRC and additional data, the impact of a typical 50 km segment has been estimated and the results aggregated for the entire sub-component.
19. Rural roads rehabilitation and maintenance are expected to impact the beneficiaries through two channels: increase the possibility of marketing agricultural surpluses and reducing the cost of procuring staples by food deficient households. In the present analysis using 2012 data, it is assumed that 130 households are affected per km of rural roads, with 79 of them being agricultural households (that is, deriving the most or all of the income from agriculture). In terms of market access, available information indicates that agricultural households have a marketable surplus of about US\$300 per year: the present analysis assumes a conservative increase of 10 percent due to better rural infrastructure. In terms of sourcing food,



a rural household spends US\$312⁷² per year of purchasing food, with the cost of transport playing an important role. Better rural infrastructure is assumed to reduce the cost of purchasing food by 10 percent.

20. Overall, the investments in rural infrastructure rehabilitation and maintenance are economically justified.

An example segment of 50 km, with an investment of US\$400,000, could generate yearly benefits estimated at US\$241,755. Over a 10-year period, the NPV of the additional benefits would total US\$591,000, with an EIRR of 24.2 percent. In addition, better access and lower transport costs are expected to have additional benefits for the rural populations: improved access to healthcare and education, lower costs for non-agricultural goods, lower security risks along the roads, and so on, yet, these aspects cannot be fully quantified at this stage.

Table 3.3 Assumption and economic results for rural road rehabilitation

Segment length assumption (km)	50
Total population served per segment	39,000
(HH served/km)	130
(Ag HH served/km)	79
Gains from better access to market (US\$/segment/year)	118,500
Savings from food purchasing costs (US\$/segment/year)	123,255
Total benefits (US\$/segment/year)	241,755
Rehabilitation cost (US\$/segment)	402,500
Economic Internal rate of Return (%), 10-year	24.2%
NPV (US\$, 10y, @6%)	591,557

V. Economic results

21. The overall benefits of the project have been aggregated using the economic results of the identified benefit streams, against the project costs and including phasing aligned to the results framework.

The economic analysis was developed over a period of 10 years (5 years of implementation and 5 years of capitalization) and assumed that the estimated total number of project beneficiaries will fully adopt the proposed packages. The time horizon and adoption rate assumptions were coupled to compensate for the fact that in reality adoption will be partial, but benefits will last longer for those adopting. Unfortunately, at the appraisal stage, it was not possible to have a realistic estimate of adoption.

22. Overall, the Project is profitable, generating a NPV, at 6 percent of US\$244.5 million and an EIRR of 29.5 percent⁷³ (over a 10-year period and on a budget of US\$500 million), not accounting for environmental externalities.

The economic results are very satisfying, given that as previously indicated several other project benefits (such as improved nutrition, demonstration effects, development of networks of input suppliers and agri-SMEs, etc.) could not be quantified at this stage, due to limited data availability. After the pilot phase of direct farmer support (year 1), additional refinements could be made to the Project's economic and financial analysis.

23. The Project is also expected to generate significant environmental externalities, which have also been valued in the present analysis. The GHG accounting (annex 7) estimates that the project activities

⁷² Source: WFP Comprehensive Food Security and Vulnerability Analysis (2014, using 2011–2012 data)

⁷³ These estimates are comparable to the economic results of previous analyses done in DRC, in particular for the proposed Kasai project where estimated EIRRs ranged from 22 percent for the market infrastructure component to 38 percent for the agricultural production component and 42 percent for the agri-SME component.



(agriculture interventions and rural infrastructure) constitute a net carbon sink. Over a period of 20 years, the with-project scenario would result in a total mitigation of 4.4 million tCO₂e, with an annual net average carbon sink of 220,235 tCO₂e. In line with the World Bank guidelines (in particular, the *Guidance note on shadow price of carbon in economic analysis* (September 2017), this mitigation potential has been valued using the forecast social price of carbon under two different pathways. As such, including the environmental benefits, the project's economic results are significantly higher, with an NPV between US\$319.1 million (low estimate shadow price of carbon) and US\$393.2 million (high estimate shadow price of carbon).

24. **These economic results are robust when testing several sensitivity scenarios, including reduced adoption rates, delays in implementation, cost overruns, etc.** Nevertheless, as summarized in
25. **Table 3.4,** the interplay between these risk scenarios (in particular, lower output prices coupled with significant delays) can significantly affect the project's economic justification.

Table 3.4 Sensitivity analysis

Scenarios	EIRR	NPV (6%)	
		USD million	
Base scenario	29.5%	244.5	
Costs + 10%	27.2%	229.0	
Costs + 20%	25.0%	213.5	
Costs + 50%	19.5%	167.0	
Benefits - 10%	26.9%	204.6	
Benefits - 20%	24.0%	164.6	
Benefits - 30%	18.4%	109.2	
Benefits delayed by 1 year	23.2%	195.5	
Benefits delayed by 2 year	17.3%	130.7	
Benefits delayed by 3 year	11.2%	57.6	
Benefits delayed by 4 year	3.7%	-22.4	
Adoption rate - 10%	26.9%	169.0	
Adoption rate - 20%	24.1%	136.2	
Production prices - 5%	19.0%	100.7	
Production prices - 10%	7.9%	-0.5	
Input prices + 5%	20.7%	117.9	
Input prices + 10%	11.7%	34.0	

**Annex 4: Procurement****Applicable Procurement Regulations**

1. Procurement activities for the Project will be carried out in accordance with the procedures specified in the “World Bank Procurement Regulations for IPF Borrowers” (November 2020); the World Bank’s Anti-Corruption Guidelines, “Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants” (October 2006, revised in January 2011 and July 2016); and provisions stipulated in the Financing Agreement.” In line with provision of para. 12 of the Investment Project Financing Policy, and when needed, procurement shall use the procedures stipulated in the Procurement Regulations for Situations Under Urgent Need of Assistance or Capacity Constraints.
2. All goods, works and non-consulting services will be procured in accordance with the requirements set forth in or referred to in Section VI—Approved Selection Methods: Goods, Works, and Non-Consulting Services of the Procurement Regulations and the consulting services will be procured in accordance with the requirements set forth or referred to in Section VII. —Approved Selection Methods: Consulting Services of the Procurement Regulations, the PPSD and the Procurement Plan approved by the World Bank.
3. A PPSD has been drafted to ensure the procurement activities are packaged and prepared in such a way that they expedite implementation considering (i) the market analysis and the related procurement trends, and (ii) the procurement risk analysis. The PPSD will include the recommended procurement approaches for the project that have been reflected in the approved Procurement Plan covering the first 18 months of the project implementation. table 4.1 below summarizes the various procurement methods to be used for the main activities financed by the proposed IDA Credit.

Table 4.1: Procurement Methods

Type of Procurement	Selection Methods
Goods	Request for Proposals, Request for Bids, Request for Quotations, and Direct Selection
Works	Request for Proposals, Request for Bids, Request for Quotations, and Direct Selection
Non-consulting Services	Request for Proposals, Request for Bids, Request for Quotations, and Direct Selection
Consulting Services	Quality Cost Based Selection, Fixed Budget Based Selection, Least Cost Based Selection, Quality Based Selection, Consultant’s Qualification Based Selection, Direct Selection, and Selection of Individual Consultants.

Procurement Plan

4. The PPSD will recommend procurement approaches for the Project reflected in the approved Procurement Plan covering the first 18 months of the Project implementation. The Procurement Plan for the first 18 months has already been approved. Any updates of the Procurement Plan shall be submitted for World Bank approval. The recipient shall use the World Bank’s online procurement planning and tracking tools (STEP) to prepare, clear, and update the Procurement Plans and manage all procurement



transactions and related documentation.

Institutional Arrangements for Procurement

5. The NPCU established under the Ministry of Agriculture for the implementation of the Project will be responsible for ensuring that the fiduciary aspects of the project are managed appropriately. The procurement unit within the NPCU will be staffed with well-qualified and experienced staff who will be fully responsible for carrying out all the procurement activities of the Project. All staff will be recruited on a competitive basis.

Assessment of the Ministry's Capacity to Implement Procurement.

6. A procurement capacity assessment of the NPCU was conducted. It noted that the NPCU has extensive experience with the World Bank procurement guidelines and that the coordination of the Project will need to be fully reinforced by the new staff who will be recruited to implement the Project.

Guiding Principles of the Implementation of Procurement

7. The Government has decided to mainstream the implementation of the Project into the existing entities and structures and it will be framed by the following principles: (a) line ministry to be made more responsible and accountable in Project implementation with a focus on strengthening country systems; (b) equity; and (c) performance-based agreements which make providers accountable for delivering specific results. All Project procurement activities will be carried out by the procurement unit within the NPCU to be set up and staffed with at least two qualified and experienced staffs.

8. **To the extent possible, considerations of value for money will be used to include appropriate social or community benefit aspects in procurement.** For example,

- **Contracting/subcontracting with commercial enterprises:** includes social clauses, such targeted employment, training, apprenticeship requirements, local sourcing, or local participation for relatively large-scale contracts/subcontracts. In a similar vein, commercial enterprises could be required to provide enhanced environmental commitments, under which enterprises are required to adopt sustainable approaches to construction, emissions, waste management, and so on. These social and environmental commitments could be set out as mandatory or conformance specifications (with a pass-fail on bid evaluation) or performance-based (whereby these criteria are rated, and the bidder would gain more points for meeting or surpassing the base levels). The prime contractors would also likely have to engage with local organizations, as facilitators and mentors to be able to achieve the targets.
- **Results-based outsourcing with local organizations:** there is the potential for public agencies to outsource to local organizations for the delivery of services under the project.

9. Procurement Risk Assessment

Given the (a) country context and associated risk, (b) low procurement capacity in implementing under NPF, and (c) the fact that this Project will be implemented under the World Bank's New Procurement



Framework, the procurement risk is rated **High**.

10. The prevailing risk can be improved to Substantial if the corrective measures identified in table 4.2 below are implemented.

Table 4.2: Procurement Action Plan Corrective Measures

Ref.	Tasks	Responsibility	Due Date
1	Recruit a well-qualified and experienced staff for the procurement unit within the NPCU.	NPCU	Before effectiveness
2	Train all the procurement staff on the World Bank's New Procurement Framework (online courses and face-to-face courses) and on the use of Systematic Tracking of Exchanges in Procurement (STEP) tools, which will be used to manage all procurement transactions and related documentation.	NPCU World Bank	Three months after effectiveness
3	Train all the procurement staff in robust ex-ante due diligence on winning bidders to ensure they meet the bidding requirements on financial capacity.	NPCU World Bank	Three months after effectiveness
4	Organize a launch workshop involving all stakeholders.	NPCU	Three months after effectiveness
5	Develop a contract management system to ensure that all contracts under the Project are effectively and efficiently managed.	NPCU	Continuously
6	Hiring and independent consultant to conduct annual compliance verification with focus on identified or perceived high-risk contracts and informed by incoming complaints and grievances.	NPCU	Three months after effectiveness

Procurement Reviews and Thresholds

Table 4.3: Thresholds for Procurement of Goods and Works and Non-consulting Services based on risk

	Procurement Type	Prior Review Threshold (US\$)	Comments
1	Goods	Above 1,500,000	All
2	Non-consultant Services	Above 1,500,000	All
3	Works	Above 5,000,000	All
4	Consulting Services firm	Above 500,000	All
5	Individual Consultant	Above 200,000	All

Frequency of Procurement Supervision

11. In addition to the prior review to be carried out by the World Bank, at least two implementation



support missions will be carried out annually, including field visits to be carried out for post review of procurement actions. As agreed with the Government, contracts will be published on the web through STEP. Annual compliance verification monitoring will also be carried out by an independent consultant and will aim to: (a) verify that the procurement and contracting procedures and processes followed for the project were in accordance with the Financing Agreement; (b) verify technical compliance, physical completion, and price competitiveness of each contract in the selected representative sample; (c) review and comment on contract administration and management issues as dealt with by the NPCU; (d) review the capacity of the NPCU in handling procurement efficiently; and (e) identify improvements in the procurement process in light of any identified deficiencies.

12. Project procurement activities will be carried out in accordance with the World Bank's procedures specified in the World Bank Procurement Regulations for IPF Borrowers: Procurement in Investment Project Financing Goods, Works, Non-Consulting and Consulting Services dated July 2016 and revised November 2017 and August 2018, and any other provisions stipulated in the Legal Agreement. In addition, the implementation of procurement will be in accordance with the "Guidelines on preventing and combating Fraud and Corruption" stipulated in section 2.2a of Annex IV of the Procurement Regulations.

13. All goods, works and non-consulting services will be procured in accordance with the requirements set forth in or referred to in Section VI—Approved Selection Methods: Goods, Works, and Non-Consulting Services of the Procurement Regulations. The consulting services will be procured in accordance with the requirements set forth or referred to in Section VII. —Approved Selection Methods: Consulting Services of the Procurement Regulations, the PSD, and the Procurement Plan approved by the World Bank.

14. A PSD has been prepared with World Bank support and aims to ensure that procurement activities are packaged and prepared in such a way that they expedite implementation considering both (i) the market analysis and the related procurement trends, and (ii) the procurement risk analysis.

15. Key risks within the procurement process have been identified and corresponding mitigation is proposed (see the Risks section above and the Risks section of the Project). The PIM ensures that the proposed mitigation measures are reflected. Procurement arrangements for high- or substantial-risk contracts within the project in table 4.4.

**Table 4.4: Procurement Arrangements for High or Substantial Risk Contracts**

Contract Name, Description and Category	Estimated cost in US\$	World Bank Review	Procurement method/competition, call for submissions: <ul style="list-style-type: none"> • National • International • Open • Limited • Direct Selection Single source • QCBS, QBS, etc. • Negotiations • BAFO 	Evaluation Method <ul style="list-style-type: none"> • Noted criteria (VfM) • Lowest evaluated cost
Recruitment of and operator (OT) International NGOs or firms in charge of implementation of Component 1	30,000,000	Prior	International Open/QBS	Criteria noted Publication of ROI
Recruitment of a financial entity to administer the direct farmer support	1,000,000	Prior	International Open/QBS	Criteria noted Publication of ROI
Contract with accredited research institutes for the production of fortified organic seeds	12,000, 000	Prior	Single source with CGIAR centers	Not applicable, but cost negotiation
Contract with a specialized organization for technical and logistical support	4,000,000	Prior	International Open/QBS	Criteria noted Publication of ROI
Contract with a firm in charge to develop and implement a farmer registry system	300,000	Prior	International Open/QBS	Criteria noted Publication of ROI
Contract with a firm in charge to develop and test a risk-based verification system	900,000	Prior	International Open/QBS	Criteria noted Publication of ROI
Supply of furniture, hardware, and information technology equipment	750,000	Post	National Bid Request	Lowest evaluated cost
Supply and installation of Internet connection equipment (VSAT and related)	200,000	Post	Limited/Request for Quotations	Lowest evaluated cost
Supply of five 4 x 4 vehicles for project coordination	250,000	Post	Limited/Request for Quotations	Lowest evaluated cost



Contract Name, Description and Category	Estimated cost in US\$	World Bank Review	Procurement method/competition, call for submissions: <ul style="list-style-type: none">• National• International• Open• Limited• Direct Selection Single source• QCBS, QBS, etc.• Negotiations• BAFO	Evaluation Method <ul style="list-style-type: none">• Noted criteria (VfM)• Lowest evaluated cost
Construction and/or rehabilitation of phytozoosanitary facilities	280,000	Post	Limited/Request for Quotations	Lowest evaluated cost
Contract with accredited national research institutes INERA and SENASEM for production of seeds	100,000	Post	Single source with SENASEM	Protocol
Recruitment of company to do the surveys and impact evaluation data collection	5,000,000	Post	National Open/SIC	Publication of ROI
Contract with a mobile operator in charge of the dissemination of alert messages in national languages for the benefit of targeted households	50,000	Post	National Open/CBS	Criteria noted (VfM) Publication of ROI

NB: Whatever the method of selection, the terms of reference must be submitted to IDA before any processing of consultants selections (firms or individuals).



Annex 5: Financial Management

Financial Management and Disbursement Arrangements

1. In accordance with Bank Directive: Financial Management Manual for World Bank Investment Project Financing Operations, and Bank Guidance: Reference material—Financial Management in World Bank Investment Project Financing Operations, the financial management arrangements of the **Project's** NPCU have been assessed to determine if the entity has acceptable financial management arrangements in place that satisfy the World Bank's requirements. These arrangements would ensure that the implementing entity: (a) use project funding only for the intended purposes in an efficient and economical way; (b) prepare accurate and reliable accounts as well as timely periodic financial reports; (c) safeguard assets of the Project; and (d) have acceptable auditing arrangements.
2. The World Bank team determined that financial management (FM) arrangements at the NPCU could be deemed adequate to project implementation subject to meeting the following requirements: (a) opening the designated account in a financial institution acceptable to the World Bank; (b) updating the existing manual of procedures to take into account the new Project and grant specificities; (c) acquiring a multisite and multiproject version of the management accounting software TOM2PRO to accommodate the decentralized and multiagency nature of the Project, recording transactions, and preparing Quarterly Interim Unaudited Financial Reports, no more than three months after Project effectiveness; (d) recruiting a Financial Management Specialist to assist the financial management team that will be dedicated to the Project; (e) recruiting an Accountant to do the same; (f) recruiting an internal audit consultant who will contribute to strengthening the project's internal control environment and internal audit unit; and (g) recruiting an independent external auditor acceptable to IDA, based on acceptable terms of reference 6 months after effectiveness.
3. The project implementation entity will be the NPCU. Implementation arrangements of the ongoing PARRSA project will be maintained under the Project. The current arrangements provide for the NPCU to be the main implementing unit for the other World Bank-funded projects. The proposed Project will use the existing financial management arrangements currently in place at the NPCU.
4. The overall FM risk at preparation is considered High. The proposed financial management arrangements, including the mitigation measures, for this project are considered adequate to comply with the provisions of the World Bank Directive: Financial Management Manual for World Bank Investment Project Financing Operations, and World Bank Guidance: Reference material—Financial Management in World Bank Investment Project Financing Operations. Additional details on the FM assessment are found below.

Project Institutional and Implementation Arrangements

5. The proposed Project will be implemented by the NPCU which currently manages PARRSA and PICAGL. The NPCU will implement all components of the Project. The Project will be governed by a Project Steering Committee consisting of Ministry of Agriculture as its chair, with permanent members from other pertinent directorates within the Ministry of Agriculture, of Science and Technology, Rural Development, and Ministry of Fisheries and Livestock. The full Committee will meet at least twice a year. Smaller working groups will be set up for specific project components and will meet with more frequency to guide activities and coordination of the investments undertaken by the three entities.



Financial Management

Overview of Project and Implementing Entity

6. It is expected that the NPCU will play the leading role in project management and will have overall responsibility for the fiduciary management of the Project.

Country PFM Situation and Use of Country Systems

7. The overall project fiduciary risk is considered High; fiduciary risks have a high probability of impacting the PDO in a highly adverse way. Overall the fiduciary environment of the country is weak, with the main reasons further detailed.

8. Despite making progress during the last decade, the DRC's governance ratings are among the lowest in the world and significantly below the Sub-Saharan African average. Because of weak governance, improvements in the institutional performance of the country's economy and political participation systems have been stagnant. The national budget is insignificant given the size, population, and natural resource wealth of the country. The tax revenue base in the DRC is narrow and does not allow the Government to mobilize the revenues needed to finance its own operations and deliver public services. Budget execution suffers from: (a) redundant and lengthy steps in budget execution processes, including various political interventions in the approval of commitments and payments; (b) abuse in the use of exceptional or emergency procedures; and (c) excessive centralization of budget execution authority in the Ministry of Finance and the Ministry of the Budget. The 2017 Country Policy and Institutional Assessment by the African Development Bank Group for the DRC shows overall below-average performance relative to IDA borrower and Sub-Saharan Africa countries, especially in the areas of economic management and public sector management and institutions. There are a number of reasons for this below-average performance. The weakness of formal institutions charged with the oversight of public finances has enabled the widespread use of discretionary power. Data controls in the FM system are weak. There have been some delays in financial reporting. Some internal control deficiencies have resulted in the default of compliance with core rules. Internal audits have not been systematically performed in keeping with generally accepted standards. While external audits have been adequate, there have been some delays in audit reports and follow up. The overall project fiduciary risk is considered High, and fiduciary risks have a high probability of impacting the PDO in a highly adverse way. Overall the fiduciary environment of the country is weak.

9. Assessments by the World Bank and other donors, notably the Public Expenditure Management and Financial Accountability Review, Public Expenditures Review (PER), and Public Expenditure and Financial Accountability (PEFA) portray an unsatisfactory economic and financial control environment including weak budgeting preparation and control, financial reporting, and external audit procedures, and limited human resources. In-depth structural reforms are consequently required in the areas of economic governance, public expenditure management, financial sector expertise, and public enterprises to strengthen capacity in public administration. To this end, with the support of the donor community, the Government of DRC undertook a series of PFM reforms in budget preparation and execution, adhesion to treasury forecasts, preparation of regular budget execution reports, and simplification of the national budget classification system. The first critical step in these series of PFM reforms was the adoption in July 2011 of a new PFM organic Law, preceded by the adoption of a new procurement code in December 2008. Additional decrees are being finalized to further clarify the organic Law. The third PEFA, concluded at the end of 2019, took stock of the areas of progress and revised the existing PFM strategy plan accordingly.



The World Bank-financed project “Strengthening PFM and Accountability” (P145747), effective since May 2014, strengthens the Public Financial Management system both at the central level and at some provinces levels. The outcomes of the use of the national PFM systems assessment report which had been undertaken in April 2013 will be gradually implemented for the World Bank-financed projects. Concerning internal and external audits, discussions will be engaged with the government to organize the working environment of the “*Inspection générale des Finances*” (IGF) and the “*Cours des comptes*.” Most of these reforms are still ongoing, and it will admittedly take time for them to yield substantial improvements in the management of public funds.

Risk Assessment and Mitigation Measures

10. The World Bank’s principal concern is to ensure that Project funds are used economically and efficiently for the intended purpose. Assessment of the risks that Project funding will not be so used is an important part of the financial management assessment work. Risk features are determined over two elements: (i) the risk associated to the Project (inherent risk), and (ii) the risk linked to a weak control environment of the Project implementation (control risk). The content of these risks is described below, mainly focusing on the NPCU.

Table 5.1 PFM risk assessment

Risk	Risk rating	Risk mitigating measures incorporated into Project design	Residual risk after mitigation measures	Conditions for effectiveness (Y/N)
INHERENT RISK	H		S	
Country level Poor governance and slow pace of implementation of PFM reforms that might hamper the overall PFM environment.	H	Some PFM reform programs were implemented and concluded successfully, through IDA-financed projects, such as the Enhancing Governance Capacity (P104041), and the Establishing Capacity for Core Public Management (P117382). Currently ongoing are the Public Service Reform and Rejuvenation Project (P122229) and the Strengthening PFM and Accountability (P145747) projects approved in January and May 2014 respectively by the World Bank’s Board. These reforms will address the key new challenges the country is facing.	H	
Entity level —Lack of coordination due to several stakeholders being involved and to the political interference of the ministry. —All stakeholders aren’t familiar with the specific implementation	H	—The NPCU will ensure the coordination of the Project with the collaboration of other stakeholders. —Updating the existing manual of procedures which clarifies the roles and responsibilities of the various stakeholders. The PIM defines implementation procedures in line with adequate fiduciary requirements. Training sessions will also be provided. From inception, the necessity for seamless coordination will be integrated into the protocols/agreements between the NPCU and other external stakeholders respectively.	S	



modalities of the Project. —The NPCU will implement the Project in association and in collaboration with several external stakeholders. There will be an inherent issue of coordination and consolidation of actions and information.				
Project level —Weak capacity and lack of availability of different stakeholders involved in other tasks within their usual duties —Project design is relatively complex since it involves activities executed across multiple sectors and in multiple provinces, with multiple government entities, combined with difficult physical access to some Project areas; —Weak FM capacity at different stakeholder levels and risk of fraud and corruption.	S	<ul style="list-style-type: none">—Updating the existing Accounting, Financial and Administrative Procedures Manual, coupled with the adoption of a PIM that includes adequate fiduciary procedures.—PARRSA FM staff will provide fiduciary support.—Use of smart fiduciary tool to perform supervision where physical access is difficult.	M	
CONTROL RISK	S		S	
Budgeting The budget preparation process may be delayed given the number of stakeholders involved in Project implementation.	S	<ul style="list-style-type: none">—The FM staff will help stakeholders in preparing realistic budgets consistent with the work program. Moreover, the manual of procedures will define the arrangements for budget formulation, budgetary control, and the requirements for budgeting revisions.—Annual detailed disbursement forecasts will be included in the budget. Quarterly IFR will provide information on budgetary control and analysis of	S	



		<p>variances between actual performance and budget estimates.</p> <ul style="list-style-type: none"> - If applicable, no later than the project closing date, the Central Bank of DRC (BCC) will reconcile the balances of funds disbursed to participating financial institutions (PFIs) based on approved sub-loans and the actual disbursements made by PFIs to AgriMSMEs and small corporates. Any undisbursed balances will be refunded to the World Bank. 		
Accounting Lack of reliable accounting system and weak capacity may undermine Project capacity to produce accurate and reliable information on time	S	<ul style="list-style-type: none"> —Acquisition of management accounting software and its customization to generate the financial reports of the project. —Implement appropriate training sessions based on agreed accounting procedures. —Recruitment of a qualified and experienced financial management specialist and an accountant with proven experience in managing World Bank-financed projects to assist the financial management team that will be dedicated to the Project. 	M	
Internal Controls and Internal Audit An internal control environment not suited to the World Bank's fiduciary management procedures.	S	<ul style="list-style-type: none"> —Updating the existing manual of procedures to take into account the new project and grant specificities; —Electronic and mobile payments will be the preferred means for disbursements related to conditional cash transfers (CCT). —Internal audit unit will be strengthened, and the audit plan will be reviewed by the World Bank. —Periodic reviews of risk management and controls over the management of Project funds will be carried out as part of Project supervision. —Recruitment of an internal audit consultant who will perform a risk assessment analysis of the Project for the Government's internal audit institutions. In addition, the capacity of the internal audit institutions will be strengthened through training sessions. 	S (Within three (3) months after effectiveness) During Project implementation	
Funds Flow (i) Risk of misappropriation of funds, allocated to Project activities, used for non-eligible purposes; (ii) Weak capacity in the disbursement procedures of smart subsidies such as vouchers and conditional cash transfers (CCTs).	H	<p>Opening the designated account in a financial institution acceptable to the World Bank.</p> <p>Sub account will be opened for provincial implementation agency or payment agency where advance will be deposited to enable payment to beneficiaries.</p> <p>As relates to cash transfers and use of vouchers, special attention will be paid to the following aspects:</p> <ul style="list-style-type: none"> ▪ Targeting and identification of beneficiaries. ▪ Processing of applications (verification of eligibility and beneficiaries). ▪ Effecting actual payments (security and regularity of payment systems). ▪ Audit and control of the process (ex-ante and ex-post). ▪ Accounting and justification of expenditure). <p>A specific section on the fiduciary management of</p>	H	



		<p>cash transfers will need to be included in the manual of procedures to be drafted.</p> <p>Require of the future FM consultant to ensure compliance with disbursement letter stipulations, especially the monthly submission of withdrawal applications.</p>		
Financial Reporting Delay in the submission of acceptable IFRs to IDA due to weak capacity of the FM team and to the number of stakeholders involved in the project.	S	<p>(i) Acquisition of management accounting software and its customization to generate the financial reports of the Project.</p> <p>(ii) Agreement of the format and content of the Interim Financial Report which will include Project specifics.</p>	M	
External Auditing Audit not carried out in compliance with acceptable standards. Delay in submission of the audit report.	S	<p>Shortlist and ToRs of the audit will be reviewed by the World Bank.</p> <p>Reporting system will be strengthened to enable timely generation of the financial statements.</p>	M	
Fraud and Corruption Possibility of circumventing the internal control system with colluding practices as bribes, abuse of administrative positions, mis-procurement is a critical issue.	H	<p>The ToR of the external auditor will comprise a specific clause on the audit of corruption.</p> <p>Internal audit TOR will include a periodic review of Project transactions, both accounting and procurement.</p> <p>Requirement that Banks and non-Bank financial institutions located outside the country who issue securities (unconditional guarantees) shall have a correspondent financial institution located in the Employer's Country to make it enforceable.</p> <p>Expanding the scope of the audit function to include technical and/or "Value for Money" audits to make it more difficult for contractors, supplies, and consultants to get away with substandard work/goods or deliverables.</p> <p>Developing an effective and accessible complaints handling system to increase the probability of detecting irregularities in the implementation process.</p> <p>Training of the project staff in fraud and corruption framework as part of the institutional strengthening</p>	S)	
Overall FM risk	H		S	

**Table 5.2 Key issues and Action Plan to reinforce the control environment**

No.	Issue	Remedial action recommended	Responsible entity	Completion	Project effectiveness conditions
1	Disbursement arrangements	Project implementation must open a new designated account in a financial institution acceptable to the World Bank.	DRC Government	After project signing	N
2	Accounting Staffing	In contracts of prospective FM staff, including coordinator, the ToRs for essential staff will need to systematically include objective performance criteria: <ul style="list-style-type: none"> • Recruit a project financial management specialist • Recruit a project accountant 	NPCU	by effectiveness	N
3	Information system accounting software	Update the current version of the accounting software TOM2PRO to a multisite and multiproject version to accommodate the decentralized and multiagency nature of the Project, record project transactions, and prepare Quarterly Interim Unaudited Financial Reports whose format will be agreed upon during negotiations,	NPCU	Within three months after effectiveness	N
4	Administrative, Accounting and Financial Procedural Manual	Update the existing procedural manual (i) to include the specificities of the new Project; (ii) ensure adequate ownership of stakeholders; (iii) strengthen the anti-corruption aspects, and (iv) ensure the comprehensive coverage of all the components of necessary FM arrangements in IPF projects by beginning the planning and budgeting, accounting, internal control, funds flow, financial reporting, and auditing arrangements of the Borrower and entity responsible for Project implementation; and (iv) include a specific section on the fiduciary management of cash transfers. At a minimum, as relates to cash transfers, special attention will be paid to the following aspects of the cash transfers: <ul style="list-style-type: none"> ▪ Targeting and identification of beneficiaries ▪ Processing of applications (verification of eligibility and beneficiaries) ▪ Effecting actual payments (security and regularity of payment systems) ▪ Prospective of forecasting relevant disbursements ▪ Audit and Control of the process (ex-ante and ex-post) ▪ Accounting and justification of expenditure) 	NPCU	By negotiation	N
5	Internal auditing	Recruitment of an internal audit consultant based on ToRs acceptable to the World Bank	NPCU	Within three months after effectiveness	N
6	External financial auditing	Agree the ToRs for the recruitment of an external auditor acceptable to IDA	NPCU	six months after effectiveness	N

Governance and anticorruption considerations

11. The country's political situation has weakened the governance and anticorruption environment. In the context of the project, the following governance and anticorruption measures will contribute to enhance transparency and accountability during project implementation: (a) an effective implementation



of the fiduciary mitigation measures should contribute to strengthen the control environment; (b) the ToRs of both the internal audit unit and external auditor will include a specific chapter on fraud and corruption; (c) the administrative and financial management procedural manual will include anticorruption measures with a specific safety mechanism that will enable individual persons and NGOs to denounce abuses or irregularities; (d) measures to improve transparency such as providing information on project status to the public and to encourage participation of civil society and other stakeholders will be strengthened during project implementation; and (e) an anticorruption action plan will be prepared in addition to the robust FM arrangements designed to mitigate the fiduciary risks.

12. Staffing and Training: The NPCU will have overall responsibility for the FM of the Project, including budgeting, accounting, reporting, disbursement, and internal control at both the central and decentralized level. To compensate for the extra workload to be borne by the NPCU FM staff, a qualified and experienced FM specialist will be recruited to support the NPCU in the supervision financial management of the project. An accountant will also be hired to support the accounting division.

13. Budgeting: The NPCU will prepare an annual work plan and budget for the implementation of Project activities, taking into account Project objectives. The work plan and budgets will identify the activities to be undertaken and the role of the respective parties in the implementation. The annual work plans and budgets will be consolidated into a single document by the NPCU, with the support of the FM team, which will be submitted to the Steering Committee for approval, and then to World Bank for a “no objection” no later than November 30 of each year. The consolidation will be carried out after NPCU has assured, through its technical departments, that the plan and the budget meet the objectives of the Project. The budgeting arrangements will include an annual work plan and budget to be prepared for each year. The Project’s FM Manual of Procedures will define the arrangements for budgeting, budgetary control, the requirements for budgeting revisions, and the adoption by the Steering Committee of the budget. Annual detailed disbursement forecasts and budgets will be required—an emphasis will need to be placed on the prospective nature of such forecasts so that uses of funds are adequately covered. IFRs will provide information on budgetary control and analysis of variances between actual and budget.

14. Accounting Policies and Procedures: The accounting systems and policies, administrative, and financial procedures will be documented in the Project’s Administrative, Accounting and Financial Manual. It will be used by the Project staff as a reference manual, by the World Bank to assess the acceptability of the accounting, reporting, and control systems, and by the auditors to assess project accounting systems and controls and to design specific audit procedures. Accounting management software that can handle multiple projects, multiple sites, and multiple donor characteristics will be procured. At least two sets of financial reports will be prepared by the NPCU: the quarterly Interim Financial Reports, as required by the World Bank; and the Annual Financial Statements, which will include the Project’s consolidated financial statements. Project accounts will be maintained on an accrual basis, supported with appropriate records and procedures to track commitments and to safeguard assets.

15. Internal Control and Internal Auditing: The internal control will be organized in the NPCU’s Administrative, Accounting, and Financial management manual which will be updated so as to provide a framework for implementation, in compliance with World Bank directives. It will highlight the management of the Project and the appropriate separation of tasks and responsibilities. The internal audit functions will be performed by NPCU’s Internal Audit Division, whose professional capacity will be



strengthened by recruiting an internal audit consultant.

16. **Financial Reporting and Monitoring:** Quarterly IFRs to be agreed upon during negotiation will be prepared and submitted to the Bank 45 days after the close of each quarter. The format of this report will include: (a) a statement of sources and uses of funds; (b) a table summarizing the use (utilization) of funds by category, activities, and by components; (c) an updated procurement plan; (d) a report on the physical progress of activities; (e) a table on budget execution and, (f) the summary of missions of internal audit, as well as the implementation status of the recommendations of internal or external audit and supervision missions.

17. **External Auditing:** The financial statements and internal control system in place at NPCU will be subject to annual audits by an independent external auditor acceptable to the Bank.

18. The audit report should reflect all the activities of the financial management program and be submitted to IDA within six months after the end of each fiscal year. The selection of an external auditor of Project financial statements should be presented to IDA for nonobjection. Appropriate ToR for the external auditor will be provided to the Project team.

19. The audit reports that will be required to be submitted by the NPCU and the due dates for submission are:

Audit Report	Due Date
Institutional financial statements, that is, annual audited financial statements (including statement of financial position, statements of Sources and Uses of Funds with appropriate notes and disclosures) and Management Letter.	Submitted within six months after the end of each fiscal year.

20. In line with the new access to information policy, the Project will comply with the disclosure policy of the World Bank of audit reports (for instance making them available to the public without delay after receipt of all reports' final financial audit, including qualified audit reports) and place the information on its official website within one month after acceptance of the final report by the World Bank.

Implementation Support and Supervision Plan

21. FM implementation support missions will be consistent with a risk-based approach and will involve a collaborative approach with the Project team. A first implementation support mission will be performed six months after the project becomes effective. Afterwards, missions will be scheduled by using the risk-based approach model and will include the following: (a) monitoring of the financial management arrangements during the supervision process at intervals determined by the risk rating assigned to the overall FM Assessment at entry and subsequently during implementation (ISR); (b) integrated fiduciary review on key contracts; (c) review of the IFRs; (d) review of the audit reports and management letters from the external auditors and follow-up on material accountability issues by engaging with the task team leader, client, and/or auditors; the quality of the audit (internal and external) also is to be monitored closely to ensure that it covers all relevant aspects and provides enough confidence on the appropriate use of funds by recipients; (e) physical supervision on the ground; and (f) assistance to build or maintain



appropriate financial management capacity.

22. Based on the outcome of the financial management risk assessment, the following implementation support plan is proposed:

Table 5.3 FM Implementation Support Plan

FM Activity	Frequency
Desk reviews	
Interim financial reports review	Quarterly
Audit report review of the Project	Annually
Review of other relevant information such as interim internal control systems reports.	Continuous as they become available
On site visits	
Review of overall operation of the FM system	Bi-Annual (Implementation Support Mission)
Monitoring of actions taken on issues highlighted in audit reports, auditors' management letters, internal audit and other reports	As needed
Transaction reviews (if needed)	As needed
Capacity-building support	
FM training sessions	Before the Project starts and thereafter as needed

Conclusion of the Assessment

23. **The overall FM risk at preparation is considered High.** The proposed financial management arrangements, including the mitigation measures for this Project, are considered adequate to comply with the provisions of the Bank Directive: "Financial Management Manual for World Bank Investment Project Financing Operations," and the Bank Guidance: "Reference material—Financial Management in World Bank Investment Project Financing Operations."

Disbursements

Designated Account

24. The NPCU will have two Designated Accounts (DAs): one for managing the GRiF funded costs and possible payouts in case the risk transfer product (that is, insurance) triggers under subcomponent 1.3; and a second one for the other sub-components and components of the Project. Both DAs will be managed by a joint signature of both the NPCU Financial Management Specialist and the NPCU Project Coordinator. The Designated Account will be opened in a reputable commercial bank on terms and conditions acceptable to IDA. This account will be held in US dollars. The Designated Accounts will receive cash advances to pay project expenses eligible for IDA financing. Payments will be made in accordance with the provisions of the manual of procedures. Sub-designated accounts will be opened for the PPIU as needed to enable them to pay for their day-to-day operating cost, and the ceiling based on three months' forecasts approved by the NPCU coordinator. The sub-account balances will be included in the financial statements and that the justification of advances given to PPIUs will be done in an orderly on a quarterly

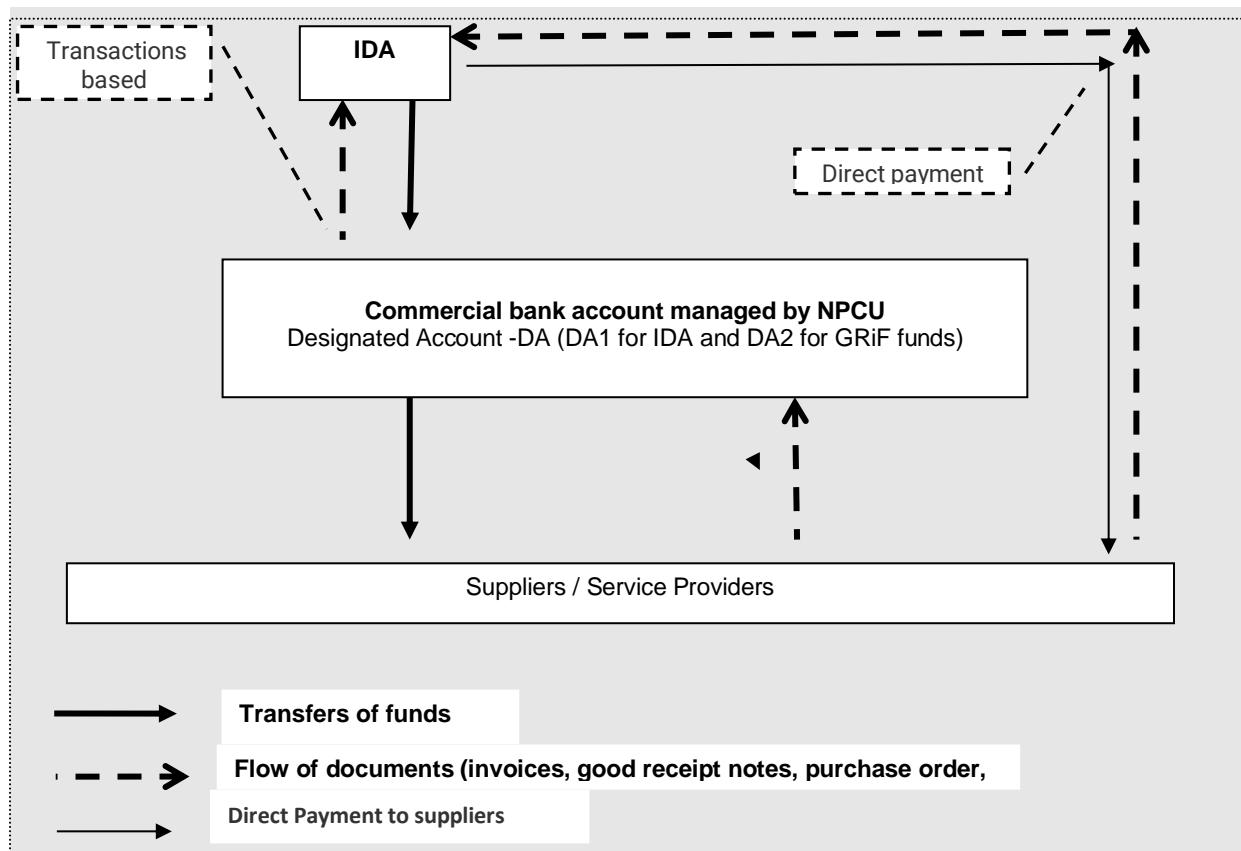


basis. The minimum value of applications for Reimbursement, Direct Payment, and Special Commitment will be stated in the disbursement letter and replenishment applications will be submitted at least once a month and will include reconciled bank statements and other documents as may be required until such time as the recipient may have the capacity to convert to report-based disbursement.

Disbursement Methods

25. Transaction-based disbursement procedures (advances, direct payment, reimbursement, and special commitments) will be used. The transaction-based disbursement method (SOE) will be applied for the Designated Account (DA). Customized statement of expenditures will be used for documentation of cash transfers transactions (CCTs and ETCs) and Line of Credits (LoC). If applicable regarding disbursement related to LoC, no later than the Project closing date, the Central Bank of Congo (BCC) will reconcile the balances of funds disbursed to PFIs based on approved sub-loans and the actual disbursements made by PFIs to MSMEs and small corporates. Any undisbursed balances will be refunded to the Association. The disbursement methods that can be utilized for component 1.3 of the project are reimbursement and advances (through the Designated account). The Designated account ceiling will be stated in the disbursement letter. Funds flows for the DA are illustrated as follows:

Figure 5.1 Funds Flow Arrangements



26. **Disbursements by category:** The table below sets out the expenditure categories to be financed



by IDA and GRiF.

Table 5.4 Disbursement Category Table (IDA Financing)

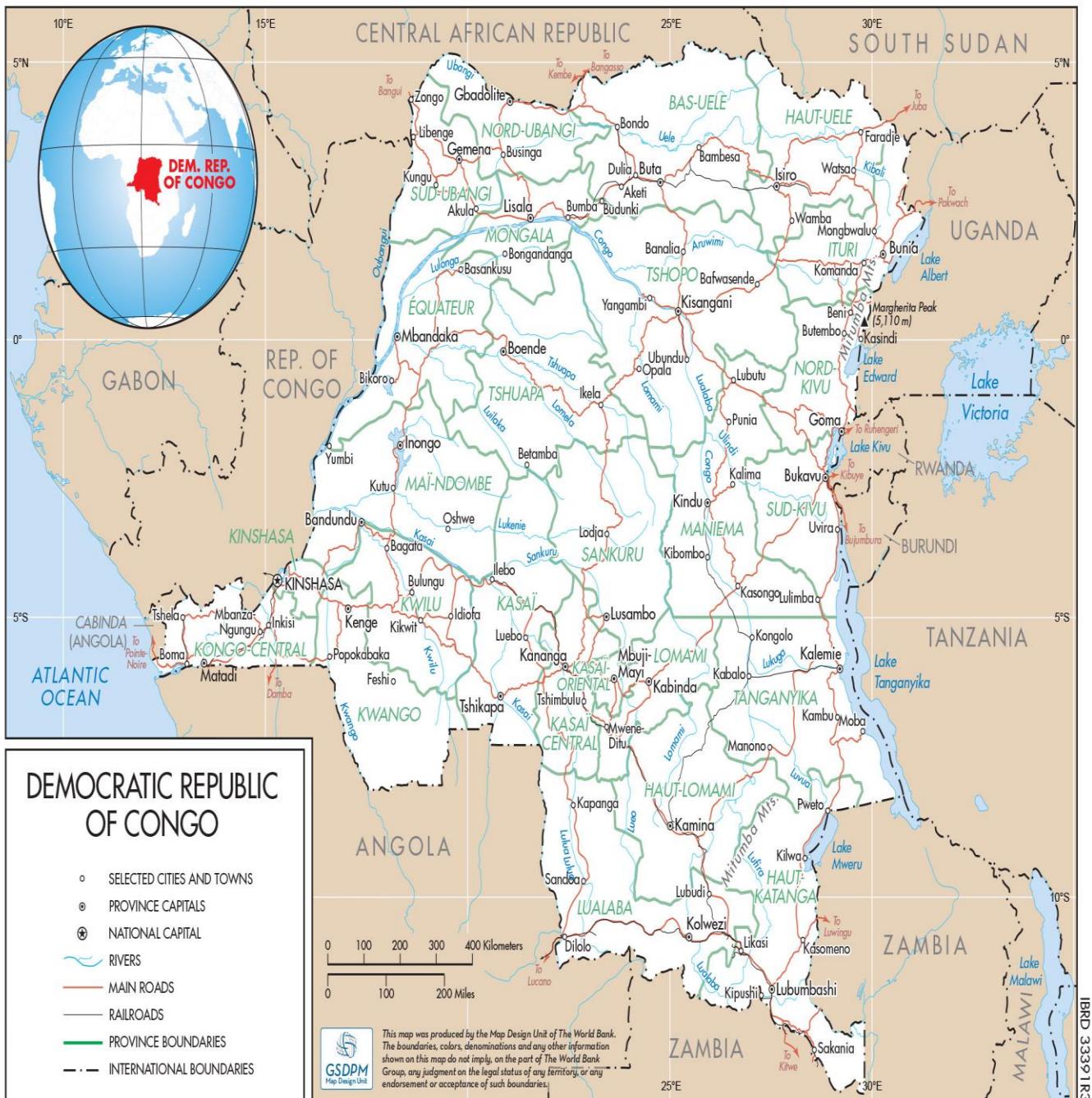
Category	Amount of the Credit Allocated (expressed in US\$)	Amount of the Grant Allocated (expressed in SDR)	Percentage of Expenditures to be Financed (inclusive of Taxes])
(1) Goods, works, non-consulting services, consulting services and Operating Costs under Components 1.1(b), 1.2, 2.1, 2.2(b)(c) (d) and (e), and 3 of the Project	141,500,000	98,540,600	100% (50% Credit/50% Grant)
(2) Matching Grants and CCTs under Component 1.1(a) of the Project	92,000,000	64,068,800	100% (50% Credit/50% Grant)
(3) Sub-Loans under Component 2.2(a) of the Project	3,500,000	2,437,400	100% (50% Credit/50% Grant)
(4) ECTs under Component 1.3(a) of the Project	10,000,000	6,964,000	100% (50% Credit/50% Grant)
(5) Premia, Fees and Associated Costs under Component 1.3(b) of the Project	0	0	100%
(6) Emergency Expenditures under Component 4 of the Project	0	0	100%
(7) Refund of Preparation Advance	3,000,000	2,089,200	Amount payable pursuant to Section 2.07 (a) of the General Conditions
TOTAL AMOUNT	250,000,000	174,100,000	

Table 5.5 Disbursement Category Table (GRiF Financing)

Category	Amount of the Grant allocated (expressed in US\$)	Percentage of expenditures to be financed (inclusive of Taxes)
(1) Non-consulting services (including Premia, Fees and Associated Costs) and consulting services under Component 1.3(b) of the Project	20,000,000	100%
TOTAL AMOUNT	20,000,000	

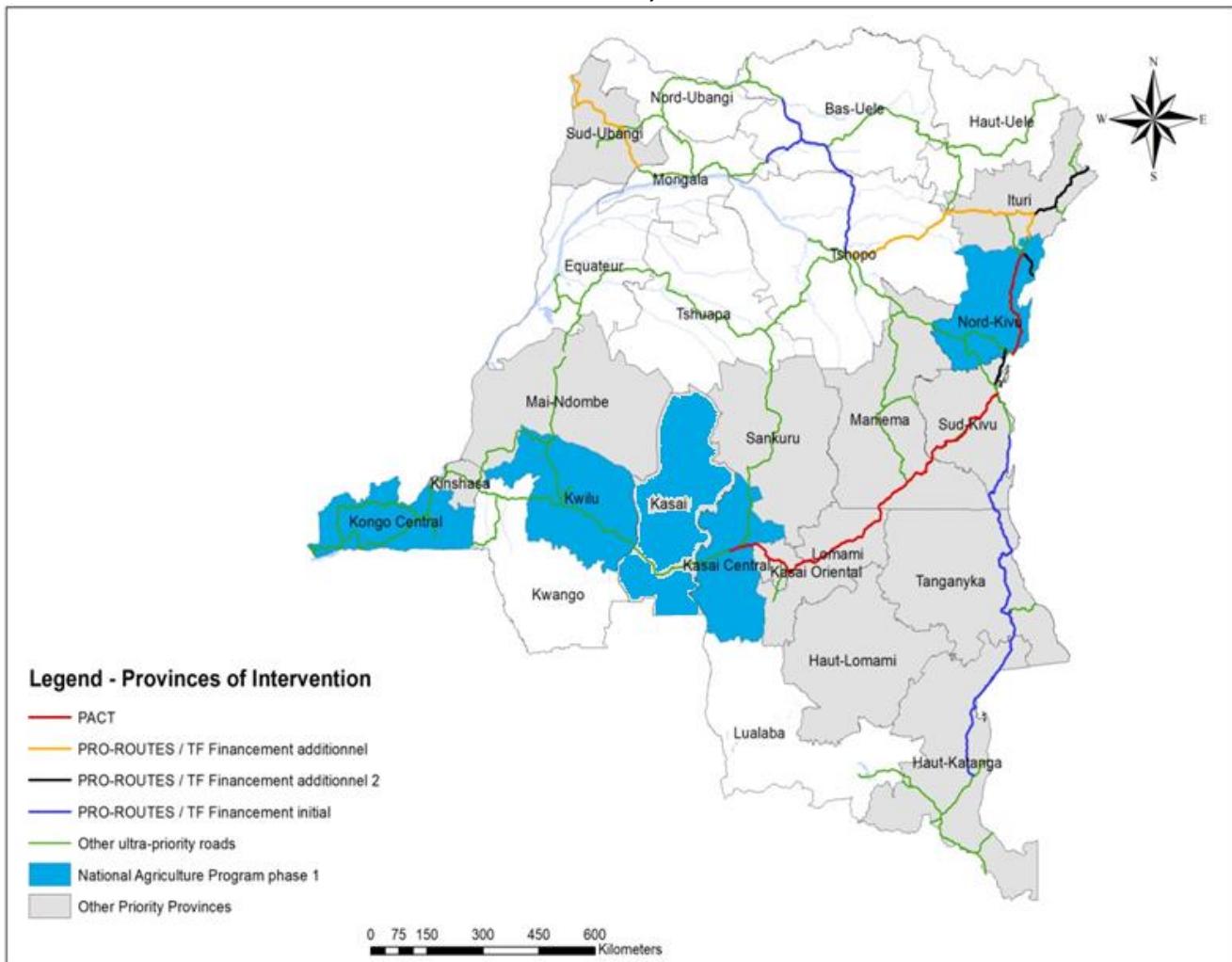


Annex 6: Maps





Map 1—Five selected provinces for Phase 1, other Priority Provinces as per analysis in Technical File 1⁷⁴ and Road Investments by World Bank



⁷⁴ See: https://drive.google.com/file/d/1IL5enICWhtRCvzi1FGcRJ0SF8SB_G5YV/view?usp=sharing

**Annex 7: Assessment of the Net Carbon Balance****Background**

1. In its 2012 Environment Strategy, the World Bank adopted a corporate mandate to conduct greenhouse gas (GHG) emissions accounting for investment lending. The quantification of GHG emission is an important step in managing and ultimately reducing emissions and is becoming common practice for many international financial institutions. The World Bank has adopted the Ex-Ante Carbon-balance Tool (EX-ACT) developed by FAO in 2010,⁷⁵ to assess a project's net carbon balance. This is the net balance of tons of CO₂ equivalent (tCO₂e) GHGs that were emitted, or carbon sequestered as a result of project implementation compared to a "without project" scenario compared to the "initial" scenario. EX-ACT thus estimates the carbon stock changes as well as GHG emissions per unit of land, expressed in tCO₂e per hectare and year.
2. In terms of accounting GHG contributions related to transport activities changes triggered by road infrastructure development (construction, rehabilitation, and maintenance), the Bank uses the Roads Economic Decision Model (RED) and the HDM-4 Road User Cost Model. Both tools have been developed to improve the decision-making process for the development and maintenance of low-volume rural roads.

Project Focus and Objectives

3. The Project is designed to improve agriculture productivity and market access of smallholder farmers in selected project areas and strengthen public sector capacity to respond to eligible agriculture sector emergencies. The Project will invest in sustainable development by promoting climate smart and sustainable agriculture practices, such as conservation agriculture and agroforestry, that improve the productivity while relieving pressure on natural resources. The Project will also focus on improving rural roads in the Project area to improve the access to markets, which has been found to be an important strategy for reducing poverty and enhancing inclusive growth in DRC.

Data Inputs in EX-ACT

4. DRC has tropical moist climate and Low Activity Clay soil type. The Project duration is five years; the capitalization period is assumed to be 10 years. Dynamics of evolution are assumed to be linear. Default "Tier 1" coefficients are used.

The Project proposes several activities that can be captured with the GHG accounting tool EX-ACT:

- Component 1 (US\$290): Direct smallholder farmer support, including climate smart agriculture approaches, such as agroforestry, on-farm irrigation systems, conservation agriculture and manure application
- Component 2: (US\$150) Rural Infrastructure, focusing primarily on improving (rehabilitating and maintenance) priority rural roads.

Adoption rate. It is expected that the Project targets 1.7 million farmers, who cultivate approximately 1.6 ha each on average. We further assume that about 30 percent of the farmers will complete the supported activities.

⁷⁵ <http://www.fao.org/tc/exact/ex-act-home/en/>

**Table 7.1. Data inputs to EX-ACT in the current, without project and with project scenario**

Activities	Current scenario	Without project scenario
Technology packages on climate and nutrition smart agriculture provided to small holder farmers Maize Cassava	Traditional agriculture practices implemented on 1,700,000 ha producing low yields 1t/ha 10t/ha	Climate smart practices (improved follow, improved varieties, integrated soil management) applied on 510,000 ha, improving resilience and yields 3t/ha 17t/ha
Technology packages (PTechs) on agroforestry developed and implemented	No agroforestry currently practiced in the participating provinces	10,000 ha of agroforestry
Land-use change: Deforestation	Continued expansion of agriculture from Savannah to forest through slash-and-burn agriculture.	CSA practices promoted through PTechs encourage and facilitate farmers to apply shorter fallow, improve yields, and avoid expansion Avoided deforestation 1,700,000 PTechs CSA practices adopted by 30 percent 510,000 farmers with approx. 0.1 ha avoided expansion of agriculture land into forest land
Introducing improved breeds and animal health services (poultry)	No improved breeds available	90,000
Rehabilitation of roads		9,000 km rural roads improved (rehabilitation and maintenance)

Data inputs and analysis with RED and HDM-4 Models

5. The calculations and estimates were made using data obtained from the impact evaluation of the PARRSA⁷⁶ project funded by the World Bank in 2012 in DRC. It was deemed appropriate to use this reference information due to the comparable nature of the scopes between PARRSA and the Project in terms of rural roads infrastructure improvement and rehabilitation in isolated rural regions within the DRC. Traffic growth factors are assumed comparable given the characteristics of the rural environment and projected traffic flows, on both composition (vehicle typology) and volume/frequency (Average Annual Daily Traffic—AADT) within the country. Following the completion of the rehabilitation works, it is assumed the traffic growth pattern will continue for three years, gradually reducing to a more traditional trend assumed to be 3 percent/year. Forecasts on changes of vehicle composition are not available. However the forecasted AADT is assumed to account for typology shifts that naturally occur as demand for transport varies along the corridor. Although sub-component 2.1 refers to the financing and implementation of road rehabilitation and maintenance for an estimated 9,000 km within Project provinces, the GHG accounting analysis was generated to obtain yearly transport-related emission estimates per km of road intervened, allowing for future

⁷⁶ Projet d'Appui à la Relance et Réhabilitation du Secteur Agricole



refinement in the accounting process once detailed information is available. As such, the accounting was carried out for a sample road of 100 km in length.

Table 7.2. Inputs for Base Scenario Average Annual Daily Traffic (AADT)

Traffic (AADT)		
Vehicle Description	Without Project	With Project
Motorcycle	20	87
Delivery Vehicle		3
Truck Medium		2
Total	20	92

Table 7.3. Inputs for Base Scenario Road Characteristics

Scenario	Road Condition			Speed Flow Type				
	Road	Carriageway	Surface Code	Ultimate Capacity	Free-Flow Capacity	Nominal Capacity	Jam Speed at	Number of Lanes
	Roughness (IRI, m/km)	Width (m)	(1-Paved / 2-Unpaved)	(pcse/hour/lane)	(pcse/hour/lane)	(pcse/hour/lane)	(km/hour)	(#)
Without	10.0	5.0	2	1200	0	840	20	1
With	6.0	7.0	2	1400	140	1260	25	2

**Table 7.4. Results
Results from Agriculture**

Project Name	<i>DRC Agriculture Productivity and Commercialization Project</i>		
Continent	<i>Africa</i>		
Components of the project	Gross fluxes		
	Without		With
	All GHG in tCO2eq		
	Positive = source/negative = sink		
Land-use changes			
Avoided deforestation	16,764,026	0	-16,764,026
Other LUC (Agroforestry)	0	-73,988	-73,988
Agriculture			
Annual	0	-4,510,373	-4,510,373
Perennial	0	-1,717,100	-1,717,100
Livestocks			
Chicken		5,185	5,185
Total	32,347,330	-6,296,276	-38,643,606
Per hectare	8.1	-3.1	-18.7
Per hectare per year	0.5	-0.2	-1.2

***Results from the Rural Roads Component***

6. For a rehabilitation intervention of a road of 100 km, the total gross CO₂ emissions from transport-related activities are expected to raise from 46.54 tons in the without project scenario to 249.9 tons in the with-project scenario, for the first year of operation (203.37 tCO₂ of net emissions). This primarily due to expected increase in motorcycle traffic and to generated/induced traffic flows of cars/pickups and trucks. For the proposed roads rehabilitation and maintenance of 9,000 km and over a period of 15 years, the total gross CO₂ emissions for the same activities are 11,030,796 tons, the total net emissions are 10,918,248 tons, and the annual net average emissions are 545,913 tCO₂ emissions per year.

Overall Results

7. Overall, the estimation results show that the Project activities (agriculture interventions and rural infrastructure) constitute a net carbon sink. Over a period of 15 years, the gross sink for with Project scenario is 27,725,358 (10,918,248–38,643,606) tCO₂e, with an annual net average carbon sink of 2,030,327 (545,913 - 2,576,240) tCO₂e.

**Annex 8: Gender Action Plan****Background**

- 1. Women are key players in agriculture and food security in DRC. They provide the majority of manual labor and manage the decisions around nutrition in the household.** In DRC, over 80 percent of women are employed in the agricultural sector, compared to 61 percent of men, which makes women's participation as beneficiaries a necessary condition for achieving the objectives of the Project. In DRC, women are responsible for most of the agricultural production: in the fields they plant, weed, pick, harvest and take care of the poultry and small ruminants. At home, they are almost entirely responsible for household chores (fetching water and firewood, processing and preparing food, etc.). To earn an income, many women are employed as agricultural workers, cultivate a vegetable garden and sell vegetables, or have a small business.
- 2. Large gender gaps persist in DRC due to the multifaceted nature of gender inequality.** DRC ranks 149 (out of 153 countries) as measured by the Global Gender Gap Index from the World Economic Forum⁷⁷. In 2020, the Global Gender Gap score (based on the population-weighted average) stands at 68.6 percent, just slightly above the Sub-Saharan African average 68.0 percent. DRC has closed only 57.8 percent of its gender gap so far, and is especially stagnant in the educational gender gap, where it has yet to close 32 percent of the gap. While important gains have been made in terms of legislation addressing gender inequalities, persistent sociocultural disparities restrict women's engagement in social and economic life as well as in public decision-making. Women's participation in politics is limited, and they currently occupy about ten percent of parliamentary seats in both the National Assembly and in the Senate. Only 38.8 percent of adult women have reached at least a secondary level of education compared to 61.2 percent of their male counterparts.⁷⁸ The revised Family Code (2016) removed several discriminatory provisions in terms of access to land and resources for women and increased the minimum age of marriage for girls from 15 to 18; however, much remains to be done to ensure that such legislation is enforced. Women continue to face unequal treatment with respect to labor force participation, land tenure, and property ownership. For instance, the percentage of permanent, full-time female workers was reported at 18.5 percent in the 2013 World Bank Enterprise Survey Results (notably lower than the average 29 percent in surveyed countries).⁷⁹
- 3. Gender inequality in the DRC likewise manifests itself through high prevalence rates of gender-based violence (GBV), which represent a significant barrier to women's full engagement in social and economic life in the DRC and remain correlated with violence and insecurity.** Overall, 52 percent of all women aged 15–49 reported experiencing physical violence (by any perpetrator)⁸⁰ while 27 percent have experienced sexual violence⁸¹. For those having experienced physical violence, the perpetrator was most often a current male partner (56.8 percent). Most intimate partner violence (IPV) in the DRC was physical with 45.9 percent of married women experiencing physical violence. Approximately one out of three women (36.6 percent)

⁷⁷ This index benchmarks national gender gaps on economic, education, health and political criteria, and provides country rankings that allow for effective comparisons across regions and income groups.

⁷⁸ World Economic Forum, Global Gender Gap Report, 2020.

⁷⁹ World Bank and International Finance Corporation, Enterprise Surveys, Democratic Republic of Congo, 2013, <https://data.worldbank.org/data-catalog/enterprise-surveys>. World Bank Enterprise Survey Results collect and analyze firm level data from 139 countries.

⁸⁰ At least once since the age of 15 (Demographic and Health Survey, 2013–2014).

⁸¹ Of which 16 percent in the last 12 months (Demographic and Health Survey, 2013–2014).



experienced IPV in the form of emotional violence, and one out of four (25.5 percent) experienced sexual violence at the hands of a male partner. Approximately half of women who experienced IPV (50.2 percent) suffered from bruises, injuries, sprains, dislocations, or burns in the previous 12 months due to their partner's actions.⁸² Globally, the World Health Organization estimates that more than one out of three women worldwide (35 percent) have experienced either physical and/or sexual IPV or sexual violence by a non-partner.⁸³

4. **Younger women and adolescent girls constitute a particularly vulnerable group.** Overall, younger women (ages 20–29) are more likely to experience physical violence.⁸⁴ In the most recent Demographic and Health Survey, the national teenage pregnancy rate stands at 27 percent (for female respondents aged 15–19).⁸⁵ In addition, 37 percent of women aged 20–24 were married before the age of 18, compared to six percent of men in the same age group.⁸⁶
5. **Levels of acceptability of IPV in the DRC are likewise very elevated, with 74.8 percent of women and 59.5 percent of men believing that physical abuse of a wife is justified for at least one specified reason.**⁸⁷ Interestingly, IPV is seen as justified by the younger female population—over three quarters of women aged 15–29.⁸⁸ These high statistics reflect the significant socialization and internalization of violence against women as an acceptable norm.
6. **In the agriculture sector specifically, the largest gender gaps** are related to lack of access to new technology, inputs as well as assets, and as a consequence, the agriculture productivity gap in DRC is 26 percent.⁸⁹ Traditional gender norms restrict women's access to assets, such as land, and exclude women from decision-making processes, both in the community and at home. In addition, low asset ownership and low levels of education reduce rural women's bargaining power within the household and limit their voice in collective action in their communities and in the wider agricultural sector. For example, women hand over their incomes from agricultural work and production to their male partners and, as such, are not able to make productive investments in productive assets, such as improved seeds and fertilizers, which keeps their agricultural productivity and yields low.
7. **In view of these significant inequalities and barriers to women's full social, economic, and political participation, the Government of the DRC and the World Bank are committed to closing the gender gap for women producers through agriculture sector development.** In the National Agricultural Investment Plan (2014–2020), improving gender equality is one of the five main priorities. The World Bank's Country

⁸² Demographic and Health Survey, 2013–2014.

⁸³ World Health Organization, *Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*, 2013.

⁸⁴ Demographic and Health Survey, 2013–2014.

⁸⁵ Adolescent fertility is nearly three times higher among young women living in the poorest households (42 percent) than among those living in the wealthiest households (15 percent).

⁸⁶ Demographic and Health Survey, 2013–2014.

⁸⁷ Demographic and Health Survey, 2013–2014.

⁸⁸ Around 60 percent of women of this age group agree that a husband is justified in committing physical violence against his wife if she argues with him.

⁸⁹ Donald, Aletheia; Campos, Francisco; Vaillant, Julia; Cucagna, Maria Emilia. 2018. *Investing in Childcare for Women's Economic Empowerment*. Gender Innovation Lab Policy Brief, No. 27.



Partnership Framework FY16-20 underlines the importance of creating rural livelihoods opportunities through community-based development and agribusiness. Addressing gender gaps in agricultural productivity and in entrepreneurship are the key thematic areas in WBG's Africa Region Gender Action Plan FY18-22.

Project Approach on Gender Mainstreaming

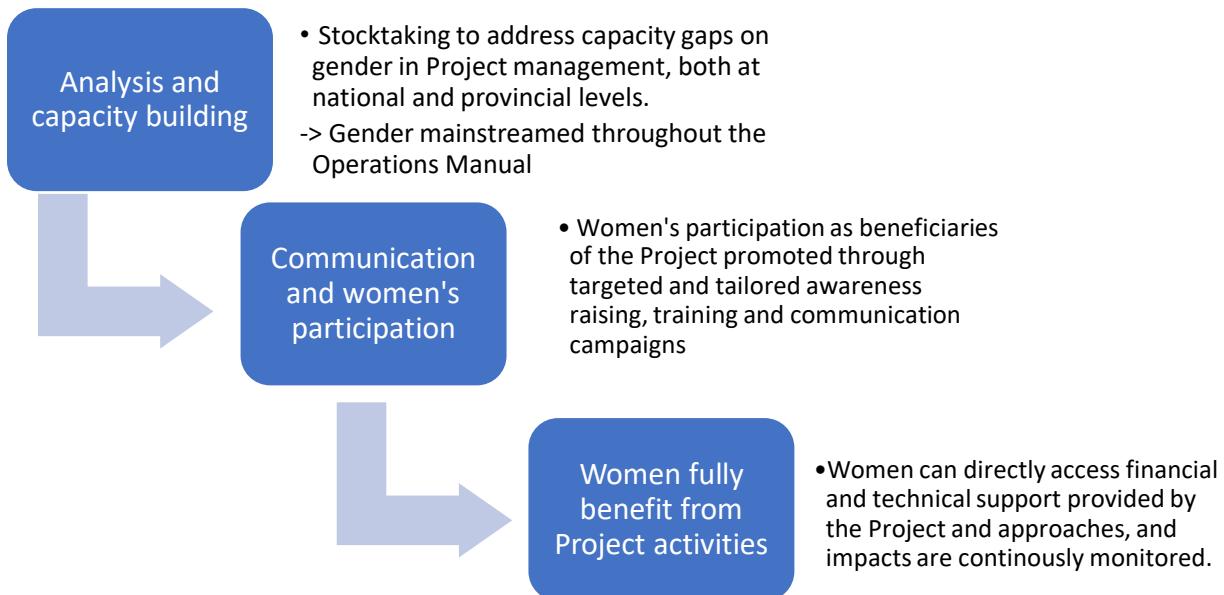
8. **The Project will adopt a phased approach for gender mainstreaming to build capacity of the stakeholders to identify and address the gaps and constraints faced by women producers and farmers to achieve women's full participation and assure that they will wholly benefit from the Project's activities and financing.** The Project will address key gender gaps in agricultural productivity and agribusiness operations. The approach builds on continuous monitoring and building on lessons learned from previous interventions in the agriculture and other sectors in DRC and in the region. There will also be continuing consultations with women farmers and beneficiaries (in enabling environments with other women to facilitate the discussions) to ensure that women's perspectives are collected and integrated into programming throughout the life of the Project.
9. **At the beginning of the Project, the focus will be on raising awareness and building capacity of the implementation partners at the national and provincial levels.** The Project will have national coverage over the life of the multiple phases. There will be a National Project Coordination Unit (NPCU), with Project Provincial Implementation Unit (PPIUs) in each of the participating provinces (the first phase of the SOP will include Kasai Central, Kasai, Kongo Central, Kwilu, and North Kivu). In addition, there will be other technical partners who will travel to the field and support the implementation of the different Project components (see details in table 8.1). The various Project stakeholders and actors involved (at national and provincial levels) in the implementation will receive training on gender-sensitive programming, and gender considerations have been mainstreamed in the PIM. This training, to be coordinated with training and awareness-raising activities regarding risk mitigation of sexual exploitation and abuse as well as sexual harassment, includes discussions about gender norms in the DRC and how those norms have negative impacts on women, including regarding their participation in the agriculture sector as well as how they are not able to maximize the benefit that they might otherwise receive from agricultural work.
10. **Selection criteria for technical operators and other service providers will include experience in gender mainstreaming in agriculture and value chain development projects.** Recruitment of women will be promoted and prioritized, for example, by disseminating information in sources or places that women typically access and making sure that the recruitment processes do not intentionally or unintentionally exclude women (e.g., stringent educational or job requirements that many women in the DRC will not be able to meet and are not necessary for the role)⁹⁰.
11. **Gender-sensitive programming and raising awareness of the role of and significant contributions by women to the agriculture sector will be integrated into communication and training campaigns throughout the Project.** This will include age, gender, and culturally appropriate ways to facilitate the meaningful

⁹⁰ Evidence from impact evaluations shows that increasing the number of female extension agents, integrating gender-mainstreaming into extension agent training curricula, or targeting the training to both spouses can help improve women farmers' outcomes (*Top Policy Lessons in Agriculture. Gender Innovation Lab, March 2020*).



participation of women in the planning, implementation, monitoring and evaluation of Project. Based on the experience from the initial stage, the Project will look for opportunities to build upon behavior and attitudinal change (e.g., using household methodologies), which could be piloted in targeted provinces. Participation of women will also be promoted by incorporating quotas for women farmers, female-headed households and producer organizations where majority of the members are women.

Figure 8.1. Integration process of women in project activities



12. The Project's approach on gender includes activities to address the main gender gaps in agriculture, to empower women and to improve their agency, are at the same time designed to prevent and mitigate the risk of GBV. As such, it is important to create an enabling environment for women's participation through strategic and behavior change communication, targeting religious and traditional leaders, community members, both men and women. This will also be the opportunity to enhance community awareness as well as improve capacities and strengths of project beneficiary communities, implementing partners and government staff in preventing and reducing risks of GBV.

Table 8.1: Addressing gender gaps and improving gender equality and women's empowerment

Components and activities to contribute to closing the gender gaps	Specific activities and indicators
Component 1: Agriculture Productivity This component addresses the gender gaps in access to inputs, services, finance and decision-making.	Indicators: <ul style="list-style-type: none">• Share of women registered in the national farmer registry (percent)• Share of women farmers accessing improved inputs/services• Share of women farmers with access to improved financial services in rural areas



Components and activities to contribute to closing the gender gaps	Specific activities and indicators
Women's access to agriculture inputs and services	<ul style="list-style-type: none">Deliver trainings in locations, days and times, and language accessible to men and women—use a variety of methods (e.g., theater, radio, ICT)Train TO and extension service agents on gender sensitive methodologies and recruit female agents
Reducing social barriers and increasing decision-making power	<ul style="list-style-type: none">Raise awareness in the communities around attitudinal change regarding gender norms and understand “why” it is important to recognize and build on women’s contribution in agriculture productionRaise social awareness on importance on women’s engagement in decision-making processesEncourage both men and women to come to trainings, but ensure there is always a women-only space to gather feedback from women specificallyEnsure women’s participation in decision-making bodies, esp. in marketsArrange visits to successful women’s groupsSelect male and female gender champions in communities
Reducing women’s workload	<ul style="list-style-type: none">Demonstrate and train in use of new agricultural technologies, and ensuring women’s regular, unrestricted access to new technologies promoted by the Project.
Women’s access to business development services and finance	<ul style="list-style-type: none">Business Development Services (BDS) include training targeting needs and constraints of women (or example, financial literacy, timing and place of training)
Component 2: Smallholder Market Access This component addresses the gender gaps in access to jobs, economic activities, finance and markets.	Indicators: <ul style="list-style-type: none">Share of business proposals from cooperatives that have at least 50 percent women in decision-making roles
Women’s participation in rehabilitation, maintenance, and management of transport infrastructure can offer income generation opportunities	<ul style="list-style-type: none">Targeted outreach campaign for women on opportunities to participate as laborers and team supervisors in rural infrastructure rehabilitation and maintenance.
Improving women’s access to finance and markets	<ul style="list-style-type: none">Enabling women’s participation in value chain groups implementing value adding and/or quality enhancement activitiesEnsure that BDS providers have the knowledge and technical capacity to provide services to womenDevelop financial products (group savings, credit) tailored for women and women entrepreneursSupport/train women as agro-input dealersTargeted outreach campaign for women on objectives, process and rules of selection and funding of productive alliances or value chain groups
Component 3 (Sub-component 3.1) Capacity building for delivering agriculture public services	Indicators: <ul style="list-style-type: none">New gender unit created at the Ministry of Agriculture (MoA)Share of women staff at the MoA and within the gender unitShare of women in the decision-making positions at the MoA and within the gender unit



Components and activities to contribute to closing the gender gaps	Specific activities and indicators
This component addresses the gender gaps in access to training and decision-making	<ul style="list-style-type: none">• Share of women staff within the NPCU, including in decision-making positions• Share of women on training activities
Ensure that men and women are involved in institutional capacity development	<ul style="list-style-type: none">• Create a gender unit at the Ministry of Agriculture, with clearly defined mandate and mission.• Ensure that all the training materials include the gender perspective and address the specific gender norms that hinder women's full and meaningful participation in the agriculture sector• Ensure that women access information about these training opportunities reliably and can meaningfully participate.
Gender balance in the decision-making structure of the project	<ul style="list-style-type: none">• Ensuring that the project's management structure has both men and women at all levels• Ensure that both male and female personnel hired within the project's management structure have a basic understanding of gender norms and the specific challenges and barriers that women farmers face.

**Annex 9. Lessons from the rapid agriculture portfolio review in the DRC****1. Given that no ICR has been done in recent years on agriculture sector investments funded by the World Bank, a rapid portfolio review was conducted of the three ongoing agriculture investments in the sector.**

These operations are totaling US\$341 million and expected to benefit 500,000 smallholder farmers:

- (i) Agriculture Rehabilitation and Recovery Support Project—PARRSA—P092724 (Mongala, Nord Ubangi, and Sud Ubangi Provinces);
- (ii) Western Growth Poles Project—PDPC—P124720 (Kongo Central Province); and
- (iii) Regional Great Lakes Integrated Agriculture Development Project—PICAGL—P143307 (Tanganyika and South Kivu Provinces).

Box A9.1 Building on Lessons from the Agriculture Rehabilitation and Recovery Support (PARRSA) Project (P092724)

The objective of PARRSA was to increase agriculture productivity and improve marketing of crops and animal products for approximately 105,000 smallholder farmers in the North West Region (Equateur and Pool Malebo). The project timeframe and geographic scope was expanded through an Additional Financing currently under implementation within the North West. The original three components are to: (i) improve on farm and off farm production, including capacity building for producer organizations; (ii) support rehabilitation of feeder roads and marketing infrastructure; and (iii) selective support to the Ministry of Agriculture restructuring program. The results achieved include: (i) substantial increases in crop yields: e.g., cassava, from 7 to 19 tons per hectare and maize, from 0.8 to 1.5 tons per hectare; (ii) increased access to improved seeds: a total of 2,792 tons of commercial seeds for different crops have been produced (compared to a target of 1,500 tons, an increase of 186 percent) and distributed through a network of seed multipliers to farmers' households leading to the above-mentioned productivity increases; (iii) mobilization of more than US\$400,000 equivalent in community savings benefiting 77,000 people; (iv) establishment of 16 village storage facilities amounting to a total storage capacity of 12,800 m³; and (v) rehabilitation of 2,269 kilometers of rural roads compared to a target of 2,500 km (90 percent of the target). 715 villages have benefited from the rural roads rehabilitation and 50,000 jobs were created since the beginning of the project due to the civil works that took place in the project areas. A key lesson in terms of phasing, was to build a base for increase agriculture productivity among smallholder farmers, to generate marketable surplus, to then support the link of those smallholder farmers to markets and value adding opportunities. This phasing approach to productivity and the onwards to post-harvest and value-added opportunities was important to build smallholder technical capacity and confidence in reaching markets. An important lesson on rural roads rehabilitation was the collaboration with UNOPS as delegated management contractor that ensured quality supervision of works (including environmental and social safeguards), training of local specialized workforce before works begun and capacity building of local roads maintenance committees.

A key to the success of PARRSA has been the emphasis on institutional capacity building combining both (i) the support to public services delivery such as access to seeds and planting materials, agricultural advisory services, vaccination campaigns, new animal breeds, better access to market due to roads improvement, etc.; and (ii) the community level investments, using a CDD-type approach to develop new organizational skills to use common productive and marketing infrastructure as well as exploring other opportunities. An important lesson learned for future agriculture development projects in DRC is the approach of working through national agencies (Ministries of Agriculture, Rural Development, and Livestock, the National Agriculture Research Agency—INERA, the National Seed Agency—SENASEM, and the National Agriculture Extension Service—SNV) in linking with existing NGOs and Universities in delivering the services and support to farmers. This has enabled an institutionalization of key policies and approaches across geographic regions and project but has also influenced agriculture policies and priorities (different from other projects working exclusively with NGOs in supporting farmers).

PARRSA also tested a vouchers scheme, which was also accompanied by a randomized control trial conducted with the Paris School of Economics and the Gender Innovation Lab to provide empirical evidence on their impact on different constraints to adoption of improved seeds and their impact on production and welfare. The results show that: 1) the subsidies for improved agriculture inputs effectively induced their adoption in the agricultural season following the intervention and one year later, 2) there was limited evidence of spillover effects on adoption of improved seeds by non-voucher recipients; 3) households who adopted improved agriculture inputs also invested in complementary inputs and labor; and 4) there was an improvement on food security in the most difficult months of the lean season, and on food diversity. These could derive either from an income effect, or from the shorter duration of the crop cycle. The lessons from this voucher experience and from the institutional arrangements to implement it points out to the capacity of the Government to deliver such support at scale, as long as the implementation capacity of the PIU is strengthened. Given that the PARRSA PIU is handling 3 distinct operations in different corners of the country, is evidence that there is implementation capacity.

**Box A9.1 Building on Lessons from the Agriculture Rehabilitation and Recovery Support (PARRSA) Project (P092724)**

A key to the success of PARRSA has been the emphasis on institutional capacity building combining both (i) the support to public services delivery such as access to seeds and planting materials, agricultural advisory services, vaccination campaigns, new animal breeds, better access to market due to roads improvement, etc.; and (ii) the community level investments, using a CDD-type approach to develop new organizational skills to use common productive and marketing infrastructure as well as exploring other opportunities. An important lesson learned for future agriculture development projects in DRC is the approach of working through national agencies (Ministries of Agriculture, Rural Development, and Livestock, the National Agriculture Research Agency—INERA, the National Seed Agency—SENASEM, and the National Agriculture Extension Service—SNV) in linking with existing NGOs and Universities in delivering the services and support to farmers. This has enabled an institutionalization of key policies and approaches across geographic regions and project but has also influenced agriculture policies and priorities (different to other projects working exclusively with NGOs in supporting farmers).

PARRSA also tested a vouchers scheme, which was also accompanied by a randomized control trial conducted with the Paris School of Economics and the Gender Innovation Lab to provide empirical evidence on their impact on different constraints to adoption of improved seeds and their impact on production and welfare. The results show that: 1) the subsidies for improved agriculture inputs effectively induced their adoption in the agricultural season following the intervention and one year later, 2) there was limited evidence of spillover effects on adoption of improved seeds by non-voucher recipients; 3) households who adopted improved agriculture inputs also invested in complementary inputs and labor; and 4) there was an improvement on food security in the most difficult months of the lean season, and on food diversity. These could derive either from an income effect, or from the shorter duration of the crop cycle. The lessons from this voucher experience and from the institutional arrangements to implement it points out to the capacity of the Government to deliver such support at scale, as long as the implementation capacity of the PIU is strengthened. Given that the PARRSA PIU is handling 3 distinct operations in different corners of the country, is evidence that there is implementation capacity.

2. The following key lessons have been distilled: (i) a combination of access to improved input (seeds, fertilizers, technical assistance) and output markets (rural roads, support to farmer groups) has had significant impact on agriculture yields and food security in DRC; (ii) supporting private sector agriculture input suppliers and technical assistance providers through farmer vouchers has shown to improve farm-level productivity with significant gains in the efficiency and targeting of public spending; and (iii) raising smallholder productivity has had a direct impact on nutritional status of households.
3. There is a strong demand from beneficiaries for support to strengthen poultry production and small ruminant breeding. Some projects have successfully managed to increase productivity in this sector by introducing genetic improvements and supporting vaccination campaigns, with positive impacts on households' income and nutrition. Community Animal Health agents have also been trained creating local skills and improving access to basic services. However, the sustainability of these interventions will hinge upon the ability to ensure adequate supply and access to veterinary drugs, regular access to vaccination, and a more holistic approach to supporting farmers to improve their practices (by reducing the free wandering of animals and building fences for example) and not focused solely on genetic improvements.
4. While agriculture support projects have been able to improve agricultural production for key crops, access to markets is still a major impediment to increasing income for farmers and reducing poverty. Supporting beneficiaries to define the best organizational forms, to install processing units and storage capacity, or to access information on the markets have proven to be effective strategies to improve access to market and need to be prioritized and further developed. The use of new technologies (based on smartphones and applications) reveals great potential, particularly suited to local conditions. In the case of support to cash crop production (such as coffee or cocoa) the need for support to producers to access markets is even more important. The viability of these activities is directly linked to the ability to market the crops under the best conditions. In this case, specific support and technical assistance for producers must be guaranteed by the projects and market assessments should be conducted prior to initiatives to increase production.
5. NGOs have an important role to play in the agricultural extension systems to complement public institutions. They can bring in agronomic and technical assistance skills, field experience, and an understanding of the



local context. If they have a preexisting field presence in a province, they can also be deployed in the field and become operational more quickly. Finally, the contractual relationship established with the projects allows the definition of concrete results and therefore better monitoring of the services provided. Combined with agricultural Inspection and SNV, they can help deliver advisory support of the quality and intensity that is required to respond to the needs of beneficiaries.

6. The monitoring and evaluation systems of previous projects have major shortcomings and do not respond to the needs of the projects. The quality, frequency, and timeliness of the data collected does not meet the needs of decision makers and is not sufficient to allow adjustments to be made during implementation. The indicators used show short-term results but do not provide enough information on the sustainability and viability of the actions (such as the evolution of yields over time for example). The methodology used to measure core indicators is not well documented and the quality of measurement is insufficient to establish evidence of impacts. In addition, the absence of knowledge management and more regular data flows does not allow the dissemination and sharing of lessons learned during the implementation of projects.
7. Groups created by projects, such as Producer Organizations, are often used to simplify the organization of project intervention and channel advisory support services. While they are sometimes built on preexisting groups and informal organizations, they are sometimes created ex nihilo, do not necessarily reflect social reality of the villages, and sometimes exclude some social groups in the villages, questioning their sustainability. Greater flexibility in the composition of these producer groups and organizations to better reflect preexisting social dynamics could help improve representativeness and viability of these interventions.
8. Previous projects have made efforts to ensure that women benefit from project interventions, with limited success. Although women are present in producer organizations, not enough is done to guarantee that they have direct access to the actions and benefits of the projects. The current approach and methodology do not consider more specific modalities focused on women. Adjustments and more targeted approaches are necessary to increase effective participation of women and improve their outcomes.

**Annex 10: Digital Innovations within the Project****A. Design of National Farmer Registry****DRC ICT4Ag Context**

1. The agricultural sector in the DRC faces many challenges that could be partially addressed by the ICT4Ag (ICT for agriculture) ecosystem. It is estimated that the potential market for ICT4Ag solutions will continue to grow over the next decade as the number of smallholder farmers increases, connectivity improves, and farmers' incomes rise. The use of mobile phones allows farmers to connect to a greater number of input suppliers, service providers, customers for selling their production, to obtain input and output price information in distant markets, and to organize transporters to reach more distant markets. ICT4Ag can facilitate the integration of small farmers into value chains. There are already some agritech start-ups in DRC such as Agrikonet, Smak Corp, Bilanga, Agribros or Jaune Congo, which are trying to seize these market opportunities. However, they mainly operate in niche sectors and limited areas, such as consulting services and market links. Furthermore, there are advanced agricultural technologies slowly starting to emerge in DRC, such as the start-up Ultra Drone Africa, which can offer various UAV-based services.

An Opportunity for the Telecom Sector

2. The liberalization of the telecom sector in DRC has given opportunity to the burgeoning of private operators. Increased competition among operators helped in decreasing communication costs for consumers, although access is still low and affordability is still constrained. There are multiple Internet Service Providers now providing Internet access at reasonable cost in major cities (and suburbs) through satellite, HSPA+, 4G LTE, WiMAX, CDMA or EDGE technologies. The challenge now is to offer prices that are more affordable to existing users, to support more complex use cases and to expand broadband Internet coverage at usable speeds in rural areas. The DRC falls behind most of its regional counterparts in access to the Internet and fixed or mobile phone services. Despite recent improvements, the Internet penetration rate remains low, at around 9 users per 100 inhabitants. E-banking services, telephony and connectivity needs of millions of beneficiaries of the Project are an important market opportunity for telecom operators in DRC in several ways:

- The National Farmers' Register will operate on a publicly accessible digital platform that will provide telecoms and digital entrepreneurs with information regarding potential users
- Subsidies to smallholder farmers will be delivered using digital vouchers in partnership with e-banking sector
- The project will finance the construction of rural roads, which can be used as an opportunity for expanding the mobile coverage at a reduced cost
- The ecosystem of agribusiness actors will be strengthened through TA and matching grants

AgriStartups and agroentrepreneurship development

3. The DRC is the biggest French-speaking market in the world and one of the largest markets in Africa based on current population and expected population growth. It therefore offers a great potential for expansion of existing agritech solutions looking to expand to new markets heavily dependent on agriculture development. The establishment of international agritech in DRC can contribute to the transfer of knowledge and emulation of the ecosystem. It is also a great opportunity for local companies to expand their activities in new DRC markets.



The National Digital Plan—Horizon 2025

In September 2019, the Government adopted the National Digital Plan (*Plan National du Numérique - Horizon 2025*), showing its intention to provide the country with a strategy and corresponding policies to meet the challenges of the digital economy. The Plan includes the creation of a National Council for the Digital Economy (*Conseil National du Numérique*) that will promote and boost digital start-ups launching competitions and challenges.

The plan comprises four axes: (I) Infrastructure (II) Content (III) Application Uses, and (IV) Governance. Axes I and IV in particular address some of the DRC's shortcomings in supporting digital entrepreneurship. For example, it aims to bridge the digital skills gap and foster innovation throughout the education system and beyond by launching competitions and challenges as well as a dedicated fund to promote and stimulate digital start-ups (Specific Objective II.2.2.3 under Axis II).

It also aims to create a legal framework for intellectual property (IP) rights and to implement legal and fiscal measures that will encourage innovation and stimulate investment (Specific Objective IV.1.1.3 and Specific Objective IV.1.2.2 under Axis IV).

In December 2019, in his first State of the Nation address, the President of the DRC expressed his determination to make the digital economy an essential vector of the country's development.

4. New initiatives and training centers are emerging in the DRC such as Kinshasa Digital, a digital agency that organized the 2019 Hackathon Ebola and runs the Kinshasa Digital Academy, which offers intensive trainings on tech skills, such as coding skills, and the Kobo Academy, which has the ambition to provide a training center on information technology and new technology. Most of these initiatives are small-scale and operate only in large urban locations like Kinshasa, Lubumbashi and Goma. The Project plans to finance (under sub-component 1.1) technical operators (*opérateurs technologiques* in French, or OTs) for supporting the national and provincial governments in the process of registering smallholder farmers and administering the farmer support schemes for the adoption of agriculture technological packages. These technical operators may be a range of non-governmental, not-for-profit organizations, associations, cooperatives or for-profit contracted service providers. The Project will also finance (under sub-component 1.2) a series of downstream activities by these providers to enhance services and support to smallholder farmers supported under sub-component 1.1, including the development of local agribusiness services through the organization of ICT4Ag seminars, hackathons, software development competitions and demonstrations, experiments with mobile surveys or data collection tools, photo/video contests which will contribute to the transformation of agricultural value chains in selected provinces under the Project.

National Farmers' Registry and Farmer Information Systems: a challenge in need of innovative solutions and technologies

5. As part of the Project (in particular component 1), a National Farmers' Register (*Registre National des Agriculteurs*, or RNA in French) and a Farmer Incentive Management Information System (SIGI) will be established to identify, target, deliver services and support, and monitor/evaluate smallholder beneficiaries. Millions of farmers are expected to be registered in the RNA. The technical constraints for setting up and operating an effective RNA and SIGI in rural areas of DRC are numerous: the geographical area is vast, road and waterway networks are either not maintained or non-existent, conflict zones restrict



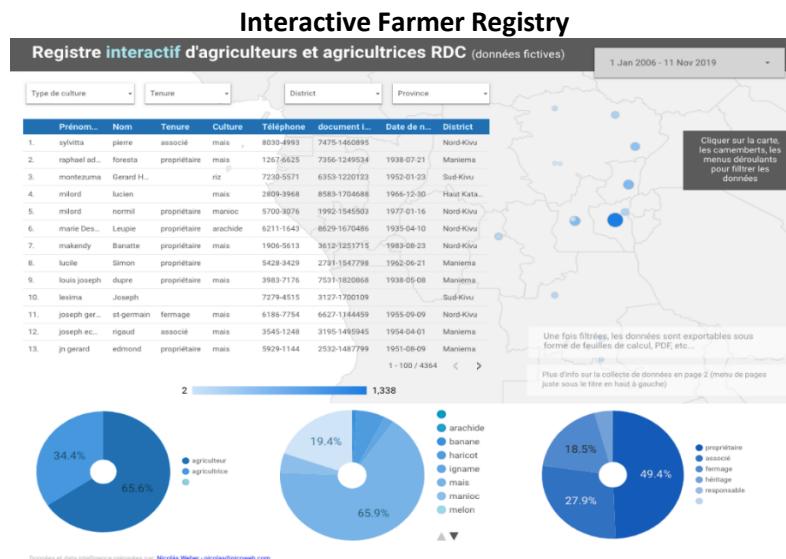
movements, and mobile phones and electricity network coverage is often lacking outside the major urban centers. Additional challenges include widespread illiteracy and lack of national identity documents (identity card, baptismal certificate, driving licenses, etc.) among project's beneficiaries. All these challenges require innovative ITC solutions for RNA and SIGI.

- Enrollment in the RNA will be individual, voluntary, unique, but mandatory for the farmers who want to benefit from the incentives of the Project and possibly other projects and programs managed by the national and provincial governments. The Project will organize targeted awareness raising campaigns for women, including outreach to particularly vulnerable groups such as female-headed households, to inform that enrolling in the registry is mandatory for receiving the support of the Project. The technologies and innovation that can be put in place to develop and operate the RNA are manifold. Here are a few examples:

Data Intelligence and big data



- This new technology makes it possible to easily connect to virtually any kind of RNA's data. Trained users of the Ministries of Agriculture, Fisheries and Livestock, and Rural Development of the DRC could quickly build interactive reports and dashboards with free, web-based reporting tools. RNA's reports and dashboards would be publicly accessible. The collaboration, interactive graphics, maps, embedded reports would be available in real time on ministries websites, exported in PDF or CSV, or send automatically by email to registered subscribers on a regular basis.





8. See an example of a RNA interactive report with Data Intelligence Technology:
<https://datastudio.google.com/embed/reporting/1TXBJcEhlQoVs9gFBGHStTTpSf5AK06J/page/3N6k>



Advanced offline modes in the APP and Web-based RNA information system

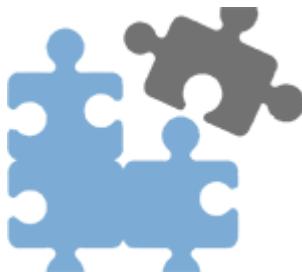


9. In rural areas with unreliable or non-existent Internet access, agriculture extension officers and/or contracted technical specialists would have access to offline solutions that allow them to access essential data on the various technology packages for farmers, local geographical data (toponyms, farmer records, pictures, and so on) and areas (with offline maps technologies). Once these data and map areas are downloaded, experts can use them to capture assets and observations, as well as perform inspections, in the same way they would with an Internet connection. All field data collection could be collected offline as well as for the web-based system in case of connectivity issues in offices.

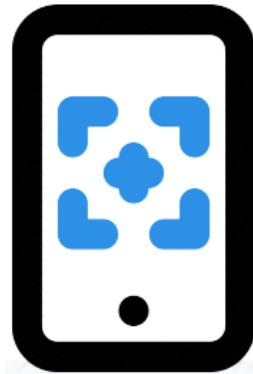
Contactless Farmers Smart Cards and E-Wallet



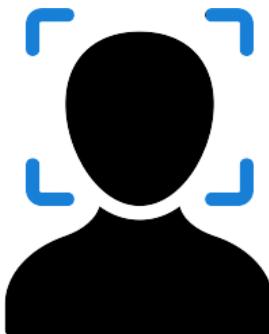
10. Each farmer would receive an officially issued contactless smart card with the holder's photo and a unique identification number generated by the RNA and issued by the Provincial RNA Management Agency. The card will also serve as an electronic wallet capable of operating in offline and online modes. The technology developed for the RNA will manage the printing and encoding of the cards as well as all operations during their life span.

**Financial Inclusion**

11. In line with the objective of financial inclusion of farmers and improving farmers' access to credit, the RNA system is exploring with the Central Bank of Congo (BCC) the operability to ensure consistency and compliance with all BCC payment systems.

Smart Photo Assistant Technology

12. A photo would be entered in the RNA APP for each new farmer record. This is the first biometric data recorded in the RNA. It will be used to identify the holder and to detect duplicate entries. The quality of the photo is therefore of paramount importance, and the RNA APP will provide smart assistance to assist the technical operator to obtain the best quality photo ID possible based on ISO 19794-5.

Large-Scale Identity Deduplication Using Face Recognition

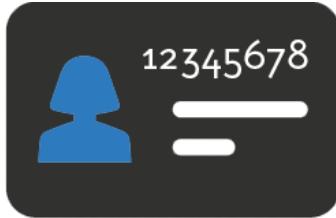
13. The APP and web-based RNA systems will provide a face-recognition system to perform face recognition



and check duplicate entries in the database. This cutting-edge technology will run in offline mode in the RNA's APP version.

Fingerprint for Payment Systems

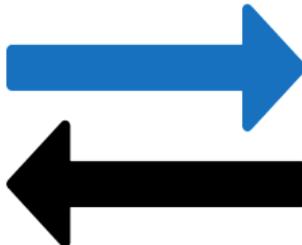
14. The RNA will provide the capability of fingerprint capture to ensure uniformity and compliance with all payment systems, including regional payment systems with which the Central Bank of Congo system is to interconnect.

Unique Farmer Identification Number in Offline Mode

15. In the absence of a national identity card and registry, the RNA will assign each farmer a Unique Identification Number (UIN) of 8 digits (plus 1 check digit). The RNA technology will be able to issue an UIN in offline mode without creating duplicates at the country level.

Mobility tracking and map routes histories

16. To facilitate the management of the pools of smartphones, the data collectors will be able to share their location in real time (if there is connectivity), chat and record their route to optimize the access to the rural areas and help collectors to find their way.

**API, the connection with other farmer and beneficiary databases**

17. A secure gateway (called an API) will allow other authorized computer systems to “plug in” to the RNA to exchange data. The first two systems to connect to the RNA through its API will be the RNA APP and the Incentive Management Information System (SIGI).

B. Identification and promotion of ICT4Ag innovations offered to the beneficiaries of Sub-Comp 1.1

18. A dynamic ecosystem of digital and non-digital innovation is crucial. To achieve this, systematic investment in ICT4Ag innovation (education, research, knowledge dissemination, financing capital, acceleration and incubation) are all necessary in the country. It must enable ICT4Ag innovators to engage in iterative processes to improve their technologies and business models, prove their impact and return on investment, and rapidly extend their market.
19. ICT4Ag (both digital and non-digital) innovations will enable smallholder farmers to overcome their current constraints. Relevant ICT4Ag technologies include climate information and advisory services, services and platforms that link farmers to production inputs (including mechanization), services that link farmers and their products to buyers and markets, macro-farm decision information tools that can inform government, donor and farm business decisions on resource allocation, and data intermediary services that collect and analyze farm or farmer-level data offered by the Project to contribute to downstream decisions and use cases. Beyond these agro-technical products and services, other ICT4Ag application areas include agro-energy products (e.g., off-grid solar irrigation, processing and cold chain solutions), portable agricultural diagnostic tools (e.g., crop, soil and agricultural input diagnostic equipment) and bio-fortified foods. All of these innovations can be tailored to the needs of smallholder farmers, and can be monetized, by charging farmers and other users for the information, based on affordability. These open opportunities for the emergence of social entrepreneurs, including cooperatives, associations and NGOs, and to target the poorest and most disadvantaged.

Mapping Innovation

20. It is important for agritech start-ups, SMEs, investors and other stakeholders in the ICT4Ag innovative ecosystem to assess the quality of innovation poles. The development of an online resource center, a marketplace, an M&E system for the ICT4Ag ecosystem in the DRC will promote competition between clusters and the use of resources. It will also help identify good practices and scale up the most effective models.

Support of existing initiatives

21. The Project aims to strengthen the ICT4Ag ecosystem, through the organization of a multiplicity of events



and the support of existing proposals such as the Kinshasa Digital Week, SAM2019 (mobile applications fair), Congo Tech Day, DevFest (annual programming conference that hosts code labs and hackathons), Lubumbashi Digital Story or competitions such as Seedstars Kinshasa edition.

Structuring the ICT4Ag sector

22. A first step in this direction will be to help young entrepreneurs, including women, disadvantaged groups and youth, to self-organize, by supporting the capacity of ICT4Ag industry associations, the creation of forums for industrial dialogue (dedicated website, creation of specialized channels on WhatsApp Business, on dedicated SMS news services and social networks), by presenting company success stories and by offering prizes to entrepreneurs to increase their visibility.

Digital innovation corridors

23. As there is still no culture of solidarity and synergies between digital entrepreneurs, who remain rather isolated, the Project aims to support initiatives to coordinate and connect digital entrepreneurs by helping networks such as RAN (*Réseau des acteurs du numérique*) at the national level or Resojec in Lubumbashi, which also contribute to creating a community and strengthening the ecosystem. A recently created KivuHub in Bukavu shows great commercial potential with the vision of becoming the “new Silicon Valley of the Democratic Republic of Congo” and expanding to Goma and Kisangani.
24. The Project aims to strengthen the links between the ICT4Ag ecosystems of Kinshasa and the provinces to create digital corridors of innovation. These links will be established through incentives, such as encouraging joint applications for activities funded by the Project and these subcomponents. These links will help bridge the current cultural and geographic gap between the growing innovation clusters and the rest of the country.

An Erasmus for Innovation in the DRC

25. The Project plans to support the movement of young entrepreneurs across the country through an internship program for ICT4Ag entrepreneurship. Modeled on the European Union’s Erasmus for Young Entrepreneurs program, the Project proposes the establishment of a trans-provincial and cross-border exchange program that gives new or aspiring entrepreneurs the opportunity to learn from experienced entrepreneurs running small businesses in other participating provinces and countries.

Inclusive ICT4Ag Entrepreneurship:

26. Promotion of women entrepreneurs and entrepreneurial initiatives of disadvantaged communities in the field of agricultural entrepreneurship. The Project proposes the establishment of a training program for financial institutions on the specific nature of the business cycles of young SMEs, including social enterprises, with financial products designed for young companies in general and businesses run by women in particular. The Project proposes to support the creation of centers specifically designed for start-ups and women-led enterprises, using, for example, the SME Centre Toolkit provided by the World Bank.

Connecting Digital Entrepreneurs to Investment Solutions

27. The main source of external finance for early stage entrepreneurs is venture capital, which suffers from a considerable constraint due to the asymmetry of information between investors and investment beneficiaries. The Project proposes the creation of information campaigns for investors that will introduce them to the updated Congolese entrepreneurial landscape, while SMEs, including SEs, will be able to benefit from guidance on presentation strategies and investment conditions, which would enable them to better present their applications for financing.

**Attracting Existing Funding to Agro-Innovation**

28. Catalyzing existing funds towards investment in digital and non-digital agricultural start-ups. The Project proposes to support the creation and development of a formal network of investors who will receive training and advice on investment models for start-ups and on how to support innovation in the digital and non-digital agricultural ecosystem in the DRC.

C. Creation of markets for ICT4Ag innovation**Adoption of digital technology**

29. Promotion of the adoption of digital technology in all sectors of agriculture, including public agencies, ecosystem actors around the smallholder farmers, and other consumers including large-scale farmers, and commercial enterprises in the sector. This will provide an important boost to digital entrepreneurs by opening up new business opportunities in local markets. The promotion is proposed to be done through various incentive mechanisms, such as subsidies, technical assistance and the development of dedicated digital platforms. This will work to stimulate the demand for such digital technologies while other measures are aimed to encourage the entrepreneurs to fill that demand. Given the issues of affordability on the part of smallholder farmers, businesses and other organizations that enter into the digital marketplace will have to adapt their business models, including the potential for cross-subsidizing among market segments, to ensure that access to these technologies is both tailored to the needs of smallholder farmers and what they can afford to pay. This is an area where social entrepreneurs can play a distinct role.

ICT4Ag Take-up by Public Bodies and Consumers

30. Promotion of the adoption of digital technology among consumers and public bodies. Digital literacy training for the agricultural sector, including government officials, will increase the need for digital solutions and increase business opportunities for entrepreneurs.

Development of collaboration with agro-entrepreneurs

31. in the provision of public services through transparent public contracts that support sustainable approaches to providing such services and include the mixed participation of consolidated companies and young entrepreneurs. These services will be based on a range of digital technologies including for the poorest, such as the use of basic mobile phones.

D. The DRC “1.7 Million Farmers” Initiative

32. Based on the model of “One million farmers” in Kenya, the “1.7 Million Farmers” initiative aims to create a partnership to link 1.7 million Congolese small farmers, spread across multiple different agricultural value chains, to a digital platform. This platform will integrate and coordinate the activities of the main innovations developed for agriculture in the DRC.
33. The Project is preparing to support 1.7 million farmers in five years. Through collaboration in partnership, the “1.7 Million Farmers” initiative will connect innovators with experts, investors, agrifood SMEs, NGOs and other social entrepreneurs, and government partners at national and provincial levels. All activities will focus on a common mission of adding value to the 1.7 million smallholder farmers in DRC (and related intermediaries). A secondary objective is to create demonstration effects to validate the replication of this digital innovation ecosystem platform throughout the country.



34. Through the “1.7 Million Farmers” initiative, the World Bank estimates that all actors in the ecosystem will achieve economies of scale by reaching smallholder farmers. The platform will enable innovators in the agricultural sector to take advantage of large-scale identification, data collection, and data analysis services (e.g., with farm and soil mapping). Smallholder farmers will also benefit from a multitude of advantages resulting from the “1.7 Million Farmers” initiative. They will have access to affordable services that will enable them to solve the main problems related to their activity. By adopting the platform’s many innovations, they will be able to increase their yields, receive financial services and access local and international markets. On the long run, successful entrepreneurs will be rewarded with service contracts, let competitively, to serve 1.7 million farmers.

E. COVID 19 and ICT4Ag in the DRC

35. The consequences of the COVID-19 pandemic on agriculture extension services, inspections, delivery and food and nutrition security are dramatic and further exacerbate poverty and malnutrition. It is therefore imperative that the DRC can be able to guarantee the basic activities necessary for the production, trade and supply of food. In such a context, ICT4Ag represents a real ray of hope.

Use of Project’s digital services to protect essential agricultural activities

Food production activities such as plowing, planting, weeding and harvesting are seasonal activities where time is of the essence: any delay in accessing information, inputs, transport, agronomic advice or weather forecasts can have devastating consequences for food and nutrition security.

36. The implementation of the Project’s ICT4Ag tools is an opportunity to improve the State’s digital infrastructure both in Kinshasa and in the provinces: RNA and SIGI will provide real-time data at the national level, installation of computer equipment, guaranteed access to energy with the installation of solar energy production units, development of the mobile banking with the incentive component, digital training and the creation of closer partnerships between the government and the private sector to promote digitization in the long term. As well, the adoption of digital technologies can reduce the need for face-to-face interaction. The ICT4Ag tools of the Project are inclusive systems, especially designed for the integration of women and disadvantaged groups: the registration of vulnerable groups in the RNA is mandatory to benefit from the Project’s support. The design of the computer systems has been thought out so as to avoid information exposing the Project’s beneficiaries, who are particularly vulnerable after the COVID 19 pandemic, to discrimination, profiling or social exclusion.

E-AGRICULTURE PROJECT

Côte d’Ivoire (P160418)

The project’s objective is to promote the development of digital technology solutions for agriculture. It is based on 2 pillars:

- 1. Extending digital connectivity in targeted rural and remote areas**, providing technical assistance to strengthen capacity of key stakeholders in defining, enhancing and enforcing an enabling environment conducive to providing digital services in rural areas. It also supports the extension of digital infrastructure in rural areas that will be able to access both mobile services (voice and SMS) and the Internet.
- 2. Strengthening of the digital platform** for the Ministry of Agriculture, developing local content,



applications, and services, leveraging Internet of Things (IoT - connected objects) and Big Data; as well as strengths the digital ecosystem and e-agriculture.

E-AGRICULTURE PROJECT

Benin Digital Rural Transformation (P162599)

The project's objective is to promote Benin Digital Rural Transformation. It is based on four points:

1. **Extension of digital connectivity in rural areas** to increase the number of individuals, public administration institutions, and businesses that are able to access both mobile services and the Internet in the most climate-vulnerable areas.
2. **Increase of the use of digital financial services** in targeted rural communities by supporting the digital transformation of financial institutions, catalyzing digital payments, and the improvement of digital and financial literacy.
3. **Support of the local digital ecosystem** by promoting the development of local digital content, climate-smart agriculture applications and services for the agriculture sector.
4. **Improvement of the access to local markets** and agricultural production zones, and resilience to climate change by leveraging digital applications and rehabilitating rural access roads that are all-weather/season practicable and flood resistant, in turn increasing the revenues of smallholder farmers.

**Annex 11: World Bank COVID-19 DRC Country Program Response Note**

1. This annex summarizes adjustments made to the World Bank country program in the DRC to mitigate economic and social impacts from the coronavirus disease 2019 (COVID-19) pandemic. Adjustments have been made in support of and aligned with the government's response plan and request for support, aligned with the four pillars of the June 2020 WBG COVID-19 Crisis Response Approach Paper.
2. The first COVID-19 case in the DRC was confirmed on March 10, 2020, in the province of Kinshasa. As of May 12, 2021, there were officially 30,350 confirmed cases and 772 fatalities—the majority in Kinshasa.
3. Congolese authorities have taken specific and concrete action to contain the spread of the COVID-19 virus since the first case was confirmed in March 2020, including the declaration of a state of emergency. The government-imposed confinement in the central business district of the capital (Gombe), closed the airports, and restricted travel between Kinshasa and the rest of the country. Restrictions were eased at the end of June 2020, and the state of emergency was lifted on July 21, 2020. Facing a second wave of infections, a national curfew (9 p.m. - 5 a.m.) was put in place on December 18, 2020. In addition, the government suspended the resumption of schools following the Christmas break.
4. The COVID-19 pandemic has caused significant social and economic impacts in the DRC—exacerbated by weak social outcomes and an economy that is poorly equipped to address shocks. Given the preexisting poverty and vulnerability of the Congolese population, the aggregate shocks of the COVID-19 crisis may translate into a welfare shock at the household level. In line with emerging worldwide evidence, Congolese women have been disproportionately affected by the health and socio-economic impacts of measures applied for the control of COVID-19. Most women are employed in the informal sector, which has been heavily affected by border and market closures and restrictions on movement. Similarly, high food prices, declining incomes, and the increase of the exchange rate limit women's ability to meet basic household needs, including food for children. COVID-19 has had an adverse impact on women's health and nutrition, as well as protection, with increased risks of gender-based violence (GBV), including risks of sexual exploitation and abuse (SEA) and early marriage, particularly faced by adolescent girls, compounded by an accentuated economic vulnerability and the disruption of education.⁹¹
5. **The economy.** The International Monetary Fund (IMF) is estimating the additional 2020 fiscal gap related to the pandemic at US\$700 million. The pandemic may also deepen the risks of fragility and increase poverty. The COVID-19 pandemic is estimated to negatively affect growth and fiscal outcomes, with a projected contraction of 2020 GDP by 1.7 percent—driven primarily by a decline in private consumption and investment.⁹² The fiscal deficit is estimated at 2.1 percent of GDP in 2020—up from 1.3 percent in 2019—given underperformance in domestic revenue mobilization (delays in reform implementation, temporary relief measures) and persistently high expenditures—estimated at 12.1 percent of GDP in 2020.⁹³

⁹¹ CASS: The impacts of the COVID-19 outbreak response on women and girls in the Democratic Republic of the Congo and REACH, *Indicateurs pertinents pour la réponse au COVID-19*.

⁹² Source: World Bank estimates

⁹³ Source: World Bank estimates



6. **Poverty.** The latest World Bank projections put poverty at 73.3 percent in 2020, indicating a 1.5 percentage point increase compared to 2019 as a result of the COVID-19 pandemic.⁹⁴ Poverty numbers and inequality are expected to increase further as a result of impacts from the COVID-19 pandemic. Increases in poverty and inequality are expected due to a decline in labor and non-labor income, disruptions in goods and services markets, and disruptions in public services. Poverty in Kinshasa alone could increase by more than 15 percentage points if the level of inflation reaches the levels recorded in 2017.⁹⁵ According to COVID-19 high-frequency phone surveys in Kinshasa, by September 2020, over 10 percent of households had seen members lose jobs and 20 percent had reduced their food consumption due to rising prices. Given the lasting adverse impact from COVID-19 and the expected high population growth that is likely to partially offset economic growth, the extreme poverty rate is projected to reduce by only 0.4 percentage points by 2022.⁹⁶
7. **Food insecurity.** Based on recent food security data, there are indications DRC is facing an escalating food security crisis as a result of COVID-19 impacts, insufficient food availability, limited market access, natural disasters, and conflict. According to the 2021 Humanitarian Response Plan, around 19.6 million people across the DRC face food insecurity challenges in 2021—with approximately 9.6 million facing acute food insecurity (IPC Phase 3 or 4). The provinces of North and South Kivu, Ituri and Kasai Central have the highest number of populations facing high food insecurity. Trade with neighboring countries, particularly Burundi, Rwanda, and Uganda, is critical to reducing food insecurity and sustaining livelihoods in the east. Most of the trade is by small-scale traders, largely women.
8. **Government response.** Due to COVID-19, the authorities are prioritizing activities under the National Strategic Development Plan (“*Plan national stratégique de développement*,” PNSD) that align with a multi-sector emergency program adopted to mitigate pandemic impacts (“*Programme multi-sectoriel d’urgence d’atténuation des impacts du Coronavirus*,” PMUAIC). The program has been costed at US\$1.8 billion and prioritizes: (i) health emergency response and systems strengthening; (ii) macroeconomic stability and economic recovery; and (iii) risk mitigation and support to the population. To swiftly respond to the COVID-19 pandemic and its impact on the population and the economy, a national plan on COVID-19 preparedness and response was adopted in March 2020. This plan was integrated into the Emergency Multisectoral Program to Mitigate COVID-19 Impacts. In line with this plan, as of end June 2020, the Government had allocated US\$13 million (including US\$6 million domestic resources) to the COVID-19 health response, with close to 80 percent of resources allocated to direct healthcare and the remainder to measures aimed to prevent the spread of the pandemic. The national health contingency plan focuses on (i) strengthening early detection and surveillance and fostering technical and operational coordination within the government; (ii) improving the quality of medical care to infected patients; and (iii) developing effective preventive communication strategies and enhancing medical logistic platforms. The emergency program combines a set of measures aimed at reducing the tax burden on companies and on the food supply and medical supply chains and temporarily exempting segments of the population from taxes and utility fees. Additionally, the Government has supported the education sector, including through the free primary education policy that came into effect at the start of the 2020-21 school year and measures put in place to allow for distance learning, strengthen school safety, and ensure teachers are paid during the pandemic. Looking beyond the immediate COVID response, the Government is

⁹⁴ World Bank (October 2020): MPO

⁹⁵ World Bank (2020): Monetary Poverty and Shared Prosperity in Kinshasa.

⁹⁶ World Bank (2020): Monetary Poverty and Shared Prosperity in Kinshasa.



working to strengthen the health system (immunization system, community-level healthcare facilities, and response, etc.), and advance its Universal Health Care strategy.

9. **WBG response.** All WBG engagements in the DRC launched since the onset of the pandemic—lending and non-lending—have a COVID-19 filter, aligning with the four pillars of the June 2020 WBG COVID-19 Crisis Response Approach Paper. The WBG also aims to integrate, when feasible and appropriate, this framework into the implementation of ongoing operations—through restructuring if needed, as well as in Advisory Services and Analytics (ASA) and policy dialogue, to support a resilient recovery. Engagements addressing COVID-19 impacts span the human capital, economic, and infrastructure sectors, and include specific attention to gender impacts, including those related to SEAH. Targeted support is and will be provided throughout the three phases of the Approach Paper - relief, restructuring, and resilient recovery.
10. WBG support to the initial relief phase has been through the DRC COVID-19 Strategic Preparedness and Response Project, a US\$60 million emergency operation (P173825) (US\$47 million IDA, US\$13 million from the Pandemic Emergency Fund - PEF) to respond to the immediate health concerns presented by the epidemic (approved in April 2020). An Additional Finance (US\$200 million) for COVID-19 vaccine purchase and distribution is currently under preparation. A US\$800 million Emergency Equity and System Strengthening in Education Project (P172341 EESSE) (approved in June 2020) provides additional support for paying teachers' salaries as fiscal pressure has increased due to a slowdown in the economy and ensured free primary schooling as schools have reopened. Support has also been provided through an ongoing health operation, Health System Strengthening for Better Maternal and Child Health Results Project (P147555, PDSS), through the social safety net project (P145196 STEP) (PSDD and STEP strengthened through FY20 AFs), and through an Urban Water Supply Project (P091092, PEMU). A US\$200 million COVID-19 Mitigation, Resilience, and Recovery DPO (P174026) is also under consideration. The IDA19 Crisis Response Window (CRW) Early Response Financing (ERF) modality has been triggered for the DRC and will provide US\$50 million for early action to address emerging food security as a result of the COVID-19 pandemic. Going forward, implementation of ongoing operations in the social sectors will be strengthened, ensuring that progress made in the sectors (free basic education; routine and prenatal care and vaccination programs) is not reversed as the pandemic consumes national and global resources.
11. To support the DRC in the restructuring phase, newly approved and existing operations in the human development sectors (e.g., health—PDSS, REDISSE4 (P167817); education—EESSE; and social protection—STEPP), coupled with the proposed Development Policy Operation (DPO) and vaccine and distribution project, an ongoing SME Development and Growth Project (P160806), a solar energy IPP (IFC), the Electricity Access and Service Expansion (EASE) project (P156208), which through investments in distribution in Kinshasa and connections to private sector mini-grids and sale of off-grid systems will increase electricity access in underserved areas. A US\$500 million Kinshasa multisector urban development and resilience project (Kin Elenda – P171141) aims to restore livelihoods and support enhanced quality of and access to basic services in the DRC. Lending will be complemented by analytical work, including Public Expenditure Reviews (PERs), for the social sectors—in support of efforts to ensure more efficient government spending in the social sectors, a Country Economic Memorandum, and analysis of women's empowerment and girls' education.
12. Moving into the resilient recovery phase, WBG support will be through investments in transport and connectivity; a proposed operation to increase electricity and water access, supply, and sanitation



and sector governance; this proposed Project; an ongoing regional trade facilitation project (and possible financing of a second phase); and IFC investments in energy, ICT, and financial sectors. WBG (IDA, IFC, Multilateral Investment Guarantee Agency) coordinated engagements in energy aim to significantly ramp up private capital mobilization in decentralized energy grids and a step-up increase in access. The WBG will also focus on engagements to strengthen the business environment and reforms that will enhance the business climate and create further opportunities for private sector investment and operations, and on solidifying reforms aimed to ensure macroeconomic stability and enhance domestic revenue mobilization for stronger and more sustainable macroeconomic management.

- 13.** A forthcoming Country Partnership Framework (CPF) has a proposed COVID-19 filter and will lay out the approach and programming for FY22-26.



Indicative Lending and Restructuring program (as of February 2021)

	Saving lives	Protecting poor and vulnerable people	Saving livelihoods, preserving jobs, ensuring more sustainable business growth and job creation	Strengthening policies, institutions, and investments for resilient recovery
Relief	<ul style="list-style-type: none"> - COVID-19 emergency health project (\$47M) (FY20) - PDSS AF (\$200M) (FY20) - COVID-19 Vaccine Purchase and Distribution Project (\$200M) (FY21) 	<ul style="list-style-type: none"> - STEP2 (\$445M) (FY20) - GBV CERC (FY21) - PDSS AF (\$200M) (FY20) - COVID-19 Vaccine Purchase and Distribution Project (\$200M) (FY21) - PEMU (ongoing) 	<ul style="list-style-type: none"> - Trade facilitation project (ongoing) - PRRAP (ongoing) - Financial Infrastructure and Markets (\$30M) (ongoing) - IFC loan rescheduling and new investment to Financial Institution clients to address immediate impact on portfolios (\$15-20M)* (ongoing) 	<ul style="list-style-type: none"> - COVID-19 Mitigation, Resilience, and Recovery DPO (\$200M) (FY21) - PRRAP (ongoing)
Restructuring	<ul style="list-style-type: none"> - PDSS AF (\$200M) (FY20) 	<ul style="list-style-type: none"> - STEP2 (\$445M) (FY20) - EESSE (\$800M) (FY20) - PDSS AF (\$200M) (FY20) - PEMU (ongoing) 	<ul style="list-style-type: none"> - COVID-19 Mitigation, Resilience, and Recovery DPO (\$200M) (FY21) - SME Development and Growth Project (\$100M) (ongoing) - IFC Equity investment in a leading bank to establish standards and develop innovative tools (\$50-70M) (FY22)* - IFC: develop a solar energy IPP to increase electricity access in underserved areas (ongoing)* - IFC: Develop ICT infrastructure to support increased mobile penetration and digital economy (\$60M) (FY23)* 	<ul style="list-style-type: none"> - STEP2 (\$445M) (FY20) - Emergency education project (\$800M) (FY20) - COVID-19 Mitigation, Resilience, and Recovery DPO (\$200M) (FY21) - Kinshasa Urban Project (\$500M) (FY21) - PFM TA Project (\$100m) (FY22) - COVID-19 Vaccine Purchase and Distribution Project (\$200M) (FY21) - PEQPESU (ongoing) - PAQUE (ongoing) - PRRAP (ongoing)
Resilient recovery	<ul style="list-style-type: none"> - REDISSE (\$150M) 	<ul style="list-style-type: none"> - EESSE (\$800M) (FY20) - Transport and Connectivity Support Project (\$500M) (FY22) - Kinshasa Multisector Development and Urban Resilience Project (\$500M) (FY21) - Electricity and Water Access and Governance Project (\$500M) (FY22) - Women's and Girls' Empowerment Project (\$250M) (FY22) 	<ul style="list-style-type: none"> - COVID-19 Mitigation, Resilience, and Recovery DPO (\$200M) (FY21) - Electricity and Water Access and Governance Project (\$500M) (FY22) - Kinshasa Multisector Development and Urban Resilience Project (\$500M) (FY21) - Regional trade facilitation project (ongoing and proposed follow up operation) - National Agriculture Development Program (\$500M) (FY22) - Improved Forested Landscape Management Project (\$16M AF in FY21) - IFC program in energy, ICT and financial sectors 	<ul style="list-style-type: none"> - STEP2 (\$445M) (FY20) - EESSE (\$800M) (FY20) - COVID-19 Mitigation, Resilience, and Recovery DPO (\$200M) (FY21) - Transport and Connectivity Support Project (\$600M) (FY22) - Kinshasa Multisector Development and Urban Resilience Project (\$500M) (FY21) - Electricity & Water Access and Governance Project (\$500M) (FY22) - National Agriculture Development Program (\$500M) (FY22)

* IFC's expected investment, whose completion is subject to the outcome of IFC's upcoming due diligence (expected in 2021)