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Report No: PAD4390

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT  
ON A  
PROPOSED GRANT

IN THE AMOUNT OF SDR 28.4 MILLION  
(US\$40.0 MILLION EQUIVALENT)

TO THE

REPUBLIC OF THE GAMBIA

FOR A

GAMBIA INCLUSIVE AND RESILIENT AGRICULTURAL  
VALUE CHAIN DEVELOPMENT PROJECT (GIRAV)

November 2, 2021

Agriculture and Food Global Practice  
Western and Central Africa Region

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## CURRENCY EQUIVALENTS

(Exchange rate effective as of September 30, 2021)

Currency Unit = Gambian dalasi (GMD)

SDR 0.7097 = US\$1

## FISCAL YEAR

January 1 - December 31

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## ABBREVIATIONS AND ACRONYMS

AFD	<i>Agence Française de Développement</i> (French Development Agency)
AfDB	African Development Bank
APA	Alternate Procurement Arrangements
AWPB	Annual Work Plan and Budget
CERC	Contingent Emergency Response Component
CORAF	West and Central Africa Council for Agricultural Research and Development
COVID-19	Coronavirus Disease - 2019
CPCU	Country Project Coordination Unit
CPF	Country Partnership Framework
CSA	Climate Smart Agriculture
DA	Designated Account
DFIL	Disbursement and Financial Information Letter
ECOWAS	Economic Community of West African States
EIRR	Economic Internal Rate of Return
ESIA	Environmental and Social Impact Assessment
ESRS	Environmental and Social Review Summary
ESMF	Environmental and Social Management Framework
EU	European Union
EX-ACT	Ex-Ante Carbon Balance Tool
FAO	Food and Agriculture Organization of the United Nations
FI	Financial Institution
FM	Financial Management
FSQA	Food Safety and Quality Authority of The Gambia
GATP	Gambia's Agricultural Transformation Program
GBV	Gender-based Violence
GCAV	Gambia Commercial Agricultural Value Chain Management
GCCI	Gambia Chamber of Commerce and Industry
GDP	Gross Domestic Product
GEF	Global Environment Facility
GGC	Gambia Growth and Competitiveness Project
GHG	Greenhouse Gas
GIEPA	Gambia Investment and Export Promotion Agency
GII	Gender Inequality Index
GIR	Green, Inclusive, and Resilient
GM	Grievance Mechanism
GNAIP II–FNS	Second Generation Gambia National Agricultural Investment Plan—Food and Nutrition Security
GoTG	Government of The Gambia
GPPA	Gambia Public Procurement Authority
GRM	Grievance Redress Mechanism
HDI	Human Development Index
IBM	Iterative Beneficiary Monitoring
IDB	Islamic Development Bank
IFAD	International Fund for Agricultural Development

IFC	International Finance Corporation
IFR	Interim Financial Report
IHS	Integrated Household Survey
INDC	Intended Nationally Determined Contribution of the Gambia
IP	Innovation Platform
IPSAS	International Public-Sector Accounting Standards
ISM	Implementation Support Mission
ISO	International Organization for Standardization
IVCD	Inclusive Value Chain Development
M&E	Monitoring and Evaluation
MFD	Mobilizing Finance for Development
MFI	Micro-Finance Institution
MGIM	Matching Grant Implementation Manual
MITA	Market for Agricultural Innovations and Technologies
MOTIE	Ministry of Trade, Industry, Regional Integration, and Employment
MPA	Multiphase Programmatic Approach
MSME	Micro, Small, and Medium Enterprises
NACOFAG	National Coordinating Organization for Farmers Association in The Gambia
NARI	National Agricultural Research Institute
NEA	National Environment Agency
NCCAP	National Climate Change Action Plan
NCoS	National Center of Specialization
NDP	National Development Plan
NEDI	National Entrepreneurship Development Initiative
NPV	Net Present Value
NRA	National Roads Authority
NSS	National Seed Secretariat
P2RS	Resilience Against Food and Nutrition Insecurity in the Sahel
PBC	Performance-Based Condition
PDO	Project Development Objective
PIM	Project Implementation Manual
PIS	Productive Investment Subproject
PPSD	Project Procurement Strategy for Development
PSC	Project Steering Committee
PTC	Project Technical Committee
RCoE	Regional Research Centers of Excellence
RISE	Resilient, Inclusive, Sustainable, and Efficient
RVCTP	Rice Value Chain Transformation Project
ROOTS	Resilience of Organizations for Transformative Smallholder Agriculture Program
SCD	Systematic Country Diagnostic
SDG	Sustainable Development Goal
SEAH	Sexual Exploitation, Abuse, and Harassment
SME	Small and Medium Enterprise
SOE	Statement of Expenditure
SOP	Series of Project
SORT	Systematic Operations Risk-Rating Tool

SPS	Sanitary and Phytosanitary
SRI	System of Rice Intensification
SSA	Sub-Saharan Africa
STEP	Systematic Tracking of Exchanges in Procurement
TGSB	The Gambia Standards Bureau
UNCDF	United Nations Capital Development Fund
WAAPP	West Africa Agricultural Productivity Program
WBG	World Bank Group

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## DATASHEET

### BASIC INFORMATION

Country(ies)	Project Name	
Gambia, The	Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV)	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P173070	Investment Project Financing	Substantial

### Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input checked="" type="checkbox"/> Small State(s)
<input 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
24-Nov-2021	31-Dec-2026
Bank/IFC Collaboration	Joint Level
Yes	Complementary or Interdependent project requiring active coordination

### Proposed Development Objective(s)

The Project Development Objective (PDO) is to promote the development of inclusive, resilient, and competitive agricultural value chains, focusing on smallholder farmers and agribusinesses in project target areas.

### Components

Component Name	Cost (US\$, millions)



Component 1. Improving the business environment for commercial agriculture development	19.70
Component 2: Building a productive and climate-resilient agri-food system	10.10
Component 3: Mobilizing productive private investments along the value chains	13.92
Component 4: Project coordination, monitoring and knowledge management	4.17
Component 5: Contingent Emergency Response	0.00

### Organizations

Borrower: Republic of The Gambia

Implementing Agency: Ministry of Agriculture

### PROJECT FINANCING DATA (US\$, Millions)

#### SUMMARY

Total Project Cost	47.89
Total Financing	47.89
of which IBRD/IDA	40.00
Financing Gap	0.00

#### DETAILS

##### Private Sector Investors/Shareholders

Equity	Amount	Debt	Amount
Government Contribution	43.97		
Government Resources	3.97		
IDA (Credit/Grant)	40.00		
Non-Government Contributions	3.92		
Private Sector Equity	3.92		
<b>Total</b>	<b>47.89</b>		<b>0.00</b>



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

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
<b>Gambia, The</b>	0.00	40.00	0.00	40.00
National PBA	0.00	40.00	0.00	40.00
<b>Total</b>	<b>0.00</b>	<b>40.00</b>	<b>0.00</b>	<b>40.00</b>

## Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2022	2023	2024	2025	2026	2027
Annual	3.00	7.00	10.26	10.70	6.85	2.19
Cumulative	3.00	10.00	20.26	30.96	37.81	40.00

## INSTITUTIONAL DATA

## Practice Area (Lead)

Agriculture and Food

## Contributing Practice Areas

Climate Change, Finance, Competitiveness and Innovation, Transport, Water

## 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	● Moderate
4. Technical Design of Project or Program	● Substantial
5. Institutional Capacity for Implementation and Sustainability	● Moderate
6. Fiduciary	● Substantial
7. Environment and Social	● Substantial



8. Stakeholders	● Low
9. Other	● Moderate
10. Overall	● Substantial

## 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	Not Currently 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

Schedule 2, Section I. 1.      Central Projects Coordination Unit (c)

(c) The Recipient, shall within one month of Effective Date, hire a director of operations, a grant management specialist, a communication and knowledge management specialist and a digital technology specialist all with qualifications, experience and terms of reference acceptable to the Association.

#### Sections and Description

Schedule 2, section I, 3.      Project Steering Committee (a)

The Recipient shall, within one month of Effective Date, establish and maintain throughout Project implementation, the Project Steering Committee (PSC) with adequate resources and facilities, key staff holding such qualifications and under terms of reference acceptable to the Association and as further detailed in the Project Implementation Manual.

#### Sections and Description

##### Financial Management

No later than four months after effectiveness, the Recipient shall customize the accounting software for the project bookkeeping.

#### Sections and Description

##### Financial Management

No later than four months after effectiveness, the Recipient shall recruit an internal auditor to cover the project.

#### Sections and Description

##### Financial Management

No later than six months after effectiveness, the Recipient shall recruit an external auditor with qualifications satisfactory to the World Bank Group to conduct a yearly audit of the project financial statements and express a specific opinion on the matching grants.

### Conditions

Type	Financing source	Description
Effectiveness	IBRD/IDA	<p>Article IV — Effectiveness ; Termination</p> <p>The Additional Condition of Effectiveness consists of the following, namely, that the Recipient has prepared and adopted the Project Implementation Manual, in accordance with the provisions of</p>



		Section I.B.1 of Schedule 2 to the Financing Agreement.
Type Disbursement	Financing source IBRD/IDA	Description Schedule 2, Section III, Part B - Withdrawal Conditions; Withdrawal Period: Notwithstanding the provisions of Part A, no withdrawal shall be made: (a) for payments made prior to the Signature Date; (b) under Category (2) until Recipient has adopted the Matching Grants Implementation Manual in accordance with the provisions of Section I.B.1.b (ii) of Schedule 2 to this Agreement.



## I. STRATEGIC CONTEXT

### A. Country Context

1. **The Gambia is among the poorest and most fragile countries in the world.** The country depends on foreign aid to balance its budget, and its poverty levels remain high (Table 1). According to the last Integrated Household Survey (IHS) 2015/16, 48.6 percent of Gambian households live below the poverty line of US\$1.25/day.<sup>1</sup> Poverty in The Gambia is multi-dimensional and unequally distributed, reflecting limited education, poor access to basic services, and widespread exposure to climate risks. Rural poverty stands at 70 percent against 32 percent in urban areas. The Human Development index (HDI) ranking for The Gambia is 172 out of 189 countries.

2. **The Gambia is emerging from a dire economic situation inherited from the previous regime.** The country's recent economic performance has been good owing to a more stable macroeconomic context, the recovery of trade and tourism, stronger investor interest, and a resumption of aid inflows. In 2019, investment accounted for over 22 percent of gross domestic product (GDP), three-fifths of which was private. Industry was the fastest-growing sector, partly due to the issuance of oil-prospecting licenses but also due to strong investment in construction, fueled by remittances from the diaspora. Agriculture has continued to struggle, contracting by 1.3 percent after erratic rainfall reduced crop and livestock production. Real GDP growth was 6.1 percent in 2019 after reaching 7.2 percent in 2018. The International Monetary Fund (IMF) projects average GDP growth of 5.5 percent over 2020–2025, based on strong growth in private sector activities (mostly construction and tourism), supported by improvements in public infrastructure and services.

3. **The Gambia's macroeconomic situation remains fragile amid the evolving COVID-19 pandemic.** Severe economic impacts of the pandemic include: (i) the collapsed tourism sector, which delivered more than 20 percent of GDP prior to the pandemic but experienced a 62.4 percent drop in flight arrivals; (ii) the closure of hotels and restaurants, which dragged down related services and industries; (iii) disruptions in import and export trade; (iv) declining food demand, as restrictions on mobility and disruptions in supply led to a year-over-year food price increase of 10 percent in 2021; and (v) delays in implementing investment projects. Growth in agriculture (5 percent) and industry (6.5 percent) over 2020 helped the country to avert a recession, but with the trade disruptions and a pandemic-induced fall in tourism, GDP for 2020 declined to -0.2 percent compared to the projected 6.3 percent.

### B. Sectoral and Institutional Context

4. **The Gambian economy is heavily dependent on agriculture.** Even though its share of total GDP has decreased over the last decade, agriculture retains a crucial role in economic growth in The Gambia. The sector contributes around 20 percent of GDP and generates 30 percent of all foreign exchange earnings. Agriculture is the main source of livelihood for 80 percent of the rural population, and according to the last IHS, the sector employs nearly half—46 percent—of the country's labor force, including an estimated 72 percent of the poor and

**Table 1: Outlook in 2020: The Gambia**

Population, million	2.4
GDP, current US\$ billion	1.9
GDP per capita, current US\$	788.1
International poverty rate (\$1.9) <sup>a</sup>	10.3
Lower middle-income poverty rate (\$3.2) <sup>a</sup>	38.4
Upper middle-income poverty rate (\$5.5) <sup>a</sup>	72.7
Gini index <sup>a</sup>	35.9
School enrollment, primary (% gross) <sup>b</sup>	101.7
Life expectancy at birth, years <sup>b</sup>	61.7

Source: WDI, Macro Poverty Outlook, and official data.

Notes:

(a) Most recent value (2015), 2011 PPPs.

(b) WDI for school enrollment (2019); life expectancy (2018).

<sup>1</sup> Gambia Bureau of Statistics. 2017. Integrated Household Survey 2015/2016. Volume III: Prevalence and Depth of Poverty. Banjul.



91 percent of the extreme poor.

**5. The performance of the agri-food sector has been poor and erratic but shows considerable growth potential.** The average annual growth rate of the agriculture sector from 1995–2003 in The Gambia was 8.5 percent per year. However, this was followed by a dismal period from 2003–08 where the average annual growth rate was –1.1 percent per year on account of irregular rainfall and decreased investment in the sector.<sup>2</sup> Between 2008 and 2019, average annual growth in agriculture value added was 1.46 percent, lower than in neighboring countries (6.93 percent in Senegal and 5.04 percent in Guinea). Yet the sector grew by 5 percent in 2020, when regular and sufficient rainfall coincided with improved access to quality inputs provided by the Government of The Gambia (GoTG) in response to the pandemic. Overall, agricultural growth has been driven by the expansion of cultivated land at an estimated 2 percent per year, commensurate with the increase in the rural population.

**6. Agriculture in The Gambia is dominated by subsistence-oriented rainfed crop and livestock production systems.** The sector is dominated by smallholders, whose production systems are vulnerable to climate-related crises such as the droughts and floods that cause significant fluctuations in food availability and prices. Marketable surpluses are low, with a food self-sufficiency ratio of about 50 percent. In 2018, the total harvested area was estimated at 420,000 hectares (ha), or about 70 percent of the country's arable area.<sup>3</sup> The overwhelming share of harvested area is in annual rainfed crops. Less than 3 percent was under irrigation despite the availability of important water resources (Gambia River), and less than 1 percent was under permanent crops. The private sector still contributes very little to the development of agribusiness.

**7. An overly complex land tenure system prevents secure access to land.** Uncertainties regarding land acquisition and leasing for commercial purposes reduce the incentives for private investment in land-related businesses. These uncertainties also affect farmers' behavior, especially if they have borrowed or leased farmland. Customary land right systems are also highly inequitable from a gender perspective, and women's rights to land, although mandated by the Land Act, are not sufficiently implemented in rural areas. A top priority identified in The Gambia Land Governance Assessment Framework (Bensouda 2013) is to develop a clearly articulated and integrated national land policy, with proposals and implementing legislation to strengthen women's land rights.

**8. Women are key actors in the Gambian agri-food sector, but gender disparities constrain their productivity.** Although the agricultural labor force is largely female (67 percent), gender disparities, socio-cultural pressures, and constraints in education, health, income, voice, and legal rights prevent rural women from participating effectively in Gambian agriculture and its development<sup>4</sup>. Despite progress in recent decades, women's voice in policy making is still weak, and their representation in key rural institutions such as cooperatives and other organizations is scant. Low female education levels<sup>5</sup> and binding constraints in women's agricultural activities—including lack of secure access to, ownership of, and control over land, along with limited access to quality inputs, technologies, finance, and markets—hamper women's capacity to initiate and expand their agricultural enterprises. Women generally must access land under customary law, through "user rights" conferred by husbands or communities.<sup>6</sup> Because these rights tend to be seasonal or annual, women can grow only short-cycle food crops and no perennial crops. Extension services are largely geared toward men as household heads and give little attention to women's specific needs. Not surprisingly, women producers struggle to access the

<sup>2</sup> ReSAKSS (2019).

<sup>3</sup> Of Gambia's total land area of 1.1 million ha, 60 percent (620,000 ha) is considered suitable for agriculture, including grazing and fallow.

<sup>4</sup> Agricultural production features a distinct gender division of labor. Men primarily grow sorghum, millet, maize, and groundnuts, while women primarily grow lowland rice. As noted, women are also very active in small-scale horticultural production for home consumption and sale at local markets to earn a little cash income. Women also raise and manage most of the small ruminants and rural poultry.

<sup>5</sup> Compared to 49 percent of men, 62 percent of Gambian women have no schooling. Adult female literacy is 34 percent.

<sup>6</sup> Current estimates indicate that women are mostly joint owners of land (15.4 percent), and only 4.4 percent are sole owners.



information, skills, and financial resources to acquire and use agricultural technologies efficiently.<sup>7</sup> For women, most if not all access to financial resources comes through specific development programs, almost exclusively in the form of grants. Only 9 percent of rural women are estimated own a bank account, compared to 20 percent of urban women.

**9. The Food and Agriculture Organization of the United Nations (FAO) classifies The Gambia as “a Low-Income Food Deficit Country” facing severe food security challenges.** Agricultural output covers only half of the country’s domestic consumption needs, with decreasing food production per capita leading to increased food imports. Currently food imports represent about 30 percent of national imports, consisting mostly of rice, meat, and processed food valued at around US\$450 million.<sup>8</sup> Nearly 80 percent of national rice consumption is met through imports. In 2019, imports of milled rice amounted to over 200,000 metric tons for a value of US\$50 million, corresponding to 3.0 percent of total GDP. In contrast, agricultural exports are very small. Valued at US\$6 million, agricultural exports represent 33 percent of total exports and consist mostly of groundnuts (26 percent), fish (24 percent), and small but growing quantities of cashew nuts and fruits, particularly mangoes (14 percent).

**10. The COVID-19 pandemic has worsened food security throughout The Gambia.** The pandemic reversed gains in poverty reduction. The international poverty rate increased from 8.4 percent in 2019 to 9.2 percent in 2020, pushing over 25,000 people into poverty. High-frequency phone surveys indicate that job losses (especially in services) peaked with the pandemic, at 26 percent in October 2020 and averaged 21 percent till June 2021, pushing vulnerable households into poverty. The Government’s COVID-19 emergency response plan includes measures to stop the spread of the pandemic,<sup>9</sup> as well as a program to provide immediate assistance to vulnerable households and businesses and support the post-COVID-19 recovery. For The Gambia, increased investments in the agriculture and agribusiness sector—public and private—will be essential for achieving a Resilient, Inclusive, Sustainable, and Efficient (RISE) economic recovery and reducing food insecurity.

**11. Beyond food security, malnutrition is a major public health problem in The Gambia, with especially serious consequences among women and children.** Micronutrient deficiencies (iron, vitamin A, and iodine) are highly prevalent throughout the population. The majority of Gambian women, especially in rural areas, are persistently energy deficient due to poor diets, heavy workloads, and frequent infections. The Gambia national nutrition survey (2015) using the Standardized Monitoring and Assessment of Relief Transition (SMART) method indicates that: (i) 18 percent of nonpregnant women of childbearing age were underweight; (ii) Global Acute Malnutrition (GAM) was 10.3 percent, and Severe Acute Malnutrition (SAM) was 2.2 percent; and (iii) stunting caused by malnutrition affected 22 percent of children under five, with implications for their productivity later in life.<sup>10</sup> The Government, which has placed nutrition high on the national development agenda, has made progress in reducing stunting among children under five from 25 percent in 2013 to 15.7 percent in 2018. The Government’s comprehensive National Nutrition Policy for 2018–2025 is aligned the second Sustainable Development Goal (SDG) and aims to end all forms of malnutrition.

**12. In The Gambia, the agriculture sector could become a robust engine of inclusive growth and job creation.** The country has the potential to achieve huge gains in productivity and market share, given its rich

<sup>7</sup> Access to financial services is very limited for agricultural households and nearly nonexistent for women working in agriculture. Most financial institutions (FI) will not grant credit unless the applicant has adequate security or collateral; for instance land. In addition, the high interest rates charged by FI are strong disincentives even for short-term credit.

<sup>8</sup> International Trade Centre (2019).

<sup>9</sup> The WBG immediately approved (April 2, 2020) a US\$10 million Gambia COVID-19 Preparedness and Response Project to support the government in preventing, detecting, and responding to the COVID-19 health threat and strengthening the national public health system. An additional financing of \$8 million to support the procurement and distribution of COVID-19 vaccines was approved by the Board on April 16, 2021.

<sup>10</sup> Among the working-age population (ages 15–64) in 2018, some 400,000 Gambians (5.3 percent) were estimated to have experienced stunting before they reached age five, placing them at a disadvantage compared to peers who were well nourished as children.



natural resource endowment and strong domestic, regional, and international demand for its agricultural products, including rice, groundnuts, cashews, vegetables, and fruits. With rapid population growth (2.94 percent), domestic demand for food will rise by an estimated 4–5 percent per year, and an increasingly urban and prosperous population will consume not only more staple foods (rice) but more high-value foods, such as fresh fruits, vegetables, and livestock products. The tourism sector presents an important market opportunity that can be satisfied by improving the conditioning, processing, packaging, and marketing of agricultural products. The National Export Strategy targets groundnuts, cashews, horticultural crops, and fish as the most promising sources of export growth. Along with rice and poultry which could substitute for imports, the significant potential of these crops has been identified in the updated World Bank Diagnostic Trade Integration Study (2013) and the more recent World Bank/International Finance Corporation (IFC) Agribusiness Deep Dive (April 2019) and World Bank Agriculture Engagement Note (2019).

**13. To unlock the potential of the agriculture and agribusiness sector, The Gambia will need to address several constraints:**

- (a) **A poor business environment with few incentives for private investment and weak value chain organization.** The Gambia must dramatically improve its business environment to foster private investment, especially to unlock the potential of commercial agriculture, develop agricultural value chains, generate efficiency and economies of scale, drive innovation, and enter export markets. In addition, The Gambia has many producer associations and cooperatives (for vegetables, cashews, rice, and poultry, among others), but agricultural value chains are not organized to connect buyers and sellers and improve competitiveness. Specialized agricultural value chain organizations are largely absent<sup>11</sup> for a variety of reasons. For example: (i) it is difficult to organize a large number of widely scattered actors; (ii) value chain actors have limited appreciation of the benefits of collective action; and (iii) national institutions responsible for providing the supervision, support, and services required to structure the development of the agri-food sector have low capacity.
- (b) **Limited access to finance.** According to the most recent Enterprise Survey,<sup>12</sup> insufficient access to finance and the high cost of financial services are key impediments to private sector development. Lending to agriculture represents less than 5 percent of all lending. The rural banking network is limited, the cost of managing small loans is high, and the perceived risk of lending is high due to unstable revenue flows, lack of collateral, and limited legal avenues for enforcing contracts. The lack of diversity in financial services, particularly the lack of products and services designed for agriculture and agribusiness, is a big constraint on investment<sup>13</sup>. Expanding financial inclusion, particularly for smaller agri-enterprises, poorer agricultural households, women, and youth will require improvement and deepening of the country's financial infrastructure (especially financial information), the development of more diversified and digitalized financial services, and new approaches for de-risking lending to agriculture by FIs.
- (c) **Low productivity due to limited access to inputs, technology and extension services.** Agricultural productivity has remained low in recent years as producers have had little access to technology, inputs, and advice. Support for the transfer and adoption of productivity-enhancing and climate-smart technologies will need to increase rapidly to feed the country's growing urban population.

<sup>11</sup> Some formal cooperatives and professional associations bring together a range of actors in a value chain (i.e., in the onion), although they have very weak operational and managerial capacity. These organizations are governed by the Uniform Act relating to the law of cooperatives adopted on December 15, 2010; Law No. 60-315 of September 21, 1960; Ordinance No. 2011-473 of December 21, 2011; and Inter-ministerial Decree No. 294 of August 20, 2013.

<sup>12</sup> Enterprise Analysis Unit (2018).

<sup>13</sup> From the demand side, significant factors limit access to finance among MSMEs, including: (i) informality (70 percent of MSMEs are not formally registered) and the inability to meet a number of other criteria to qualify for credit from formal FIs, as well as (ii) a lack of financial and business skills to prepare financial statements and business plans of the quality required by FIs.



(d) **Vulnerability to climate change.** The Gambia ranks among the world's most vulnerable countries with respect to climate change.<sup>14</sup> Mean annual temperatures have increased by 1.0°C since 1960 and are projected to continue increasing by 1.1–3.1°C by 2060.<sup>15</sup> At the same time, mean annual rainfall has been decreasing: since 1960 the total national area receiving less than 800 millimeters of rainfall has increased from 36 percent to 93 percent. The rainy season has become markedly shorter, while variability in inter-annual rainfall has increased, and floods and droughts have become more common. Aside from causing coastal erosion, sea-level rise threatens to inundate mangrove and swamp areas and increase saltwater intrusion in major rice-growing areas and groundwater aquifers. These climate impacts have negatively affected national agricultural production and have exposed farming communities to significant food shortages, in a country where more than half of the population is already vulnerable to food insecurity.<sup>16</sup> In addition, The Gambia's low-lying topography, high dependence on subsistence rainfed agriculture, and inadequate rainwater drainage and management are compounding risks related to climate change.<sup>17</sup> Adaptation to climate change is therefore a key priority for the country and its agricultural systems. Through its Strategic Program for Climate Resilience (SPCR), the Government plans to mainstream climate change into all national development programs. In agriculture, the plan calls for scaling up climate-smart technologies and practices, including irrigation, improved soil and water management, varieties bred to mature rapidly or to withstand drought and saline conditions, and early warning systems. Although some of these options are not new to The Gambia, securing their widespread adoption remains a challenge because of ineffective institutions (including property rights to land), insufficient information, and impediments to obtaining finance.

(e) **Weak food safety and quality control system.** The Gambia has taken steps to create a national food safety and quality control system to protect domestic consumers and enable producers to market their products domestically and internationally. In 2010 it established *The Gambia Standards Bureau* (TGSB), which is charged with standardization, conformity assessment, and metrology in industry and commerce, along with the *National Metrology Laboratory and Weights and Measures Bureau* under the Ministry of Trade, Industry, Regional Integration, and Employment (MOTIE). In 2011, it established the *Food Safety and Quality Authority of The Gambia* (FSQA) which is responsible for ensuring the safety and quality of all food and feed through the coordination of institutions in the national sanitary and phytosanitary (SPS) system, such as the Ministry of Health, MOTIE, and Ministry of Agriculture (Plant Protection Services, Departments of Livestock and Fisheries, and others).<sup>18</sup> The Government also established a number of food safety and quality laboratories over the years in various ministries. Despite these efforts to build institutions and infrastructure, the system still cannot provide the services required by consumers and producers. The FSQA does not effectively coordinate the institutions within the system (its Scientific Committee is not operational), and most of the institutions lack equipment and adequately trained staff. Laboratories are not accredited to certify the safety and quality of agricultural products, particularly for export, so producers must send products to other countries for phytosanitary certification. Aside from its inability to issue phytosanitary certificates, The Gambia experiences difficulties in monitoring and tracking agricultural pests such as fruit flies (mangoes) and False Codling Moth (chilies) and cannot undertake the corresponding risk assessment required by importing countries. Finally, the services that would enable producers to adopt good agricultural/industrial practices in compliance with the strict quality, social, and environmental standards imposed by a growing number of domestic and overseas markets—Global GAP/Tesco NURTURE, International Organization

<sup>14</sup> The ND-Country profile ranks Gambia as follows: Overall Vulnerability: 161/182; Food Sector Vulnerability: 170/192; and Adaptive Capacity: 161/192.

<sup>15</sup> The Gambia – Climate Change Knowledge Portal. See <https://climateknowledgeportal.worldbank.org/country/gambia/climate-data-projections>.

<sup>16</sup> According to the World Food Programme, at least one-tenth of the Gambian population is food-insecure, and almost half are vulnerable to food insecurity.

<sup>17</sup> Segnon, A.C., R.B. Zougmoré, and P. Houessonon. 2021. "Technologies and Practices for Agriculture and Food System Adaptation to Climate Change in The Gambia." CCAFS Working Paper No. 344. Wageningen: CGIAR Research Program on Climate Change, Agriculture, and Food Security (CCAFS).

<sup>18</sup> Aside from these arrangements, FSQA has a Scientific Committee charged with developing and proposing the FSQA's scientific opinions, including the assessment of food safety risks.



for Standardization (ISO) 22000, and BRC, for instance—are not available in The Gambia.<sup>19</sup> The absence of these services exposes local consumers to considerable food safety risks and remains a binding constraint on supplying the domestic tourism industry and accessing international markets (including markets in Sub-Saharan Africa (SSA)).

(f) ***Inadequate marketing infrastructure.*** The lack of infrastructure for pooling, handling, storing, cooling, and shipping agricultural products creates significant marketing inefficiencies. It discourages the emergence of commercial operators that can act as aggregators and generate economies of scale. Without proper storage and cooling facilities, significant waste occurs. For rice and other cereals, post-harvest losses are estimated at 10 percent, and they increase to 30–50 percent for fresh fruits and vegetables. Exports of fresh farm products are particularly limited by high transport costs. The time required to ship produce by sea makes it difficult for firms to guarantee supplies of fresh products of good quality to European Union (EU) markets. Air freight capacity is limited and depend on what is available on passenger flights (about 25–30 tons per week). Banjul port is too congested to operate efficiently. Some exporters resort to shipping their fresh products through the port of Dakar, despite the additional costs. Extremely high cost of electricity impedes the development of functioning and cost-efficient cold chains, which further reduces the competitiveness of Gambian fresh exports. Inefficient market information systems have hampered the development of commercial agriculture, but now digital technology has opened opportunities to provide market information and productivity-enhancing services more widely and efficiently.

(g) ***Inadequate road transport infrastructure and services.*** Gambia's road density of 35 km/100 km<sup>2</sup> is below the African average (50 km/100 km<sup>2</sup>). The national road network is estimated to cover about 3,900 km, of which 690 km (17 percent) forms the primary road network; consisting mostly of the paved highways along both sides of the Gambia River that are the main arteries connecting Banjul in the West with the main inland economic centers to the East. These two highways are now more efficiently connected near Banjul by about 85 km of paved road and a new bridge, replacing the ferry system. The secondary and tertiary road network, mainly gravel-surfaced, connects agricultural production zones to secondary towns and economic centers and onward to the primary road network. More than 60 percent of secondary roads and close to 100 percent of tertiary (feeder) roads are estimated to be in very poor condition. This poor road network is a major constraint on access to markets for smallholders and SMEs, leading to high post-harvest losses and transportation costs. Feeder roads have been severely impacted by climate change impacts, such as excessive flooding. The perennial lack of maintenance isolates rural communities and producers from markets, and sharply reduces the competitiveness of agricultural value chains.

14. **National policy and strategy documents have consistently advocated the emergence of a commercially oriented agriculture, driven by market-oriented agri-firms that can provide the leadership to integrate smallholders in organized and efficient value chains.** For example, The Gambia Vision 2020 committed to a “*trading, export-oriented agricultural sector*” as part of its socioeconomic development strategy for 1996–2020. One of the eight strategies priorities in the more recent National Development Plan (NDP) 2018–2021 is to develop “*a modern, sustainable, and market-oriented agriculture and livestock sector for increased food and nutrition security, income and employment generation, poverty reduction, and economic transformation.*” This goal is the central objective of the Second Generation National Agricultural Investment Plan—Food and Nutrition Security (GNAIP II–FNS) 2019–2026 and of Gambia’s Agricultural Transformation Program (GATP 2020–2030). It has acquired added urgency with the COVID-19 crisis.

<sup>19</sup> Only two Gambian producers have Global GAP certification. Yet all actors along the value chain (food production, processing, retail, distribution, and preparation) require sufficient capacities and resources to meet standards for producing and marketing safe food.



## C. Relevance to Higher Level Objectives

15. **The proposed Gambia Inclusive and Resilient Agricultural Value Chain (GIRAV) Project is fully aligned with GoTG strategies and programs.** It is especially relevant to the Government Vision 2020, National Export Strategy, NDP 2018–2021, GNAIP II–FNS 2019–2026, and GATP 2020–2030, all of which place commercial agriculture at the center of the country's economic and social development. The project is consistent with the four strategic axes of GNAIP II, which emphasize: (i) improving the production and productivity of priority products; (ii) structuring value chains; (iii) strengthening the resilience of vulnerable populations; and (iv) governance. The project reflects the GNAIP II–FNS principles of leveraging private sector investment in agricultural value chains by crowding-in private sector operators through a conducive policy environment, in the context of an institutional and legal framework that support private sector development.

16. **The World Bank Group (WBG) Gambia Country Partnership Framework (CPF) 2021–2026 (under preparation) and recently completed Systematic Country Diagnostic (SCD) in May 2020, "Overcoming a No-Growth Legacy,"<sup>20</sup> fully support the national vision and objectives for the agricultural sector.** To accelerate poverty reduction and boost shared prosperity in The Gambia, the SCD identified a priority agenda for inclusive and sustainable growth consisting of six pathways and associated policy areas. The proposed project aligns fully with SCD Pathway C (*Increase Agricultural Productivity*) and policy areas C.1 (*Investing in Irrigation Infrastructure*), C.2 (*Promoting Innovation and Digital Technology Adoption*), and C.3 (*Improving Access to and Quality of Inputs*). The project also aligns closely with Pathway D (*Diversify the Economy*) and especially with policy areas D.1 (*Increasing Access to Finance and Insurance*) and D.4 (*Developing Regional and Global Value Chains*). The three CPF Focus Areas recognize that The Gambia can transition out of fragility only by addressing its underlying public service delivery challenges, tackling constraints on development in key economic sectors such as agriculture, and investing in human capital. The proposed project is an integral part of CPF Focus Area 2, which aims to *Enable Inclusive and Resilient Private Sector Driven Job Creation* through sustained support for government efforts to create an enabling business environment that fuels job creation, by boosting commercial agriculture and increasing access to finance for micro, small, and medium enterprises (MSMEs), among other actions. The project will also support the GNAIP II and CPF objective of ensuring gender equality and equity by promoting economic independence and equitable access to economic resources among women.

17. **The WBG principles on Mobilizing Finance for Development (MFD) are reflected in many intervention areas of the proposed project.** Building on the achievements of the Gambia Commercial Agricultural Value Chain Management Project (GCAV, P125024), the project will expand private sector involvement in all segments of the value chains. It will support a spectrum of actions to foster private investment in agribusiness and value chains, including: (i) building capacity and increasing the space for private sector activity; (ii) improving the policy and regulatory environment; (iii) considering options for using public financing to leverage private capital, create investment incentives, and reduce transaction costs and risks; and (iv) supporting essential public and semi-public goods and services such as agricultural research/innovation, quality control and certification, and complementary basic public marketing infrastructure to attract agribusiness investors.

18. **Climate and disaster risk screening performed as part of project preparation indicates that global warming will lead to higher-than-average rainfall and increased frequency of drought in The Gambia.** Climate projections indicate increases in temperature, increased unpredictability of seasonal rains, increased incidence of drought, rising sea levels and higher storm surges. This project will address the climate vulnerability by supporting investments in climate smart agriculture (CSA) and building the capacity of institutions to address climate risks.

<sup>20</sup> WBG. 2020. "Republic of The Gambia: Overcoming a No-Growth Legacy." Systematic Country Diagnostic. Washington, DC. <https://openknowledge.worldbank.org/handle/10986/33810>.



To ensure that interventions reduce greenhouse gas (GHG) emissions, the project includes activities from the approved list in the *2020 Joint Report on Multilateral Development Banks' Climate Finance* and fully reflects World Bank guidance for meeting climate change requirements in agriculture.<sup>21</sup> The project activities fully meet the criteria for generating climate change mitigation co-benefits. For detailed GHG accounting results, see Annex 3 and for climate mitigation and adaptation measures, see Annex 7.

**19. Through its activities to mitigate the adverse effects of climate change, the project will contribute to national commitments and WBG strategic directions in support of climate action.** Project activities enabling agriculture to adapt to climate change will support implementation of the Intended Nationally Determined Contribution of The Gambia (INDC), in addition to the National Climate Change Action Plan (NCCAP) for carrying out the Low Emissions Climate Resilient Development Strategy. The NCCAP seeks to strengthen diversified and sustainable livelihood strategies to reduce the impacts of climate variability and climate change on agriculture and livestock production. The project will also contribute to the four strategic directions of the WBG Next Generation Africa Climate Business Plan:<sup>22</sup> (i) food security and resilient rural economy; (ii) clean energy transition and energy resilience; (iii) climate shocks and risk governance; and (iv) macro-economic policy and planning.

**20. The project is aligned with the WBG's COVID-19 crisis response approach<sup>23</sup> and RISE economic recovery framework.** Although the project is not considered a COVID-19 response operation, it reflects the aims of two pillars of the WBG pandemic response approach: Pillar 3 (*Ensuring Sustainable Business Growth and Job Creation*) and Pillar 4 (*Strengthening Policies, Institutions and Investments for Rebuilding Better*). The RISE framework for economic recovery is reflected in the project's focus on *inclusiveness* (targeting such diverse as smallholders, SMEs, women, and youth) and improvements in *climate resilience, sustainability, and efficiency* through the adoption of climate-smart technologies (including labor- and water-efficient irrigation).

## II. PROJECT DESCRIPTION

**21. The project design and activities support the development of resilient agricultural value chains.** First, the project is driven by demand from the country's main consumption centers: it specifically targets value chains for products with high potential demand and strong potential to generate important opportunities for value added and employment along the value chain. Second, the project focuses on promoting private investment throughout the target value chains through activities to improve the business climate and connectivity between the main consumption centers and main supply areas and strengthen key public and private institutions responsible for mobilizing private investments. Third, the project strengthens the competitiveness of Gambian producers through activities to increase the productivity and climate resilience of agriculture. Finally, the project helps advance the broader agenda for the sector by building synergies with current projects addressing the structural transformation of the agricultural and rural sector.

**22. Project interventions will target the following geographic areas, value chains, and opportunities that meet the "3H" criteria of High demand, High potential, and High connectivity:**

(a) **Geographic areas.** The project will operate in five agricultural regions—West Coast (Brikama), North Bank (Kerewan), Lower River (Mansa Konko), Central River (Janjanbureh), and Upper River (Basse)—and two

<sup>21</sup> World Bank (2018), "Climate Change Requirements: Guidance Note for Meeting Corporate Requirements in Climate Smart Agriculture." Washington, DC. <https://worldbankgroup.sharepoint.com/sites/Agriculture/Knowledge%20Base/GuidanceNoteClimateChangeRequirementsAgriculturalOperations.pdf>.

<sup>22</sup> World Bank. 2020. "The Next Generation Africa Climate Business Plan: Ramping Up Development-Centered Climate Action." Washington, DC. <https://openknowledge.worldbank.org/handle/10986/34098>.

<sup>23</sup> WBG. 2020. "WBG COVID-19 Crisis Response Approach Paper: Saving Lives, Scaling-up Impact and Getting Back on Track." Washington, DC. <http://documents.worldbank.org/curated/en/136631594937150795/World-Bank-Group-COVID-19-Crisis-Response-Approach-Paper-Saving-Lives-Scaling-up-Impact-and-Getting-Back-on-Track>.



municipalities (Banjul and Kanifing), which together comprise 35 of 43 national districts. These areas have good connectivity to poles of high and fast-growing demand for agricultural products (Banjul and its port/airport for exports, and the large regional capitals of the other regions, shown in parentheses), as well as high potential for developing commercial agriculture (see map in Annex 8).

- (b) **Value chains.** The four target value chains are: (i) rice (substituting for increasing imports); (ii) horticulture (vegetables and mangoes for urban centers and export); (iii) cashews (for domestic processing and export); and (iv) poultry (for urban centers), in conjunction with maize for feed. These value chains have high development potential (market opportunities and productivity gains) that can be realized in the short to medium term. Based on the import/export price parity analysis done for the IFC Agribusiness Deep Dive (2019), these value chains also have strong potential for increased competitiveness. Finally, they have high potential to create jobs, particularly for women and youth (see Annex 1, Table A1.1).
- (c) **Immediate agribusiness opportunities.** In collaboration with IFC, the project will also identify and pursue more immediate agribusiness opportunities. Specifically, it will provide support to establish or expand promising private agricultural or agro-processing companies (“low hanging fruit”) in any agricultural value chain (regardless of whether it is a target value chain) and geographical area, based on the advantages of the business proposition, such as market prospects, investor profile, and detailed development plan.

23. **In line with recent analytical work by the WBG on the Gambian agricultural sector,<sup>24</sup> the project will adopt an inclusive value chain development (IVCD) approach.<sup>25</sup>** The project interventions will include general interventions relevant to all value chains as well as specific ones to address constraints particular to each value chain. For example, general interventions will include the provision of marketing infrastructure and rural roads, improvement of the business environment, and strengthening of the main public and private institutions overseeing food production and marketing, i.e., ministries and public agencies, cooperatives, and interprofessional bodies. Specific interventions will be tailored to the individual value chain (nature of the crop, characteristics of the main actors, structure of the value chain) to strengthen vertical and horizontal coordination<sup>26</sup> and provide targeted support to individual value chain actors by facilitating access to services, including financing.

24. **The project also incorporates WBG cross-cutting priorities into its activities.** Project activities will: (i) emphasize *climate change mitigation/adaptation* in their design; (ii) promote better access of *vulnerable groups* (particularly women and youth) to productive resources and job opportunities; and (iii) recognize, in line with the *MFD strategy*, the private sector’s central role in developing Gambian food value chains.

#### A. Project Development Objective

25. **The Project Development Objective (PDO)** is to promote the development of inclusive, resilient, and competitive agricultural value chains, focusing on smallholder farmers and agribusinesses in project target areas.

26. **The PDO-level performance indicators are:** (i) Increase in the volume of marketed output by project direct beneficiaries (*percentage, disaggregated by women, youth, smallholders, and Small and Medium Enterprises–SMEs*); (ii) Increase in yield of targeted agricultural commodities by project direct beneficiaries (*percentage, disaggregated by crop*); (iii) Farmers reached with agricultural assets or services (core indicator–number,

<sup>24</sup> Including the following reports: (i) “The Gambia: Policies for Private Sector–Led Growth—Achieving Sustainable and Inclusive Growth” (World Bank internal report, 2019); (ii) the IFC Agribusiness Deep Dive; and (iii) the World Bank Agriculture Engagement Note.

<sup>25</sup> An IVCD approach links farmer with buyers in contracting arrangements, offering knowledge, access to credit and inputs. Based on lessons from the experience in Latin America with Productive Alliances.

<sup>26</sup> Promoting contracts between buyers and producers that allow buyers to obtain the required supply of a product (in terms of quantity and better and more consistent quality) and allow producers to gain better access to markets, credit, and agronomic knowledge and reduce their price and/or market risk.



*disaggregated by women and youth); and (iv) Farmers using/adopting climate-smart technologies (number, disaggregated by women and youth).*

27. The project outcome, intermediate, and output-level indicators are detailed in the results framework in Section VII and its climate mitigation and adaptation effects in Annex 7.

## B. Project Components

28. The project consists of four components. These are described below and further detailed in Annex 1.

### **COMPONENT 1. IMPROVING THE BUSINESS ENVIRONMENT FOR COMMERCIAL AGRICULTURE DEVELOPMENT (*US\$19.70 MILLION EQUIVALENT — US\$18.00 MILLION IDA AND US\$1.70 MILLION FROM GOTG*)**

#### ***Subcomponent 1.1: Strengthening the capacity of key organizations and improving value chain coordination and partnership (US\$2.50 million IDA)***

29. In cooperation with IFC, Subcomponent 1.1 will focus on the following activities:

(a) ***Strengthening producer and professional organizations.*** This activity will provide technical assistance, training, coaching, and mentoring to men and women involved in the target value chains. The technical assistance offered will also enhance engagement on climate issues and ensure that business plans consider current and expected climate impacts and integrate relevant climate adaptation and mitigation considerations, as needed. Building on the detailed analysis of the target value chains, this subcomponent will finance: (i) the institutional strengthening of producer associations through organizational audits<sup>27</sup> and the preparation and implementation of tailored capacity-building programs for these associations and their professional organizations. This would include technical and managerial training, governance, operational and financial management (FM), business development, including mainstreaming gender and climate change in business plans; and (ii) support for the identification of promising markets. To address the gender gap in agricultural value chains, the project will support specific training for women leaders of producer organizations to promote their increased participation in decision-making, as well as their economic and social empowerment.<sup>28</sup>

(b) ***Enhancing value chain coordination and partnership.*** This activity will strengthen coordination along the targeted value chains to increase their efficiency and facilitate partnerships between their actors to respond to market demand/opportunities. In addition, this activity will assess climate risks impacting the selected value chains and prioritize adaptation and mitigation measures to address these risks and integrate climate considerations in value chain development. Accordingly, it will finance: (i) a detailed assessment of the target value chains; (ii) the participatory preparation of a specific detailed operational development program, which integrates relevant climate adaptation and mitigation considerations, for each value chain to improve efficiency and climate resilience overall and at each level; (iii) the preparation of a catalogue of promising investment opportunities, which will include information on costs, expected financial return, climate adaptation and mitigation measures, risks, expected social and environmental impacts, and prerequisites for success; (iv) the digital mapping of the different value chain actors, under the coordination of the Gambia Chamber of Commerce and Industry (GCC); (v) for each target value chain, the establishment or strengthening of an Innovation Platform (IP) as promoted by the West Africa Agricultural Productivity Program (WAAPP-P122065) to bring together key stakeholders (producers, processors, traders, transporters) around common issues regarding the value chain's market demands, climate change risks, information on appropriate technologies (including CSA technologies), and

<sup>27</sup> Such as SCOPE insights.

<sup>28</sup> Training will concentrate on building women's capacity to express their needs and exercise their rights and leadership skills, to bring about women's active and recognized participation in decision-making bodies and in defining action plans to overcome specific social and economic constraints affecting them.



others; (vi) the development of productive partnerships/contract farming arrangements between producers and buyers involved in marketing, processing, and export; and (vii) workshops to facilitate the public-private dialogue on specific issues that are key to developing the target agri-food value chains.

(c) ***Strengthening the capacity of the Gambia Investment and Export Promotion Agency (GIEPA)<sup>29</sup> and GCCI for mobilizing, facilitating, and monitoring private investments in agriculture and agribusinesses.*** This activity, conducted in cooperation with IFC, will equip GIEPA to serve as an efficient one-stop shop to promote and support domestic and foreign investment in agriculture. It will strengthen several key areas of GIEPA by financing: (i) the implementation of an effective communication strategy and outreach campaigns, which will also include information on climate risks and promote climate adaptation and mitigation investments; (ii) the development of a knowledge database related to market opportunities and financing opportunities in the target value chains (and the agri-food sector in general);<sup>30</sup> and (iii) the establishment of a Private Investor Identification, Support, and Tracking System (to identify promising private investments and monitor their implementation and impacts), and a Grievance Mechanism (GM) to address and remove administrative constraints that agribusiness investors may face in establishing or expanding their business. The promising investments/investors identified through this activity will be referred to the Country Project Coordination Unit (CPCU - see below Subcomponent 1.2), which will select which investments will be supported under the project (see Component 3). This activity will also strengthen GCCI by financing: (i) a capacity building program for GCCI staff in governance, organization, communication, and other targeted field areas; and (ii) a digital platform mapping the economic operators who are GCCI members and offering them opportunities for connection and partnership.

(d) ***Supporting public-private dialogue on specific issues and reforms required for the development of commercial agriculture.*** Examples include, among others: (i) secure access to land by supporting women and youth to obtain official land transfer certificates from local land authorities, by tacitly encouraging inclusive and win-win partnership between smallholder landowners and SMEs based on out grower schemes, and by initiating policy dialogue to reflect on a clearly articulated and integrated national land policy, paving the way for land reform; (ii) incentives for ensuring the competitiveness of agricultural value chains, enhancing climate resilience, improving the agribusiness environment, and promoting private investment; and (iii) infrastructure management and maintenance to ensure its sustainability and resilience to climate impacts, including irrigation infrastructure, feeder roads, and marketing infrastructure. In addition, the project will encourage public-private dialogue on climate issues, including dialogue to encourage the use of climate-smart practices in agriculture.

30. This subcomponent will be implemented by the CPCU in partnership with GCCI and GIEPA, under the joint supervision of the Ministry of Agriculture and MOTIE, and with support from IFC advisory services and a specialized service provision firm.

#### ***Subcomponent 1.2: Developing critical marketing infrastructure (US\$4.70 million—US\$4.00 million IDA and US\$0.70 million from GoTG)***

31. Subcomponent 1.2 will support the establishment/improvement of aggregation/logistics platforms (bulking, storage, conditioning/processing) at critical locations in the project areas, based on key needs identified in consultations with value chain actors. The expected outcomes of these investments are improved product quality, reduced marketing costs, reduced post-harvest losses due to climate impacts, and better links between

<sup>29</sup> GIEPA is the national agency responsible for facilitating investment, business, and export development and support to MSMEs and regulating designated export processing zones in The Gambia. Its nine-member Board of Directors consists of four representatives from the private sector and four from the Ministry of Commerce, Ministry of Finance, Ministry of Education, and Office of the President, as well as the Chief Executive Officer of GIEPA.

<sup>30</sup> This database will include information on typical investment opportunities and more general data on markets, agronomic conditions, access to irrigation, utilities and services, industrial land, climate information and other parameters. This database will be freely available to public institutions, partner FIs, and potential investors.



producers and buyers. The feasibility studies for this aggregation/logistics infrastructure will include: (i) a review of options for its management and sustainable financing (cost recovery from users, operating subsidies, if necessary, from the central/local government), with due consideration to public-private partnership arrangements between local governments and the private sector or other concessionary agreements and sustainable financing; (ii) design standards to ensure that this infrastructure is resilient to the main local risk factors pertaining to geophysical conditions and climate change, and where possible, improved energy efficiency measures, renewable energy technologies (e.g. solar power), and so on are financed as part of the facilities improvements,<sup>31</sup> and (iii) the related environmental and social impact assessments (ESIAs). Subcomponent 1.2 will finance: (i) the technical assistance for carrying out the feasibility studies of the proposed aggregation/logistics platforms; (ii) their construction; and (iii) tailor-made technical and financial assistance to bring these markets to their full operational capacity and breakeven points (possibly including support from the project, on a declining basis, of their operating costs during the start-up phase). Climate change (e.g. higher temperatures, increased flooding events) will be an important design consideration in the establishment/improvement of these facilities.

32. This subcomponent will be implemented by the CPCU in partnership with GCCI, GIEPA, leaders of value chain organizations, and local authorities.

#### ***Subcomponent 1.3: Strengthening quality and SPS control systems (US\$3.00 million IDA)***

33. Subcomponent 1.3 will contribute to establishing the minimum platform for a coherent food safety and quality control system, which is critical for Gambian agricultural products to access export markets and for managing food health risks for Gambian consumers. Planned investments will complement past and ongoing activities in food safety and quality and focus on three levels of activity:

(a) ***Strengthening the institutional and regulatory framework for food quality control and SPS management.*** This activity will provide technical and financial assistance for: (i) updating the national food quality and safety regulatory framework to align it fully with international and regional (Economic Community of West African States - ECOWAS) standards; (ii) strengthening FSQA and TGSB through training and equipment; (iii) promoting a preventive, risk-based inspection system in food safety, plant health, and animal health that encompasses all dimensions of official control, including procedures related to food imports and exports, and monitors climate impacts so as to avoid issues related to reduced food quality and safety, as a result of extreme climate conditions – such as higher temperatures; and (iv) designing a national framework for the development of digital traceability systems for domestic producers.

(b) ***Improving key laboratories.*** This activity will provide support to upgrade the facilities and equipment of four key food-safety laboratories (the plant pathology and biological control laboratories of Plant Protection Services, the seed testing laboratory of the National Seed Secretariat (NSS), and the inspection and control laboratory of the Department of Livestock Services) to improve national testing capacity and move toward laboratory accreditation. Project support will be closely coordinated with other ongoing support in this area<sup>32</sup> and specifically designed after a detailed feasibility study. New laboratories built through this project will integrate climate considerations in their design and use renewable energy technologies (e.g., financing solar power technologies for the laboratories).

(c) ***Supporting value chain-specific compliance schemes.*** This activity will improve the capacity of professional organizations and service providers to assist private value-chain operators in complying with certification

<sup>31</sup> The design of this infrastructure will incorporate best practices and Eco-Industrial Park Guidelines, focus on mitigating climate change through resource-efficient technologies and buildings (generating renewable photovoltaic energy, for instance), and therefore reducing greenhouse gas emissions. See WBG (2016), Mainstreaming Eco-Industrial Parks.

<sup>32</sup> In particular the ongoing Agriculture for Economic Growth in The Gambia Project, financed by the EU and implemented by FAO.



requirements. It will support the preparation of product-specific training material, sensitization campaigns, and the training of specialized service providers.

34. Subcomponent 1.3 will finance the technical assistance, equipment, training, and consultations/workshops required to support these activities. It will be implemented by the CPCU, in partnership with FSQA under the supervision of MOTIE. This subcomponent will provide a sound basis for the tailor-made support in this area given to specific investors/investments under Component 3.

***Subcomponent 1.4: Improving rural connectivity (US\$9.50 million—US\$8.50 million IDA and US\$1.00 million from GoTG)***

35. This subcomponent will invest in building and rehabilitating feeder roads, accompanied by a maintenance program to ensure sustainability and adapt to climate change impacts. Subcomponent 1.4 will follow the National Rural Road Development and Maintenance Strategy, which features a partnership between GoTG, interprofessional bodies, and private operators to select roads that are high priorities for rehabilitation/maintenance or construction and to co-finance these activities. Following an inventory of rural roads in project areas, a rural road improvement program will be developed jointly by the Ministry of Agriculture, National Roads Authority (NRA) and producer associations, focusing on priority roads linking high production areas to main markets. The project will finance the development/rehabilitation of about 200 km of feeder roads. Specific interventions for each road will be determined through pre-feasibility/feasibility studies based on the level of service standards, environmental and social issues, economic viability, climate and disaster resilience considerations, engineering assessments, and budget constraints. The types of interventions will include, among others, reconstruction or rehabilitation of platforms, bridges, and culverts; graveling; surface treatment; and routine/periodic maintenance to the prescribed level of service. The feeder roads program will incorporate specific measures to adapt to climate change risks, including basic drainage infrastructure, increasing vegetation buffers between the road and bushland, and maintenance of verge vegetation. To the extent possible, roadwork will involve labor-intensive methods to provide local employment. This subcomponent will finance a work program encompassing consultations for selecting the priority rural roads, technical studies with ESIA and mitigation measures, and the rehabilitation/development works. To ensure the sustainability of this investment, a community-based road maintenance strategy will be developed, and road maintenance associations will be formed and strengthened at the community level. These associations will receive low-cost hand tools and protective equipment to undertake routine maintenance. Members will be paid the minimum daily wage. Subcomponent 1.4 will be implemented by the NRA through private civil works contractors recruited through competitive bidding under the coordination and fiduciary responsibility of the CPCU.

***COMPONENT 2: BUILDING A PRODUCTIVE AND CLIMATE-RESILIENT AGRI-FOOD SYSTEM (US\$10.10 MILLION EQUIVALENT —US\$9.00 MILLION IDA AND US\$1.10 MILLION FROM GoTG)***

***Subcomponent 2.1: Promoting modern irrigation in women and youth-led agribusiness firms (US\$5.76 million—US\$5 million IDA and US\$0.76 million from GoTG)***

36. Building on GCAV achievements, this subcomponent will promote the development of new agribusiness firms led by women and youth (ages 18–35); these businesses will be equipped with greenhouses and modern irrigation technologies to produce horticultural crops using climate-smart practices for climate resilience and reduced emissions. The special focus on women, who are already major actors in Gambian horticultural value chains, will help them shift from traditional subsistence-oriented community vegetable gardens to market-oriented firms producing high-quality horticultural products, leading to greater commercial activity in agriculture, improved climate resilience, and increased producer incomes. In the same vein, to attract young women and men to agribusiness, this subcomponent will promote modern youth-led firms, equipped with greenhouses and



automatic irrigation and fertigation systems. Along with rural youth, young graduates from agricultural and business schools will be targeted, supported, and incubated in existing agribusiness SMEs to become agri-entrepreneurs.

37. This subcomponent will fully equip 20 women-led agribusiness firms and 20 youth-led agribusiness firms, each operating 5 hectares (for a total of 200 hectares, 100 hectares for women and 100 hectares for youth). Secure access to land will be negotiated with local authorities (see Annex 2). To support this activity, Subcomponent 2.1 will finance, among other items: (i) specialized firms recruited competitively to perform the technical feasibility studies for these businesses and design and implement them; (ii) pressurized water management technologies to modernize production systems and adapt to water scarcity issues, which are further exacerbated by climate change; (iii) associated investments including on-farm water storage tanks; on-farm drip, sprinkler, or central pivot irrigation equipment; greenhouses; vertical farming equipment; fencing; solar energy systems for reduced GHG emissions; processing platforms; and (iv) capacity building, including the development of management procedures and guidelines for the selection, operation, and maintenance of financed irrigation equipment to ensure its sustainability. This subcomponent will be coordinated by the CPCU and implemented by the Soil and Water Management Service, the Horticulture Technical Services of Directorate of Agriculture and National Entrepreneurship Development Initiative (NEDI) which gained experience as successful partners under GCAV (P125024) and with support from the contracted firms.

***Subcomponent 2.2: Increasing access to technology, innovation, and advisory services (US\$4.34 million—US\$4.00 million IDA and US\$0.34 million from GoTG)***

38. Subcomponent 2.2 aims to increase access and adoption of improved climate-smart technologies, innovations, and advisory services adapted to the needs and scale of farmers and SMEs, to increase productivity, competitiveness, and resilience at the farm level as well as downstream in the target value chains. Technology transfer will focus on: (i) climate-smart technology packages for climate resilience and reduced GHG emissions, including seed of high-yielding, early-maturing, and drought-resistant varieties (in some cases with tolerance to saline conditions); (ii) improved land (i.e. erosion control measures, land rehabilitation, conservative agriculture) and water management technologies; (iii) climate smart practices for agricultural intensification in selected production systems, including organic fertilizers, biological plant treatments, and solar technologies for irrigation and agri-processing (to replace gasoil, reduce greenhouse gas emissions, and conserve natural resources); and (iv) technologies that address the main farming and processing constraints all along the value chain, such as mechanization, cold storage and other equipment to address the lack of farm labor, improve processing, or reduce post-harvest losses. The subcomponent will emphasize energy and cost-efficient solutions including use of greenhouse technology and utilization of solar dryers for post-harvest operations. This subcomponent will also promote the use of digital technologies to develop services to increase access to innovative technologies and advisory information throughout the target value chains (particularly climate information and climate-smart practices and technologies). This subcomponent will have a specific target for providing technologies and training to women.

39. Building on the solid foundation established under WAAPP, and in partnership with West and Central Africa Council for Agricultural Research and Development (CORAf), local producer organizations, and research and extension services, this subcomponent will finance: (i) the introduction, distribution, and in some cases multiplication of genetic material to increase its availability and reduce its cost to producers, including certified seed of improved varieties for target value chains (rice, horticulture, maize, and so on, provided by NSS through its established cooperatives or by private seed firms), and improved genetic material for poultry (day-old chicks); (ii) strengthening of the public seed control/certification system; (iii) the transfer, demonstration, and



dissemination of improved technologies and innovations developed across the region; (iv) technical assistance, scientific exchange visits, training, and equipment for the National Agricultural Research Institute (NARI), and public and private advisory services to strengthen technology transfer systems; and (v) the development of an e-extension platform (ICT equipment, e-lab, call center, voice message services) using digital solutions to modernize advisory services and extend their outreach, particularly in this pandemic period. The IP will contribute to accelerating technologies transfer and adoption Subcomponent 1.1) through the implementation of the agricultural extension policy. These activities will help producers recover from the adverse effects of the COVID-19 pandemic by providing sustainable access to quality inputs at the community level and to training and advice through the digital platform. This subcomponent will be jointly implemented by NSS; the Directorates of Agriculture, Livestock, and Horticulture; NARI; and CORAF, in partnership with the organizations of producers and other value chain actors.

**COMPONENT 3: MOBILIZING PRODUCTIVE PRIVATE INVESTMENTS ALONG THE VALUE CHAINS (**US\$13.92 MILLION EQUIVALENT — US\$10.00 MILLION IDA AND US\$3.92 MILLION FROM PRIVATE CAPITAL<sup>33</sup>**)**

40. Component 3 will support private investments in productive activities and related services by addressing the major market failures that constrain the financing of investments in agricultural value chains. It will: (i) develop the capacity of partner FIs to scale up their financing of agri-food value chain actors by building FIs' knowledge of the sector and capacity to evaluate agricultural investment proposals; (ii) establish a matching grant instrument to co-finance competitively selected private productive investments; and (iii) provide technical assistance and capacity building to strengthen technical, entrepreneurial, and management skills of smallholders and SMEs.

***Subcomponent 3.1: Building the operating capacities of partner FIs (US\$0.50 million; IDA)***

41. This subcomponent will enhance access to commercial credit for agri-food value chain actors. The project will identify partner FIs interested in growing this segment of their portfolio and help them, through technical assistance, to develop: (i) methodologies for more accurately assessing the creditworthiness of agricultural investments and investors, especially SMEs (for instance, innovative digital credit scoring mechanisms) and (ii) financing instruments better tailored to the cash-flow needs and other specific features of agricultural investments and SME investors (in particular appropriate repayment schedules, including grace periods if necessary). This subcomponent will finance the costs of the specialized service providers that will be recruited to deliver these capacity-building activities based on specific needs expressed by partner FIs. It will be implemented by the CPCU in close collaboration with the Central Bank of The Gambia.

***Subcomponent 3.2: Co-funding productive investments to leverage private capital mobilization (US\$12.92 million — US\$9.00 million IDA and US\$3.92 million from private capital)***

42. Subcomponent 3.2 will co-finance competitively selected productive investment subprojects (PISS) developed by small private investors (individuals or groups) and agribusiness SMEs. These subprojects will focus on agricultural production, marketing, processing, or service provision in the target geographical areas and value chains. Additionally, on a case-by-case basis, this subcomponent will co-finance promising subprojects in any part of the country based on the investment's prospective impact on the local economy and contribution to the PDO. Subprojects using climate-smart technologies will be strongly encouraged and prioritized, with a target that at least 50 percent of the PISSs using these technologies. Project funding will be provided under a single grant mechanism composed of two separate windows:

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<sup>33</sup> Contribution from smallholders and SMEs beneficiaries to the project matching grant.



(a) **Window 1 (US\$5.00 million of matching grants).** This window will target small investments by individuals or groups of producers, traders, processors, and service providers. It will be divided into two subsidiary windows accommodating PISs promoted by (i) individuals and (ii) groups. A major criterion for selection of subgrants is inclusion of climate-smart measures to reduce climate risks and emissions. In total, Window 1 will provide matching grants of up to 80 percent of the cost of the PIS, up to a maximum of US\$10,000 for the investment subprojects of individuals and US\$20,000 for those of groups. Beneficiaries will contribute at least 20 percent of the subproject cost in cash (either their own equity and/or a commercial loan). To receive funds, PIS beneficiaries will be required to have an account with a commercial bank or micro-finance institution (MFI). In total, it is estimated that Window 1 will co-fund at least 500 PISs promoted by individuals and 100 PISs promoted by groups.

(b) **Window 2 (US\$4.00 million of matching grants).** This window will target larger investments by agribusiness SMEs all along the target value chains, particularly SMEs involved in processing and marketing high-value and high-quality produce for domestic and export markets. Similarly, a major criterion for selection of subgrants is inclusion of climate-smart measures to reduce climate risks and emissions across supply chains. It will co-fund approximately 10 PISs promoted by SMEs and will provide matching grants of up to 60 percent of the total cost of the investment, up to a maximum of US\$500,000. The beneficiary SMEs will contribute at least 40 percent of the cost of the investment from their own equity or a commercial loan.

43. **Each window will have distinct eligibility criteria, application processes, guidelines for appraisal and approval, terms, and arrangements.** To complement Subcomponent 2.1, which focuses on female and youth entrepreneurs, both windows will emphasize investments in appropriate and water-efficient irrigation technologies and greenhouses to expand irrigated area, reduce dependence on rainfall, and increase resilience to climate change. The grant windows will also particularly target investments with: (i) a clear impact on developing the domestic market, especially by forging links between agriculture and the tourism industry; (ii) potential to minimize agricultural climate risks, build resilience, and reduce emissions; (iii) an impact on developing export markets; and (iv) an impact on individuals or groups directly affected by the COVID-19 pandemic. Operational modalities for grants will be detailed in a Matching Grant Implementation Manual (MGIM), which will be approved by the World Bank prior to disbursement under the matching grant subcomponent.

44. **Table A1.3 in Annex 1 (Detailed project description) provides an overview of the matching grant structure, showing the estimated total costs of PISs, total matching grant funds provided by the project, and total private capital mobilized.** It is anticipated that the project will support about US\$12.92 million in PISs, financed by US\$9.00 million in matching grants from the project and US\$3.92 million of private capital mobilized by investors.

45. **The CPCU will manage the matching grant program and monitor its implementation with support from a specialized firm that will be competitively selected to provide this service.** The CPCU will maintain fiduciary responsibility for all aspects of this subcomponent. GIEPA, the Agribusiness Services Unit of the Directorate of Agriculture (Ministry of Agriculture), and NEDI will be the implementing partners supporting the CPCU, given their experience in managing matching grants under GCAV and other donor-funded projects. GIEPA will: (i) promote and identify private investments proposals; (ii) monitor PIS implementation; and (iii) maintain a GM to assist investors with difficulties in implementing their PISs (Component 1 will strengthen the capacity of GIEPA in this regard). Through cooperation with IFC, this subcomponent will leverage advisory services and funding opportunities for eligible SMEs.

#### ***Subcomponent 3.3: Technical assistance to smallholder and SME promoters of PISs (US\$0.50 million IDA)***

46. **The matching grant mechanism will be sustained with technical assistance and capacity building.** This support is designed to strengthen the technical, entrepreneurial, and management skills of PIS promoters to (i)



prepare, improve, or finalize their business plans and (ii) successfully implement their investments. The types of technical assistance provided to the different categories of entrepreneurs may include (among others): market and supply chain analysis, preparation of business plans, selecting sites and securing access to land, selecting irrigation and other kinds of equipment, financial and accounting systems, safety and quality issues, environment and social risk management, climate-smart agricultural practices and technologies, support to mobilize funding from FIs, implementation support, and capacity-building support of PIS beneficiaries in partnerships. Through cooperation with IFC, this subcomponent will leverage advisory services and funding opportunities for SMEs to scale up their agribusinesses. Investors will be supported from the pre-investment phase and throughout the investment and start-up phases, up to the end of the project. Partnership will be built with FIs to involve them in selecting the PISs to be financed.

**47. The CPCU will be responsible for managing the grant program and supervising technical assistance provided through the specialized firm hired for that purpose.** The CPCU will maintain fiduciary responsibility for all aspects of this subcomponent. GIEPA, the Agribusiness Services Unit, and NEDI will be the implementing partners supporting the CPCU, in collaboration with the specialized firm. This institutional arrangement will build on the experience of those agencies in managing matching grants, build institutional capacity, create ownership, and ultimately ensure sustainability.

**COMPONENT 4: PROJECT COORDINATION, MONITORING, AND KNOWLEDGE MANAGEMENT (*US\$4.17 MILLION —US\$3.00 MILLION IDA AND US\$1.17 MILLION FROM GoTG*)**

**48. This component aims to ensure that the project is efficiently managed and monitored, and that performance and outcomes are carefully tracked by the CPCU and implementing agencies.** Component 4 will facilitate: (i) administrative, technical, and FM of the project; (ii) coordination among all institutional partners to ensure efficient flows of information and support to all value chain actors; (iii) effective contractual arrangements with key implementing partners and other private sector operators; (iv) monitoring and evaluation (M&E) of the project's performance and its financial, environmental, and social impacts; (v) communication activities to publicize and disseminate project results, best practices, and success stories; (vi) citizen engagement; (vii) oversight of social and environmental safeguard policies; and (viii) institutional strengthening to ensure the sustainability of project results. All communication, outreach activities and technical assistance offered will also cover information on improved climate adaptation and mitigation initiatives through the project. This component will be implemented by the CPCU.

**Component 5: Contingent Emergency Response (*US\$0 million*)**

**49. Given The Gambia's vulnerability to shocks, the project includes a Contingent Emergency Response Component (CERC), with a zero-dollar provision, to create a mechanism within the project to finance a response to a natural disaster, disease, or other eligible emergency.** If such a crisis develops, GoTG may request the World Bank to reallocate project funds to cover some of the costs of emergency response and recovery.

**C. Project Beneficiaries**

**50. The key project beneficiaries are SME-scale farmers and their organizations, agricultural SMEs, and other private actors in the target value chains (traders, processors, exporters, service providers), with a focus on agribusinesses led by youth and women.** The project is expected to directly benefit 50,000 farmers and other actors in the target agricultural value chains. At least 50 percent of the direct beneficiaries will be women, and 30 percent will be youth. In addition, at least 10 SMEs are expected to benefit directly from the project through capacity building and matching grants. Other direct beneficiaries include the public institutions responsible for the development of commercial agriculture and exports in The Gambia.



51. **The project is gender tagged in terms of analysis, action, monitoring, and evaluation.** Based on the gender analysis undertaken in preparing the project (Annex 6), GIRAV will act to close gender gaps in access to productive resources and agribusiness opportunities by: (i) targeting the diffusion of technologies, best practices, and knowledge to women through appropriate channels; (ii) strengthening the gender-sensitivity of advisory services (taking into account differences in the mobility and preferences of women and men to ensure targeted outreach); and (iii) improving women's access to finance and building their entrepreneurship skills. Through these actions, the project is expected to have a strong positive impact on women-owned (generally small) agricultural enterprises, benefiting women in their roles as producers, processors, marketers, and service providers. Gender-disaggregated data will be collected to monitor and evaluate any changes achieved.

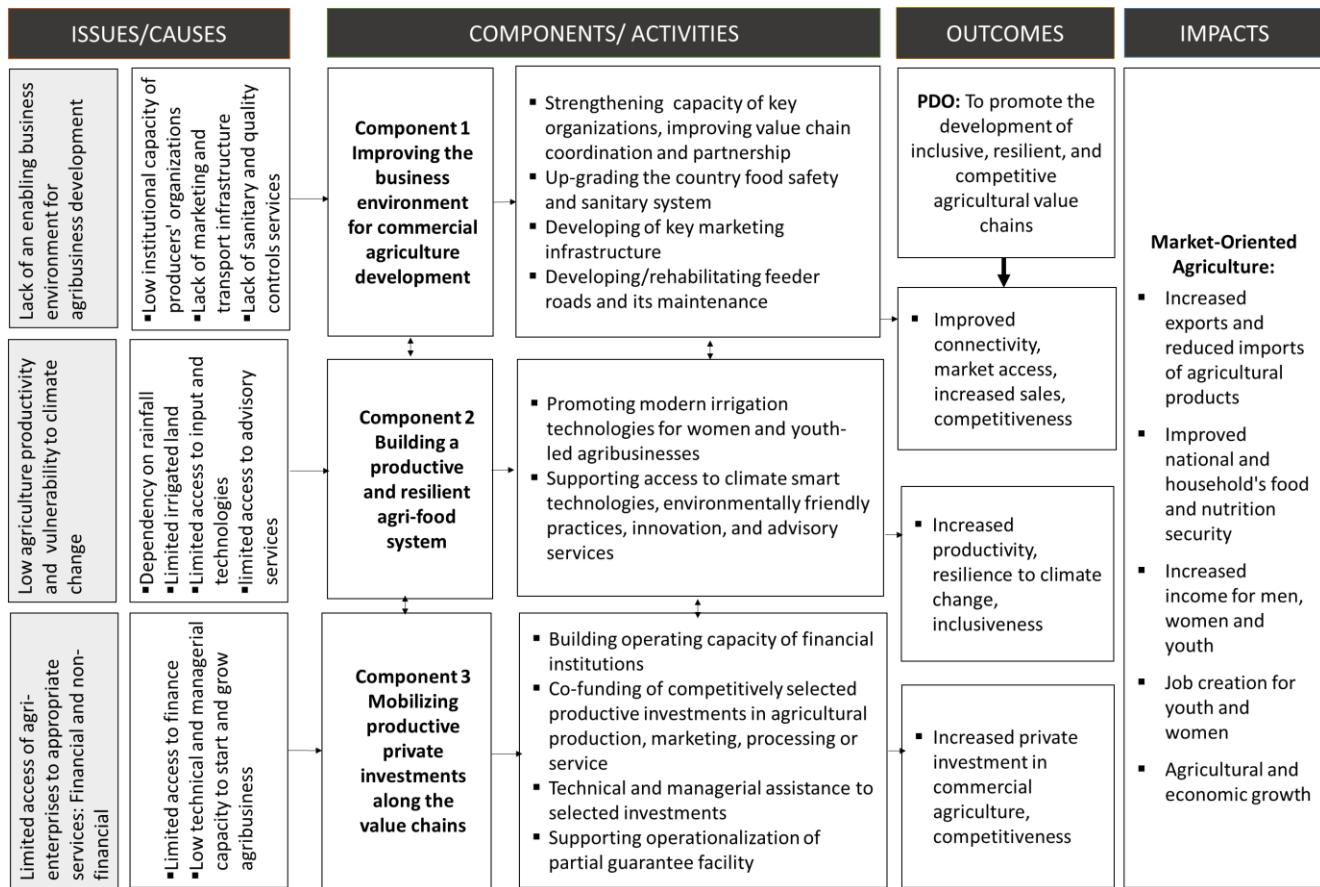
52. **The project's indirect beneficiaries include public and private service providers, government agencies, and non-governmental organizations involved in the target value chains.** Actors from diverse ministries and institutions will participate in the project, including the Ministry of Agriculture, Ministry of Youth and Women, MOTIE, and Ministry of Transport Works and Infrastructure. The project will seek to strengthen collaboration across these line ministries in addressing issues associated with the target value chains.

#### D. Results Chain

53. **The design of the proposed project supports The Gambia in transforming the agricultural sector into a competitive and resilient commercial agri-food sector.** This transformative change will be achieved through a logical chain of activities: (i) improving the enabling environment for agriculture/agribusiness development by expanding access to markets for producers and SMEs (through better logistics, market infrastructure, critical SPS services, and access roads), improving the policy and institutional framework, and strengthening the coordination and efficiency of value chain actors; (ii) increasing the productivity and competitiveness of producers and SMEs, as well as their resilience to climate change, by expanding access to climate-smart technologies, inputs, and services; and (iii) increasing private investment along the value chains by strengthening the key public and private institutions responsible for promoting and mobilizing private investment and by providing support services (technical, managerial, and financial) to agribusiness operators. The project's theory of change is presented in Figure 1 and it depends on critical assumptions that could be affected by several internal and external factors. It assumes: (i) a political stability after the election and renewed political commitment to the agricultural sector development; (ii) no extreme weather condition like drought or flooding that could affect drastically the production; (iii) COVID-19 pandemic under control with the vaccination and with no major country lockdown impacting regional and international agricultural trade; and (iv) a good adhesion of FIs to the project to build sustainable access to finance for smallholders and SMEs.



Figure 1: Theory of change, GIRAV Project



## E. Rationale for the World Bank Involvement and Role of Partners

54. **The World Bank has a long experience of support to value chains in agriculture, for food crops as much as cash crops.** It has a comparative advantage in projects that addresses the entire value chain, as it takes an integrated approach covering all segments of the value chain and players. With its involvement in the proposed project, the WBG will bring additional resources, including its technical expertise and convening power, to build momentum for transformational agricultural growth in The Gambia. These resources will focus on improving agricultural sector productivity; developing and integrating target value chains; enhancing the welfare of rural households, creating attractive agribusiness opportunities for the private sector; and promoting a better policy and institutional environment for transformational agricultural growth – all contributing to the World Bank's twin goals of ending extreme poverty and increasing shared prosperity.

55. **The project builds on and advances the achievements of operations supported by other development partners in The Gambia.** Scope exists to deepen coordination and cooperation among development partners involved in agriculture/agribusiness development in the country, among others, French Development Agency (*Agence Française de Développement*, AFD), AfDB, EU, FAO, Islamic Development Bank (IDB), and International Fund for Agricultural Development (IFAD)<sup>34</sup>. The project will seek to build synergies with these partners to leverage

<sup>34</sup> AfDB-funded projects: Agricultural Value Chain Development (AVCD), Program for building Resilience Against Food and Nutrition Insecurity in the Sahel



support in critical areas, optimize development outcomes, and avoid duplication.

#### F. Lessons Learned and Reflected in the Project Design

56. **The project incorporates lessons from an extensive analysis of Gambian agriculture, especially the need for a multipronged approach to support transformational growth in the sector.** A comprehensive assessment of the sector's performance, challenges, and opportunities (the World Bank Agriculture Engagement Note, 2019) was complemented by analyses of policies to support private sector-led growth and agribusiness in The Gambia.<sup>35</sup> The key findings and lessons learned from this work underscore the need for a multipronged approach to address the binding constraints to the sector's development and growth, including the urgent need to increase productivity, enhance resilience to climate change, and increase access to markets.

57. **The project also incorporates specific lessons from WAAPP and the recently completed GCAV Project.** WAAPP showed that when the agricultural innovation system (research and development) enables the transfer and adoption of improved technologies (including improved seed and best practices), agricultural productivity rises, and the gap narrows between current and potential crop yields in farmers' fields. This is in addition to strengthening value chains, expanding access to markets for smallholders, and providing commercial opportunities for smallholders to move out of subsistence agriculture. Through contract farming developed with exporters, producers engaged in continuous and intensive production, with harvests every two months to respond to demand. By equipping women's community vegetable gardens with solar pumps and drip irrigation, GCAV demonstrated how women can make the transformative shift from subsistence production to leading their own market-oriented agribusinesses. This success needs to be scaled up widely to increase incomes, improve household welfare, and pave the way out of poverty.

58. **The project design highlights the importance of private sector investment and effective participation to develop value chains and build commercial agriculture.** This point has been widely proven in many WBG-financed operations in The Gambia (GCAV, Gambia Growth and Competitiveness Project (GGC)), across the region, and globally. Lessons especially relevant to private sector participation come from the productive alliance approach to agribusiness, which originated in Latin America. One type of productive alliance, implemented under GCAV and many other projects, brings smallholders together with firms in export value chains to improve smallholder inclusion and livelihoods. Market-oriented interventions led by the private sector, combined with strong productive partnerships that include smallholders, are more likely to succeed in delivering shared growth and prosperity. The private sector has a leading role to play in value chain development, with public sector interventions focused on overcoming critical constraints and market failures and providing public goods, in a cascade approach that prioritizes private sector solutions.

59. **Matching grants, which have proven effective in mobilizing private capital and boosting investment in agribusiness, are a central feature of GIRAV.** In South Asia and Africa, including The Gambia, matching grants have enabled many SMEs and smallholders to start and expand a business. Through the GCAV matching grant mechanism, for instance, one company (Tropingo) invested in a processing line to start an agribusiness specializing in processing and exporting dried and fresh mangoes. The Gambia Horticulture Enterprise invested in modernizing and expanding its agro-processing plant, which enabled it to increase exports of fresh mangoes to the EU; diversify into a range of other export products (vegetables, spices, cashews); and process mango juice for the domestic and

(P2RS) and Rice Value Chain Transformation Project (RVCTP); EU-funded projects: Agriculture for Economic Growth, and Improving Food Security and Nutrition through Food Fortification; Global Environment Funds (GEF)-funded project: Adapting Agriculture to Climate Change; AfDB-funded projects: Building Resilience to Restoring for Food Insecurity in The Gambia; IDB-funded project: Small Ruminant Improvement Project; IFAD and AFD-funded project: Resilience of Organizations for Transformative Smallholder Agriculture Project (ROOTS).

<sup>35</sup> "The Gambia: Policies for Private Sector-Led Growth—Achieving Sustainable and Inclusive Growth" (World Bank internal report, 2019); IFC Agribusiness Deep Dive.



regional markets. Through its matching grant mechanism, the proposed project seeks to build on these success stories and add many more.

60. **Designing and implementing a well-defined gender action plan, and rigorously monitoring and reporting on its results, are crucial for gender targeting under WBG-funded operations.** Lessons from recent operations in the region, including WAAPP (P094084, P117148, P122065, P158265, P158983) and GCAV (P125024) in The Gambia, under which women were 60 percent of beneficiaries, indicate that a gender action plan (identifying and promoting gender-sensitive activities in all components, with strong encouragement for women's participation) is a powerful instrument to address gender imbalances in access to project benefits. A GIRAV gender action plan will be developed with relevant stakeholders, including women and youth groups, ideally at the earliest stage of project implementation. The project will also ensure that all measures to mitigate risks of gender-based violence (GBV) and sexual exploitation, abuse, and harassment (SEAH) are put into place during project preparation at the latest. These measures will include a comprehensive SEAH prevention and response action plan for GIRAV, with a response protocol and an accountability framework.

### III. IMPLEMENTATION ARRANGEMENTS

#### A. Institutional and Implementation Arrangements

##### *Project Oversight*

61. **The Ministry of Agriculture will be responsible for overall project implementation.** It will collaborate closely with other relevant ministries and their respective departments and agencies, including (i) MOTIE; (ii) the Ministry of Youth and Sport; and (iii) the Ministry of Transport Works and Infrastructure.

62. **An inter-ministerial Project Steering Committee (PSC) will provide strategic oversight of the project.** The PSC will be chaired by the Ministry of Agriculture Permanent Secretary and meet at least twice a year. The secretariat of the PSC will be headed by the CPCU in the Ministry of Agriculture. Membership of the PSC will include the project coordinator, with representatives from GCCI (vice-chair of the PSC); the Ministry of Finance and Economic Affairs; MOTIE; the Ministry of Youth and Sport; the Ministry of Gender, Children and Social Welfare; the Ministry of Environment, Climate Change and Natural Resources; the Ministry of Transport Works and Infrastructure; SMEs engaged in agribusiness; National Coordinating Organization for Farmers Association in The Gambia (NACOFAG); Gambia Women' Federation; youth organizations; and civil society organizations. The main functions and responsibilities of the PSC are: (i) provide strategic and policy guidance to the CPCU for implementation and coordination of activities; (ii) ensure overall conformity with government policies and strategies; (iii) review and assess project progress and performance; (iv) approve the annual work plan and budget (AWPB); (v) resolve implementation problems or conflicts; and (iv) assist the CPCU in obtaining, whenever needed, government assistance and contributions to the project.

63. **At the technical and operational level, a Project Technical Committee (PTC) will be established.** The PTC will be chaired by the Permanent Secretary of the Ministry of Agriculture. Its membership will consist of senior technical personnel of key implementing agencies and supporting partners. The PTC will assist the CPCU in day-to-day project management and coordination. it will meet every month during the first year of implementation to ensure a smooth start, and every two to three months as the project progresses.

##### *Project Coordination and Implementation Unit*

64. **The CPCU within the Ministry of Agriculture will be responsible for project coordination and implementation.** In 2014, the Ministry of Agriculture established the CPCU for centralized coordination and



implementation of all projects funded by development partners in the agricultural sector, to avoid a multiplicity of project implementation units, create synergies between projects, strengthen capacity, and build continuity in project management. CPCU staffing will be strengthened to meet the specific needs of GIRAV, with the addition of a director of operations; a rural/civil engineer in charge of irrigation equipment, feeder roads, and marketing infrastructure; a grant management specialist to manage and implement the matching grant mechanism; an agribusiness specialist; a social development specialist in charge of social safeguards, GBV, SEAH, gender, and youth; an environmental specialist; a communication and knowledge management specialist; and a digital technology specialist in charge of designing, updating, and implementing digital platforms; and support staff. The reinforced CPCU will coordinate overall project implementation on a day-to-day basis, prepare and consolidate AWPBs and oversee technical agencies involved in project implementation. It will be responsible for all fiduciary aspects of the project (procurement, disbursement, accounting, and financial reporting) and M&E. It will prepare bi-annual progress reports and ensure the annual auditing of all project accounts by independent auditors acceptable to IDA. Audit reports will be submitted to IDA no later than six months after the closing of the fiscal year. The CPCU will also act as the secretariat for the PSC.

#### ***Project Implementing Agencies***

65. **As some of the project activities would be executed by specialized public agencies, the CPCU will sign agreements with these agencies.** These agreements will define the assigned objectives; annual action plan; obligations and responsibilities of contracting parties; administrative, technical, and financial implementation modalities; date of effectiveness and duration; allocated budget; and categories of eligible expenditures. Through these partnership agreements, the CPCU will delegate to the relevant directorate or partner the technical responsibility for component and subcomponent implementation while maintaining overall fiduciary responsibility. Implementation arrangements are discussed in detail in Annex 2 and will be further specified in the project implementation manual (PIM). The latter will be prepared by the Government preparation team and reviewed by the World Bank team. The finalization and adoption of this manual is a condition of effectiveness.

#### **B. Results Monitoring and Evaluation Arrangements**

66. **A detailed results framework and M&E plan are presented in Section VII.** The results framework defines the performance indicators and annual targets for the PDO and each component and subcomponent. The CPCU will be responsible for overall M&E of project PDO-level and intermediate results indicators and outcomes as defined in the results framework, and for meeting the agreed reporting requirements. A robust M&E system will be implemented to provide high-quality technical and financial data on progress in achieving project outcomes and development impacts. The M&E system will serve as a tool to assess project results and as a day-to-day management tool. The CPCU is responsible for coordinating with agricultural and rural development projects funded by development partners and ensuring consistency with national sector strategies and policies (NDP, GNAIP II-FNS, GATP).

67. **An electronic and web-based M&E platform will be developed along with smartphone applications to facilitate timely data collection.** To the extent possible, these tools will be developed by agricultural advisers from the extension services of the Directorates of Agriculture and Livestock, who will be trained for this purpose. External digital service providers will be hired to set up the M&E e-system and applications. All data collected will be disaggregated by gender and age (to capture youth participation). The CPCU will work closely with the key implementing agencies and supporting partners to collect baseline data, regularly update data on key performance indicators, and produce bi-annual progress reports. The CPCU will conduct regular farm surveys over the project's life cycle to measure the PDO indicators.

68. **Iterative Beneficiary Monitoring (IBM).** The project will monitor beneficiaries starting when



implementation begins, with the objective of improving project efficiency and increasing beneficiary satisfaction and engagement. IBM—a light, low-cost, and rapid method for collecting information on project implementation—is problem oriented and complements project supervision. IBM collects data directly from beneficiaries but keeps data collection efforts to a minimum by relying on a few research questions and small samples. The various iterations of IBM will collect data to identify shortcoming that can hinder implementation of the project and provide feedback to the project team for catalyzing improvements in implementation. While a traditional M&E system will be used to continuously monitor overall implementation progress and produce reports on progress every six months, IBM, which is demand-driven, will produce short reports, be repeated as often as needed, and focus on diagnosing specific barriers to effective implementation.

69. **The World Bank team will conduct bi-annual Implementation Support Missions (ISMs)** jointly with GoTG and key stakeholders to assess the status of project progress and outcomes, ensure compliance with legal covenants, and provide recommendations to keep the project on track to achieving its PDO. The ISMs will include field visits (adapted as COVID-19 protocols require) to allow the government and WBG to assess and discuss project progress with beneficiaries and assess their satisfaction with project activities. Civil society organizations and farmers organizations will be involved to build citizen engagement and promote communication of project outcomes. A Mid-Term Review will be conducted no later than December 31, 2024. A final independent evaluation will be conducted in the last year of project implementation to assess overall achievement of expected outcomes and draw lessons.

70. **The M&E section of the PIM will provide details on the results framework**, including the definitions of indicators, the methodology and instruments used for data collection, the institutional arrangements for M&E functions (identification of actors and definition of their respective responsibilities), the GM, and the mechanism to be used for disseminating information.

### C. Sustainability

71. **The sustainability of the project is predicated on the following major considerations:** (i) strong government commitment and continued project alignment with national agricultural development strategies; (ii) high value addition and intrinsic sustainability of project investments in the targeted value-chains; (iii) success in enabling private sector investment in the sector; and (iv) developing a strong capacity building program for governance issues and strengthening of the producer's organizations among other considerations.

72. **In addition, the project sustainability will be enhanced by factors built into its design and implementation arrangements, including:** (i) engaging the CPCU as the lead implementation unit and other public institutions as implementing agencies and strengthening their capacity to deliver and fulfill their respective mandates beyond the life of the project; (ii) reinforcing extension agents and advisory service providers with equipment and capacity to develop and use digital technologies to reach a maximum number of producers for continuous and wide dissemination of climate-smart technologies and innovations to improve resilience; (iii) strengthening the partnership with CORAF to facilitate connections between the national innovation system and the Regional Research Centers of Excellence (RCoE) established under WAAPP to transfer technologies and innovations across the region; (iv) contributing to improved competitiveness of target value chains by improving productivity and enhancing quality through better access to improved agricultural technologies, including seed of improved varieties, post-harvest technologies, and processing equipment; (v) providing matching grants with requirements for beneficiary contributions to ensure better ownership, establish links between FIs and beneficiaries, and enable beneficiaries to develop a credit history; (vi) building marketing infrastructure through public-private partnerships for sustainable operation and management, to promote better organization of agri-food supply chains and stronger connections between buyers and sellers of agricultural products over the longer



term; and (vii) upgrading SPS facilities to ensure sufficient quality control of agri-food products to meet international standards, increase export opportunities, and provide safe food for the domestic market.

#### IV. PROJECT APPRAISAL SUMMARY

##### A. Technical, Economic and Financial Analysis

###### TECHNICAL ANALYSIS

73. **Project approach.** The project approach builds on past World Bank experience in The Gambia and lessons learned in agriculture value chains development in the region (Cameroon, Côte d'Ivoire, Senegal, etc.). The project's technical design has been widely discussed and agreed upon with the GoTG and key public institutions overseeing the development of the sector. The project design benefited at all stages from contribution of experts from the private sector which helped focus its planned interventions and objectives.

74. **The project's relevance and the rationale for its technical design stem from, first, alignment with the national development agenda.** The project contributes directly to the implementation of The Gambia's long-term vision to build a commercially oriented agricultural sector with greater participation of the private sector, as defined in strategic development programs such as the NDP, GNAIP II-FNS, and GATP. Second, key diagnostic and analytical documents prepared for the sector, including by the WBG<sup>36</sup>, and third, experience and lessons from the WBG-financed WAAPP, GCAV, and GGC operations.

75. **Innovative features of the project design are its integrated and inclusive approach encompassing:** (i) a **multisector approach** that considers agriculture as a whole, focusing on the diverse nature of farm household livelihoods and bringing together the different line ministries (agriculture, trade, transport, women and youth) to build synergies and better coordinate actions for greater development outcomes; (ii) a **market-oriented approach** integrating agricultural value chain actors by connecting producers to buyers, strengthening producer organizations and developing marketing infrastructure; (iii) a **focus on digital technologies** to develop agricultural advisory services and coordinate value chains. The project will contribute to establishing an e-extension service using smartphones to increase outreach; a digital platform connecting value chain actors, particularly buyers and sellers, for market-driven supply; and a digital market platform providing real-time information on market prices, supply, and demand; (iv) a **climate-resilient approach** focused on increasing the adoption of climate smart-technologies and practices in The Gambia to adapt and mitigate climate change effects. Examples include water-efficient and labor-saving irrigation technologies; vertical farming; an array of high-yielding, early maturing, drought-resistant, and salt-tolerant varieties; solar energy for irrigation and processing to reduce greenhouse gas emissions; and best environmentally friendly technologies and practices (biofertilizers, organic fertilizers, integrated pest management, agroforestry, and others); and (v) a **gender tagged approach** taking action to close gender gaps in access to productive resources and economic opportunities. The project is explicitly designed to increase women's economic empowerment by expanding their access to modern irrigation technologies, improved inputs and innovations, knowledge and skills (including business skills).

###### ECONOMIC AND FINANCIAL ANALYSIS

76. **The economic and financial analysis of the proposed project is based on a cost-benefit analysis of financial models of eight representative investments (namely, PIs) supported through the matching grant mechanism.** The analysis: (i) identifies quantifiable benefits and costs generated/incurred by the project; (ii)

<sup>36</sup> Including: (i) "The Gambia: Policies for Private Sector–Led Growth—Achieving Sustainable and Inclusive Growth" (World Bank internal report, 2019); (ii) the IFC Agribusiness Deep Dive, and (iii) the World Bank Agriculture Engagement Note.



compares "with project" and "without project" scenarios to estimate net incremental benefits; and (iii) calculates financial and economic profitability indicators, including the financial internal rate of return (FIRR), economic internal rate of return (EIRR), and net present value (NPV). The carbon balance of the project is estimated using the FAO Ex-Ante Carbon Balance Tool (EX-ACT). The economic analysis uses low and high carbon prices to calculate the estimated value of environmental benefits resulting from the project.

77. **Project activities are expected to generate multiple benefits for smallholders and SMEs in the target value chains.** The economic and financial analysis is based on best judgments about the PISs that beneficiaries are likely to choose and the resulting mix of benefits, incorporating plausible assumptions derived from experience with the GCAV and from the design of ROOTS and drawing on agricultural statistics. The analysis also includes benefits derived from feeder road improvements.

78. **Financial models of eight PISs were developed:** (i) rainfed rice; (ii) intensive irrigated rice, based on the System of Rice Intensification (SRI); (iii) maize, in conjunction with (iv) poultry broilers and (v) layers; (vi) women and youth-led modern agribusiness firms; and—for SMEs focused on exports—(vii) processed cashew nuts and (viii) horticultural enterprises. These models are considered to be reasonably representative of the PISs that are likely to be developed under GIRAV, especially SRI and poultry layers and broilers under matching grant Window 1, and processed cashew nuts and horticulture enterprises under matching grant Window 2.

79. **The economic analysis** relies on these models as well but uses economic prices, and it aggregates the resulting estimated benefits to assess the project's value from a social standpoint. To determine the overall economic viability of the project, the environmental co-benefits are added to the aggregated incremental economic benefits, and the economic costs of the project are subtracted.

80. **All of the models show that the project is financially and economically viable.** Financially, the project could generate significant additional income for beneficiaries and attractive returns on investment, with an average **FIRR of 37 percent per individual model**. Economically, the project could generate **at a 6 percent discount rate** (i) an **EIRR of 21 percent and NPV of US\$70.95 million** without environmental benefits; (ii) an **EIRR of 21 percent and a NPV of US\$71.05 million** with environmental benefits included valued at the low estimate range (on average 49 US\$/tCO<sub>2</sub>e), and an **EIRR of 21 percent and a NPV US\$71.20 million** with environmental benefits included valued at the high estimate range (on average 97 US\$/tCO<sub>2</sub>e), from a total budget of US\$40 million (including direct and indirect costs, operating costs, training etc). Considering only the direct costs related to each type of project-funded activity results to a NPV of US\$104 million of which US\$53 from agricultural value chains activities and US\$51 million from feeder roads including its externalities. Sensitivity analysis indicates that results remain robust under various adverse scenarios, including: (i) increased project costs; (ii) increased project benefits; (iii) reduced project benefits; (iv) delayed project benefits; and (v) a higher discount rate.

81. **GHG accounting for the proposed project indicates that it will have a positive impact on GHG emissions and carbon sequestration.** The difference in gross results between the WOP and WP scenarios yields a total carbon balance for the project of 4,293 tCO<sub>2</sub>-e sequestered over the full project implementation period (see Annex 3). Under the WOP scenario, GHG emissions add up to 225,387 tCO<sub>2</sub>-e. The GHG accounting also identifies the practices and activities contributing to the positive carbon balance of the WP scenario.

## B. Fiduciary

### FINANCIAL MANAGEMENT

82. **FM risk assessment and mitigation measures.** An FM assessment of the CPCU, as the lead implementing agency of the proposed project, was conducted in August 2021. The objective of the assessment was to determine whether the FM arrangements in place under the CPCU were adequate for the proposed project, including the



planning and budgeting system, accounting system, internal controls, funds flow, financial reporting, and auditing. The CPCU is familiar with WBG FM requirements. The FM arrangements for GIRAV will be based on the arrangements devised for GCAV closed in November 2019, for which the CPCU was the implementing agency, with an overall FM performance assessed to be Satisfactory. The CPCU maintained proper books of accounts and retained supporting documents for all expenditures. unaudited interim financial reports (IFRs) for GCAV were submitted on time and acceptable to IDA. The external auditors issued an unqualified (clean) opinion on the 2019 Financial Statements. Staffing is adequate for the bookkeeping of the project but the internal audit position of the CPCU is currently vacant.

**83. To ensure readiness for implementation, however, the CPCU must implement the following measures.** No later than one month after effectiveness, the CPCU will update its FM manual of procedures to reflect the specificities of GIRAV. Before any disbursement of the matching grant, the CPCU should develop the MGIM, fully detailing the grant eligibility criteria, payment procedures, and other fiduciary arrangements. An agreement will be signed with all selected beneficiaries where the disbursement and reporting requirements will be described. The beneficiaries will open bank accounts in acceptable FIs where the grants will be directly deposited. The beneficiaries will receive technical assistance under the project to strengthen their FM capacity. No later than four months after effectiveness, the CPCU will: (i) customize the accounting software for GIRAV bookkeeping and (ii) recruit an internal auditor to cover the project. No later than six months after effectiveness, the CPCU will recruit an external auditor with qualifications satisfactory to the WBG to conduct a yearly audit of the project financial statements and express a specific opinion on the matching grants.

**84. In conclusion, the assessment showed that the FM arrangements are adequate.** They meet the World Bank's minimum requirements under World Bank Policy and Directive on Investment Project Financing (IPF) effective in 2017. An FM action plan including proposed mitigation measures will be put in place focusing on measures listed above.

**85. Overall FM risk is rated Substantial,** based on the number of stakeholders involved in project implementation and the matching grant activities.

## PROCUREMENT

**86. Applicable procurement rules and procedures.** Procurement for Goods, Works, Non-consulting and Consulting Services for the project will be carried out in accordance with: (i) the procedures specified in the World Bank Procurement Regulations for IPF Borrowers, dated November 2020; (ii) the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants," dated October 15, 2006 and revised in January, 2011 and as of July 1, 2016; and (iii) other provisions stipulated in the Financing Agreement, using the Standard Procurement Documents accompanying the Procurement Regulations.

**87.** All procuring entities, as well as bidders and service providers (namely suppliers, contractors, and consultants) shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraph 3.32 and Annex IV of the Procurement Regulations. When procurement is done in the national market, as agreed in the Procurement Plan, the country's own procurement procedures may be used, with the requirements set forth or referred to in paragraphs 5.3 to 5.6 related to National Procurement Procedures. All Works procurements that apply standard procurement documents will adopt WBG provisions related to environmental, social (including GBV and SEAH), health, and safety risks and impacts. These provisions include: (i) a code of conduct that prohibits SEAH; (ii) training on the code of conduct; and (iii) clear remedies (disciplinary sanctions) for noncompliance.



88. **Summary of Project Procurement Strategy for Development (PPSD) and Procurement Plans.** A PPSD was prepared by the Recipient and cleared by the WBG prior to negotiation. The project envisages several goods and services. The most sensitive issue will be the procurement of works, since the project will finance works such as construction of feeder roads, irrigation, and marketing infrastructure in many dispersed locations. The consultant services are the selection of research services (intellectual services), some of which concern technical engineering and vocational training and others advice and legal assistance (drafting of regulatory texts and communication/awareness in various forms), technical studies, and environmental and social studies, among others. The different approaches, selection methods, need for pre-qualification, estimated costs, prior review requirements, and timeframe are agreed between the Recipient and the World Bank in the Procurement Plans. Although open national competition is generally the preferred procurement method, in some areas the market and security conditions might lead to other options based on the recommendations of the PPSD. In conjunction with the PPSD, a detailed Procurement Plan for at least the first 18 months of implementation has been reviewed and approved during negotiations. During implementation, the Procurement Plan will be updated as required and at least annually, to reflect project implementation needs and improvements in institutional capacity.

89. **Procurement risk assessment and mitigation measures.** A WBG Procurement Specialist conducted a procurement risk assessment of the CPCU in May 2021. Anchored in the Ministry of Agriculture, the CPCU will be responsible for the day-to-day implementation, management, and monitoring of all procurement activities for the proposed project. The CPCU has implemented several development projects over the past five years, including GCAV, with adequate fiduciary arrangements. With experience in applying WBG procurement rules and procedures, the CPCU implemented GCAV under the new Procurement Regulations with one procurement specialist. The assessment of CPCU capacity to implement World Bank procurement determined that it has the experience and qualifications to carry out procurement under this project. The staff has acceptable knowledge of WBG procedures and experience in using the World Bank Standard Bidding Documents. However, the CPCU needs additional training in important topics like contract administration and management and registering procurement documents in the WBG Systematic Tracking of Exchanges in Procurement (STEP) system.

90. **Overall procurement risk is rated Substantial, but after the implementation of the proposed mitigation measures, the residual risk is deemed to be Moderate.** The mitigation measures include: (i) finalizing a PPSD acceptable to the WBG; (ii) retaining the CPCU procurement specialist for the proposed project, who is experienced and familiar with WBG procurement procedures and policies; (iii) training in the Procurement Regulations for all project staff involved in procurement; (iv) developing a detailed section on procurement procedures to be included in the PIM, clarifying the roles of each team member involved in the procurement process, defining the maximum delay for each stage of procurement (specifically with regard to review and approval systems, and the signing of contracts); (v) developing contract management plans for prior review contracts; and (vi) improving the filing system to ensure compliance with the WBG procurement filing manual. For a detailed description of procurement and the corresponding institutional arrangements, see Annex 5.

### C. Legal Operational Policies

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



## D. Environmental and Social

91. **Environmental, social, health, and safety risks and impacts.** Potential adverse environmental and social impacts of the project could stem from activities under Components 1, 2, and 3 although the expected environmental impacts of project activities under Component 2, which will promote the use of climate-smart, environmentally friendly, appropriate technologies and practices, will be generally positive. Social impacts associated with project activities to benefit women and youth are also expected to be positive. The main environmental, social, health, and safety risks that could negatively affect the surrounding physical environment and local people are associated with project activities such as the construction and rehabilitation of logistic centers and feeder roads, or the installation of water management technologies, solar energy systems, and agricultural production or processing equipment. Anticipated social risks are related to land acquisition and impact on livelihoods, loss of assets, labor influx, and SEAH risks, due in particular to construction works as well as all activities focusing on women. Other risks include: (i) soil erosion and land degradation; (ii) increased use of chemicals in agricultural activities; (iii) occupational health and safety of workers; (iv) nuisances related to air and noise emissions; and (v) community health and safety threats from increased traffic and communicable diseases (notably COVID-19). Natural disasters (such as the impending desert locust invasion), the COVID-19 pandemic, and other shocks could heighten environmental and social risks. CPCU has prepared and disclosed the ESCP on October 25, 2021.

92. Given that the exact geographic locations of project-specific interventions are not yet determined, and to comply with WBG environmental safeguards and national environmental regulations, the CPCU developed an Environmental and Social Management Framework (ESMF), and Labor Management Procedure (LMP), SEAH action plan and Resettlement Policy Framework. The ESMF includes all Environmental and Social Standards relevant to the project, and it was reviewed, consulted upon, and disclosed in-country on October 24, 2021<sup>37</sup> and on the WBG website on October 25, 2021. In addition, site-specific Resettlement Action Plans (RAPs) will be prepared to address any land acquisition needs identified for the project.

93. Responsibility and oversight of the project's overall compliance with national and WBG environmental and social standards will rest with the environmental and social development safeguard specialists hired by the CPCU. These specialists will have primary responsibility within the CPCU for the implementation of safeguards under the project and monitoring compliance. In particular, the environmental safeguard specialist will collaborate closely with the National Environment Agency (NEA), which leads safeguard compliance for all projects in the country, in accordance with its mission. NEA will periodically monitor the project's compliance with the national regulations.

94. Stakeholder engagement has been an integral part of project preparation and design and will continue throughout implementation. All activities under the project will be contingent on broad-based and sustained consultations that will be organized with local communities and civil society organizations in the project intervention areas. To that end, the CPCU, in collaboration with the WBG, prepared and publicly disclosed on October 25, 2021, an inclusive Stakeholder Engagement Plan (SEP) integrating a GM commensurate with the nature and scale of the project and the associated risks and impacts identified during preparation. Mitigation measures for the potential environmental and social impacts that have been identified, including measures to protect and preserve cultural and historical resources and comply with other social and environmental safeguards, will be properly implemented by the CPCU as specified in the safeguard instruments and bidding documents.

<sup>37</sup> ESF documents are available on the project website: <https://www.cpcu.gm/the-gambia-inclusive-resilient-agriculture-value-chain-development-girav-project/>



95. **Citizen Engagement:** The Recipient has engaged in meaningful consultations with all stakeholders throughout the project preparation, including all regions in the Projects areas, paying attention to the inclusion of all groups. Affected parties include local communities, community members and other parties that may be subject to direct impacts from the project. Specifically, the following individuals and groups fall within this category: women vegetable growers, young farmers, rice farmers, food processors, contractors, suppliers, and their workers, village Development Committees, including women, youth, and elder councils, farmers associations, village chiefs known locally as “Alkalo”, producers’ associations. Interested parties in this process are: Ministry of Agriculture, Ministry of Finance and Economic Affairs, Department of Agriculture, NARI, NRA, the National Environment Agency, FSQA, Horticultural Technical Services, Communication Unit, Dept. of Agriculture, GIEPA, GCCI , National Livestock Owners Association, NACOFAG, irrigated rice farmers, Gambia radio and television services, media television (Paradise TV, QTV, etc.), print media, telecommunication companies, Central Bank of Gambia, local Government authorities, community radios, NGOs and civil society organizations, etc. The disadvantaged and vulnerable groups include women, the elderly, and persons with disabilities, persons suffering from HIV/AIDS and other chronic diseases who are generally marginalized and unable to fully participate and benefit from development actions.

96. To ensure adequate engagement with the vulnerable individuals and groups often requires the application of specific measures and assistance aimed at facilitating their participation in project-related decision-making so that their awareness of and input to the overall process are commensurate to those of the other stakeholders. The Recipient will apply the following principles for stakeholder engagement: Openness and life-cycle approach; public consultations for the project(s) will be arranged during the whole lifecycle, carried out in an open manner, free of external manipulation, interference, coercion, or intimidation; informed participation and feedback, inclusiveness and sensitivity; flexibility: if social distancing inhibits traditional forms of engagement, the methodology should adapt to other forms of engagement, including various forms of internet communication. If major changes are made to the SEP, a revised SEP should be publicly disclosed. The SEP includes also include a GM to address all complaints that could likely arise as a result of project activities. However, the GM for project workers will be provided separately under the Labor Management Procedures prepared for this project. The GM provided will set specific procedures to manage SEA/ SH complaints ethically and confidentially accompanied by an appropriate response protocol.

97. **Environmental and social risk for the proposed project is rated Substantial.** This rating will be revisited as needed when more details are available on the PISs supported through the project. The CPCU’s relative lack of experience in environmental and social safeguards presents a challenge, however, and care must be taken to ensure that the criteria for selecting PISs include environmental and social screening and that all PISs comply with all recommended mitigation measures.

98. **The project SEAH risk is rated Moderate.** Dedicated procedures to ensure that allegations of SEAH are handled safely, ethically, and adequately will be developed during project implementation. This process will include consultations with women and girls to identify age-appropriate and culturally sensitive reporting channels, the development of communication materials to disseminate information on the WBG Grievance Redress Service, the mapping of GBV services, and a response protocol.

## V. GRIEVANCE REDRESS SERVICES

99. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms (GRM) or the WB’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to



the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB 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](http://www.inspectionpanel.org).

## VI. KEY RISKS

100. **The project overall risk is rated Substantial.** This rating is based on the following considerations:
  101. **Political and governance risks are assessed as high.** The political coalition established in late 2016 after President Barrow assumed office is fragile and up-coming presidential elections in December 2021 may generate political instability and delay much needed reforms and project implementation in the sector. The authorities remain committed to promoting the development of the agri-food sector and the implementation of the reform agenda but at the same time lack a solid institutional system and governance structures to backup and support the reform momentum. This risk will be mitigated through using the well-seasoned CPCU to plan for efficient project start-up and by establishing a solid base for execution prior to the presidential campaign and election. A project preparation advance is being used to finance background studies, prepare project manuals, select required project staff and begin procurement.
  102. **Macroeconomic risk is rated substantial.** In 2018–2019 significant progress was made towards stabilizing the Gambian economy and jump-starting economic growth stymied by the severe economic impacts of the pandemic, especially on the tourism sector. Measures to address the public health emergency have left little scope for GoTG to support economic growth. Given the persistence of the pandemic, the outlook for 2021–2022 and beyond is uncertain. The economic recovery may be muted if fear of infection continues to deter travelers and/or agriculture suffers from adverse agroclimatic conditions. Rapid and successful implementation of the project would increase agriculture's contribution to economic growth. To mitigate the risk related to the limited fiscal space, the counterpart funding to be mobilized is limited exclusively to an eventual compensation for economic losses induced by the project (US\$0.5 million) in line with safeguards policies while valuing the CPCU civil servant salary and taxes in the project costing as government in-kind contribution and estimated at US\$3.97 million. While the inherent macroeconomic risk is rated high, the residual operational risk is rated substantial.
  103. **Risk related to sector strategies and policies is rated moderate.** The Gambia finalized its second National Agricultural, Food and Nutrition Security Investment Plan in 2019, four years after the first plan ended, and has not yet elaborated instruments to implement the plan. Although rapid development of the agricultural sector is listed as a priority in the NDP (2018–2021), the public resources allocated to the sector remain low and insufficient, far below the level agreed upon under the Maputo commitment (10 percent of public expenditures). The health emergency is likely to further reduce budgetary allocations for agriculture. The project will help to mitigate this risk through its emphasis on creating an environment conducive to mobilizing increased private investment in the sector, resulting in a rating of moderate.
  104. **Technical design risk is rated substantial.** The holistic nature of the project design features several components and implementing agencies. The project simultaneously addresses enabling agribusiness environment, climate-resilience and productivity, and access to finance to promote the development of market-oriented agriculture. Thereby, through an inclusive approach, the project involves the participation of different stakeholders including both smallholders and SMEs along the value chains. As mitigation measures, large



consultations were organized during project preparation to inform and engage the different stakeholders, and these will be maintained during implementation. As an added measure, the CPCU will be staffed with the specific technical expertise required to ensure smooth technical implementation. While the inherent technical design risk is rated high, the residual operational risk is rated substantial.

105. **Risks related to institutional capacity for implementation are also rated moderate.** It is critical to strengthen the institutional and human capacity of the Ministry of Agriculture, which was deeply affected by the political instability that accompanied the previous regime. The ministry's CPCU, financed by donors under various projects, is gaining experience in project implementation, but high staff turnover has reduced its efficiency. To mitigate this risk, the project will strengthen the CPCU, particularly in the area of private sector/agribusiness development, through selective staffing, capacity building, and the provision of technical assistance by experienced consultants. The project will also strengthen key institutions responsible for promoting commercial agriculture and exports. These actions will make the residual operational risk moderate.

106. **Fiduciary risk is rated substantial**, given the matching grant activities and the number of stakeholders involved in implementing the project. The CPCU will have fiduciary responsibility for the project, and its fiduciary management of IDA-financed projects, including GCAV, has proven satisfactory. The FM assessment developed an action plan and identified measures to mitigate fiduciary risk including the recruitment of an internal auditor to cover the project and for the matching grant which requires particular attention a MGIM will be elaborated to describe the selection procedures, eligibility requirements and contractual relationship. An agreement describing disbursement and reporting requirements will be signed with all selected beneficiaries.

107. **Environmental and social risks are rated substantial.** Project activities to promote the adoption of climate-smart, environmentally friendly technologies and practices are expected to have positive environmental impacts, and positive social impacts are likely to be associated with project activities to benefit women and youth. Potential adverse environmental and social impacts of the project could stem from activities supported under Components 1, 2, and 3, including the construction/rehabilitation of logistic centers and roads and investments co-financed through matching grants (water management technologies, solar energy systems, agricultural production or processing facilities). Natural disasters (desert locust invasion, for example) and other shocks and emergencies that may activate Component 5 could heighten environmental and social risks. The project will give special attention to avoiding any involuntary resettlement (physical and economic displacement) of local populations. Risks of GBV and SEAH are rated as moderate, although they may be exacerbated by the labor influx resulting from civil works, direct interactions with women and vulnerable groups at the community level, and the COVID context (unemployment and underemployment) affecting trade in border areas. To manage environmental and social risks and ensure compliance with safeguards, the CPCU is staffed with social and environmental safeguard specialists who will be trained in the requirements of the new Environmental and Social Framework and in the requirements related to SEAH.

108. **Stakeholder risk is rated low.** Project preparation was participatory, involving all stakeholders, including producers, producer organizations, leaders of GCCL, agribusiness SMEs, women's groups, youth groups, and non-governmental and civil society organizations. The project will continue to engage in meaningful consultations with all stakeholders throughout implementation. It will give particular attention to the inclusion of all groups (including the elderly, persons with disabilities, female-headed households, and orphans) in planning and decision-making to ensure that the productive investments supported by the project open opportunities equally to men, women, and youth, and consider the needs of the disabled and other vulnerable groups. Key value chain stakeholders will drive technology transfer and advisory programs through the IPs. The project will establish a GM to arbitrate potential conflicts between investors and public agencies and to respond to incidents related to SEAH.



109. “**Other risk**” is related to weather and rated moderate. Given that Gambian agriculture is largely rainfed, changes in rainfall and other weather patterns during implementation could dilute the project’s expected outcomes and impacts. The project will mitigate this risk by promoting climate-smart technologies and practices that increase the resilience of Gambian agriculture, including irrigation, improved soil and water management, and improved varieties with traits that confer resilience, such as drought tolerance. While the inherent risk is High, with these mitigation measures, the residual operational risk becomes moderate.

**VII. RESULTS FRAMEWORK AND MONITORING****Results Framework****COUNTRY:** Gambia, The**Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV)****Project Development Objectives(s)**

The Project Development Objective (PDO) is to promote the development of inclusive, resilient, and competitive agricultural value chains, focusing on smallholder farmers and agribusinesses in project target areas.

**Project Development Objective Indicators**

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
<b>To support the development of competitive agricultural value chains</b>							
Increase in the volume of marketed output by project direct beneficiaries (percentage, disaggregated by women, youth, smallholders, and Small and Medium Enterprises -SMEs) (Percentage)		0.00	0.00	20.00	50.00	75.00	100.00
Smallholders (Percentage)		0.00	0.00	20.00	50.00	75.00	100.00
Women (Percentage)		0.00	0.00	20.00	50.00	75.00	100.00
youth (Percentage)		0.00	0.00	20.00	50.00	75.00	100.00
Small and Medium Enterprises - SMEs (Percentage)		0.00	0.00	20.00	50.00	75.00	100.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Increase in yield of targeted agricultural commodities by project direct beneficiaries (disaggregated by crop) (Percentage)	0.00	20.00	50.00	50.00	100.00	100.00	
Rice (Percentage)	0.00	20.00	50.00	50.00	100.00	100.00	
Maize (Percentage)	0.00	20.00	50.00	50.00	100.00	100.00	
Horticulture (tomato, onion, green bean, baby corn, okra, pepper, etc. depending on market opportunity, in percent) (Percentage)	0.00	20.00	50.00	50.00	100.00	100.00	
<b>To support the development of inclusive agricultural value chains</b>							
Farmers reached with agricultural assets or services (CRI, Number)	0.00	10,000.00	20,000.00	30,000.00	40,000.00	50,000.00	
Farmers reached with agricultural assets or services - Women (Number)	0.00	5,000.00	10,000.00	15,000.00	20,000.00	25,000.00	
Farmers reached with agricultural assets or services - Youth (Number)	0.00	3,000.00	6,000.00	9,000.00	12,000.00	15,000.00	
<b>To support the development of resilient agricultural value chains</b>							
Farmers using/adopting climate-smart technologies (number, disaggregated by women and youth) (Number)	0.00	10,000.00	20,000.00	30,000.00	40,000.00	50,000.00	



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Women (Number)		0.00	5,000.00	10,000.00	15,000.00	20,000.00	25,000.00
Youth (Number)		0.00	3,000.00	6,000.00	9,000.00	12,000.00	15,000.00

#### Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
<b>Component 1: Improving the business environment for commercial agriculture development</b>							
Producer organizations and other professional organizations, and institutions beneficiaries of technical assistance, training, coaching, and mentoring (Number)		0.00	0.00	10.00	20.00	40.00	50.00
Women (Number)		0.00	0.00	10.00	15.00	20.00	25.00
Youth (Number)		0.00	0.00	3.00	6.00	12.00	15.00
Innovation platforms established and/or strengthened for value chain actors (Number)		0.00	0.00	5.00	10.00	10.00	10.00
Value chain mapping and Market Digital Platform established (Number)		0.00	0.00	1.00	1.00	1.00	1.00
Food-safety laboratories rehabilitated or constructed (Number)		0.00	0.00	2.00	3.00	4.00	4.00
Standards developed and		0.00	0.00	5.00	10.00	15.00	20.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
implemented to address quality challenges of the target value chains (Number)							
Certifications of agri-enterprises to support or maintain market access (Number)	0.00	0.00	2.00	5.00	8.00	10.00	
<b>Component 2: Building a productive and climate-resilient agri-food system</b>							
Agribusiness firms fully equipped with modern irrigation equipment of which: (Hectare(Ha))	0.00	0.00	40.00	100.00	200.00	200.00	
led by women (Hectare(Ha))	0.00	0.00	20.00	50.00	100.00	100.00	
led by youth (Hectare(Ha))	0.00	0.00	20.00	50.00	100.00	100.00	
Number of improved technologies transferred from the region and disseminated with CORAF support (Number)	0.00	2.00	5.00	10.00	15.00	20.00	
Improved climate-smart varieties of certified seed produced, of which: (Metric ton)	0.00	60.00	120.00	500.00	600.00	600.00	
Rice (Metric ton)	0.00	40.00	80.00	400.00	500.00	500.00	
Maize (Metric ton)	0.00	20.00	40.00	100.00	100.00	100.00	
E-extension platform developed and used (Yes/No)	No	No	No	Yes	Yes	Yes	
<b>Component 3: Mobilizing productive private investments along the value chains</b>							
Productive Investment Sub-Projects (PIS) financed through the matching grant	0.00	0.00	370.00	370.00	610.00	610.00	



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
mechanism, of which: (Number)							
Individuals, of which: (Number)	0.00	0.00	300.00	300.00	500.00	500.00	
Women (at least 40%) (Number)	0.00	0.00	120.00	120.00	200.00	200.00	
Youth (at least 30%) (Number)	0.00	0.00	90.00	90.00	150.00	150.00	
Groups, of which: (Number)	0.00	0.00	60.00	60.00	100.00	100.00	
Women (at least 40%) (Number)	0.00	0.00	24.00	24.00	40.00	40.00	
Youth (at least 30%) (Number)	0.00	0.00	18.00	18.00	30.00	30.00	
SMEs (Number)	0.00	0.00	10.00	10.00	10.00	10.00	
Private capital mobilized to match the project grant (Amount(USD))	0.00	0.00	2.40	2.40	3.90	3.90	
Area provided with new/improved irrigation technologies through the matching grant (Hectare(Ha))	0.00	0.00	100.00	300.00	500.00	500.00	
Productive Investment Sub- Projects financed through the matching grant mechanism using climate-smart technologies (at least 50%) (Number)	0.00	0.00	185.00	185.00	305.00	305.00	
Promoters beneficiaries of technical assistance and capacity building on entrepreneurship (Number)	0.00	0.00	370.00	370.00	610.00	610.00	



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Individuals, of which: (Number)	0.00	0.00	300.00	300.00	500.00	500.00	
Women (at least 40%) (Number)	0.00	0.00	120.00	120.00	300.00	300.00	
Youth (at least 30%) (Number)	0.00	0.00	90.00	90.00	150.00	150.00	
Groups, of which: (Number)	0.00	0.00	60.00	60.00	100.00	100.00	
Women (at least 40%) (Number)	0.00	0.00	24.00	24.00	40.00	40.00	
Youth (at least 30%) (Number)	0.00	0.00	18.00	18.00	30.00	30.00	
SMEs (Number)	0.00	0.00	10.00	10.00	10.00	10.00	
Women benefitting from tailored financing, skills and technology package (Number)	0.00	0.00	200.00	500.00	1,000.00	1,000.00	
Youth benefitting from tailored financing, skills and technology package (Number)	0.00	0.00	200.00	500.00	1,000.00	1,000.00	
<b>Component 4: Project coordination, monitoring and knowledge management</b>							
Beneficiaries satisfaction rate with services and assets provided by the project (Percentage)	0.00	0.00	0.00	60.00	60.00	80.00	



Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Increase in the volume of marketed output by project direct beneficiaries (percentage, disaggregated by women, youth, smallholders, and Small and Medium Enterprises -SMEs)	Percent increase in the volume of marketed output (raw or processed product) at the beneficiary level, disaggregated by gender, youth, smallholders, and Small and Medium Enterprises -SMEs	Annually	Monitoring and Evaluation data collection system	Registration of beneficiaries in a data base using digital application developed in smart phones	Central Project Coordination Unit (CPCU) in collaboration with Department of Planning
Smallholders		Annually			
Women		Yearly			
youth		Annually			
Small and Medium Enterprises - SMEs					
Increase in yield of targeted agricultural commodities by project direct beneficiaries (disaggregated by crop)	Annual percent increase in yield per hectare achieved by project beneficiaries. It is expected that the project would increase rice, maize and horticultural crops yield at least by 100 percent latest by year 4.	Annually	Monitoring and evaluation data collection system	Survey after each cropping season to estimate yield and its increase compared to the baseline situation	CPCU in collaboration with Department of Planning



Rice	Annual percent increase in rice yield per hectare achieved by project beneficiaries. It is expected that the project would increase rice yield at least by 100 percent moving from 2 metric tons/ha to 4 metric tons/ha latest by year 4. Producers doing double cropping will even get 8 metric tons/hectare and a year (200 percent increase)	Annually	Monitoring and evaluation data collection system	Survey after each cropping season to estimate yield and its increase compared to the baseline situation	CPCU
Maize	Annual percent increase in maize yield per hectare achieved by project beneficiaries. It is expected that the project would increase maize yield at least by 100 percent moving from 1 metric tons/ha to 2 metric tons/ha latest by year 4.	Annually	Monitoring and evaluation data collection system	Survey after each cropping season to estimate yield and its increase compared to the baseline situation	CPCU
Horticulture (tomato, onion, green bean, baby corn, okra, pepper, etc. depending on market opportunity, in percent)	Annual percent increase in horticultural crops yield per hectare achieved by project beneficiaries. It is expected that the project would increase horticultural crops yield at least by 100 percent latest by year 4.	Annually	Monitoring and evaluation data collection system	Survey after each cropping season to estimate yield and its increase compared to the baseline situation	CPCU



Farmers reached with agricultural assets or services	<p>This indicator measures the number of farmers who were provided with agricultural assets or services as a result of World Bank project support.</p> <p>"Agriculture" or "Agricultural" includes: crops, livestock, capture fisheries, aquaculture, agroforestry, timber, and non-timber forest products.</p> <p>Assets include property, biological assets, and farm and processing equipment.</p> <p>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).</p> <p>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</p>	Annually	Monitoring and evaluation data collection system	Registration of beneficiaries in a data base using digital application developed in smart phones	Central Projects Coordination Unit (CPCU) in collaboration with Department of Planning
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	(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 - Women					
Farmers reached with agricultural assets or services - Youth					
Farmers using/adopting climate-smart technologies (number, disaggregated by women and youth)	Farmers using/adopting climate-smart technologies including high-yielding, early-maturing, drought-resistant and salt-tolerant seed varieties, improved land and water management technologies to improve resilience to extreme climate events and/or reduce GHG emissions, conservative agriculture, best practices for crop intensification, rice intensive cropping system	Yearly	Monitoring and evaluation of project beneficiaries	Survey and registration of farmers beneficiaries of project climate-smart technologies disseminated	CPCU in close coordination with Department of Planning, Regional Directorates of Agriculture and NARI



	(SRI) etc.				
Women		Annually	Monitoring and evaluation of project beneficiaries	Survey and registration of farmers beneficiaries of project climate-smart technologies disseminated	CPCU in close coordination with Regional Directorates of Agriculture and NARI
Youth					

#### Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Producer organizations and other professional organizations, and institutions beneficiaries of technical assistance, training, coaching, and mentoring	This indicator measures the number of producer and professional organizations, and institutions that were provided with technical assistance, training, coaching, and/or mentoring as a result of World Bank project support. "Producer organizations" include: organizations whose membership produces crops, livestock, capture fisheries, aquaculture, agroforestry, timber, and/or non-timber forest products. Beneficiary institutions	Annually	Monitoring and evaluation data collection system	Registration of producer and professional organizations, and institutions in a digital data base from the respective regulatory Government ministry(ies), department(s) and/or agency(ies)	Central Project Coordination Unit (CPCU) in collaboration with Department of Planning



	include Government ministries, departments and/or agencies that support or regulate producers and producer organizations with services including but not limited to research, extension, training, education, ICTs, inputs (e.g., fertilizers, pesticides, labor), production-related services (e.g., soil testing, animal health/veterinary services), phytosanitary 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.				
Women					
Youth					
Innovation platforms established and/or strengthened for value chain actors	Innovation platforms established and/or strengthened for value chain actors	Annual	CPCU monitoring and evaluation beneficiary	CPCU monitoring and evaluation survey	Central Project Coordination Unit (CPCU)



			database		
Value chain mapping and Market Digital Platform established		Annual	CPCU monitoring and evaluation database	CPCU monitoring and evaluation reports	Central Project Coordination Unit (CPCU)
Food-safety laboratories rehabilitated or constructed	Food-safety laboratories rehabilitated, equipped or constructed	Annual	CPCU monitoring and evaluation database	CPCU monitoring and evaluation reports	CPCU
Standards developed and implemented to address quality challenges of the target value chains	Good Practices Manuals for private sector and the Control Guides for official controls services that will be developed and implemented in the target value chains.	Annually	CPCU M&E data base and reports	CPCU M&E system data collection registering the standards developed each year	Central Project Coordination Unit (CPCU) in collaboration with The Gambia Standard Bureau (TGSB) and Food Safety and Quality Authority of The Gambia (FSQA)
Certifications of agri-enterprises to support or maintain market access	Number of agribusiness companies supported by the project that will get certified	Annually	CPCU M&E system data base and report	CPCU M&E system data collection registering the certified agribusiness companies certified each year	Central Project Coordination Unit (CPCU) in collaboration with The Gambia Standard Bureau (TGSB) and Food Safety and Quality Authority of The Gambia (FSQA)
Agribusiness firms fully equipped with modern irrigation equipment of which:	Agribusiness firms fully equipped with modern	Annual	CPCU monitoring	CPCU monitoring and evaluation surveys	Central Project



	irrigation equipment of which 20 for women and 20 for youth for each 5 ha of area.		and evaluation reports		Coordination Unit (CPCU)
led by women		Annual	CPCU monitoring and evaluation reports	CPCU monitoring and evaluation surveys	Central Project Coordination Project (CPCU)
led by youth	Agribusiness firms fully equipped with modern irrigation by the project for youth including rural and urban graduates from agricultural and business schools and interesting to agribusiness.	Annual	CPCU monitoring and evaluation reports	CPCU monitoring and evaluation database	Central Project Coordination Unit (CPCU)
Number of improved technologies transferred from the region and disseminated with CORAF support	Number of improved technologies transferred from the region and disseminated with CORAF support. A number of technologies were generated under WAAPP including new improved varieties, agricultural machinery for seeding, land preparation, processing, packaging, best cropping practices, improved poultry practices etc. CORAF will	Annual	CPCU monitoring and evaluation database	CPCU monitoring and evaluation reports	Central Project Coordination Unit (CPCU)



	help beneficiaries to identify relevant technologies through the Market of Agricultural Technologies and Innovations (MITA) digital platform and support their transfer and adoption widely in Gambia.				
Improved climate-smart varieties of certified seed produced, of which:	Improved climate-smart varieties of certified seed produced : high-yielding, early-maturing, drought-resistant or pest-resistant	Annual	Ministry of Agriculture annual reports	Ministry of Agriculture seasonal surveys	Ministry of Agriculture
Rice		Annual	Ministry of Agriculture annual reports	Seasonal surveys	Central Project Coordination Unit (CPCU)
Maize		Annual	Ministry of Agriculture annual reports	Seasonal surveys	Ministry of Agriculture
E-extension platform developed and used	E-extension platform developed and used to provide smallholders and SMEs with agricultural advisory services.	Annual	CPCU monitoring and evaluation reports	CPCU monitoring and evaluation database	CPCU
Productive Investment Sub-Projects (PIS) financed through the matching grant mechanism, of which:	Productive Investment Sub-Projects (PIS) financed through the matching grant	Semi-annual	CPCU monitoring and	CPCU monitoring and evaluation reports	Central Project Coordination Unit (CPCU)



	mechanism to support small private investors, individuals or in groups, and SMEs to start-up or grow-up their activities along the targeted agricultural value chains (agricultural production, marketing, processing or service provision)		evaluation database		
Individuals, of which:		Semi-annual	CPCU monitoring and evaluation database	CPCU monitoring and evaluation reports	Central Projects Coordination Unit (CPCU)
Women (at least 40%)		Semi-annual	CPCU M&E database	CPCU M&E reports	CPCU
Youth (at least 30%)		Semi-annual	CPCU M&E database	CPCU M&E reports	CPCU
Groups, of which:		Semi-annual	CPCU M&E database	CPCU M&E report	CPCU
Women (at least 40%)		Semi-annual	CPCU M&E database	CPCU M&E reports	CPCU
Youth (at least 30%)		Semi-annual	CPCU M&E database	CPCU M&E reports	CPCU
SMEs		Semi-annual	CPCU M&E database	CPCU M&E reports	CPCU



Private capital mobilized to match the project grant	Private capital mobilized as beneficiaries contribution to match the project grant	Semin-annual	CPCU M&E database	CPCU M&E reports	CPCU
Area provided with new/improved irrigation technologies through the matching grant	Area provided with new/improved irrigation technologies through the matching grant	Annual	CPCU M&E database	CPCU M&E report	CPCU
Productive Investment Sub-Projects financed through the matching grant mechanism using climate-smart technologies (at least 50%)	Productive Investment Sub-Projects financed through the matching grant mechanism using climate-smart technologies including improved high-yielding, early-maturing or drought-resistant seed varieties, irrigation technologies, etc.	Semi-annual	CPCU M&E database	CPCU M&E reports	CPCU
Promoters beneficiaries of technical assistance and capacity building on entrepreneurship	Promoters beneficiaries of technical assistance and capacity building on entrepreneurship	Annual	CPCU M&E database	CPCU M&E reports	CPCU
Individuals, of which:		Annual	CPCU M&E database	CPCU M&E reports	CPCU
Women (at least 40%)		Annual	CPCU M&E reports	CPCU M&E database	CPCU
Youth (at least 30%)		Annual	CPCU M&E database	CPCU M&E reports	CPCU



Groups, of which:		Annual	CPCU M&E database	CPCU M&E reports	CPCU
Women (at least 40%)		Annual	CPCU M&E database	CPCU M&E reports	CPCU
Youth (at least 30%)		Annual	CPCU M&E database	CPCU M&E reports	CPCU
SMEs					
Women benefitting from tailored financing, skills and technology package	Women benefitting from tailored financing, skills and technology package including women beneficiaries of matching grants, technical assistance, training and capacity building program, modern irrigated agribusiness firms and technologies/innovation transfer	Annually	CPCU monitoring and evaluation reports	CPCU monitoring and evaluation surveys	Central Project Coordination Project (CPCU)
Youth benefitting from tailored financing, skills and technology package	Youth benefitting from tailored financing, skills and technology package including youth beneficiaries of matching grants, technical assistance, training and capacity building program, modern irrigated agribusiness firms and technologies /innovation	Annually	CPCU monitoring and evaluation reports	CPCU monitoring and evaluation surveys	Central Project Coordination Project (CPCU) in collaboration with Department of Planning



	transfer				
Beneficiaries satisfaction rate with services and assets provided by the project	Beneficiaries satisfaction rate with services and assets provided by the project	Every two years starting year 3	CPCU M&E reports	Mobile survey using database of project beneficiaries	CPCU

**Annex 1: Detailed Project Description**

1. The design of the project considers the growing need for The Gambia to transition from a subsistence to a market-oriented agricultural sector by increasing productivity and resilience to climate change, integrating value chains, developing markets, improving competitiveness, and reinforcing infrastructure to improve the agribusiness environment—actions directed at promoting private investment in the agri-food sector to foster economic growth and improve food security. Concerns that the economy was not creating sufficient jobs for youth have now been exacerbated by the economic impact of the pandemic, making this agricultural transformation doubly critical to offer attractive business opportunities to young people and bring about a RISE and green, inclusive and resilient (GIR) economic recovery.

2. The project will target four value chains:

(a) **Rice for substituting for increasing imports.** Gambia imports 80 percent of its rice consumption needs at a cost of US\$50 million a year. Production could be increased as the potential for rice yield gains is high. Empirical evidence from GCAV shows that the project interventions enabled producers to increase rice yields 2 metric tons per hectare (t/ha) to 4–5 t/ha. Rice production is potentially competitive if constraints are lifted to increase yields, reduce costs, and increase the quality of local rice through improved processing, packaging, and marketing.

(b) **Horticulture (vegetables and mango).** Horticultural value chains present major prospects for growth, given The Gambia's land and water resources as well as domestic, regional, and international market opportunities. Horticultural products could yield significant returns to smallholders and SMEs, particularly if markets offering the highest prices are targeted.

(c) **Cashews for domestic processing to add value and increase export opportunities.** The Gambian cashew value chain has tremendous untapped potential to diversify production and increase exports, given emerging market opportunities.

(d) **Poultry for urban markets, in conjunction with maize for feed.** For poultry—a rapidly growing value chain and short-cycle economic activity—interventions targeting women, youth, and SMEs could lead to substantial results, including improved food and nutrition security, more jobs, and higher incomes.

3. These target value chains have been identified based on their: (i) high development potential (market opportunities and productivity gains) that can be realized in the short to medium term; (ii) potential to become more competitive (based on the import and export price parity analysis in the IFC Agribusiness Deep Dive; and (iii) potentially high impact on job creation, particularly for women and youth (see Table A1.1).

**Table A1.1: Sources of growth, supply potential, and impact on poverty for target value chains, GIRAV Project**

	Rice	Cashews	Horticulture	Poultry
Sources of growth	High: - domestic demand: +3 percent per annum - Imports: 80 percent of domestic consumption (US\$50 million in 2019)	High: - Fast growing demand on the international market - Current exports: < 10,000 tons of raw nuts	High: - Large European demand for mangoes and other horticultural crops - Growing domestic markets driven by tourism and expanding urban middle class	High: - Fast growing domestic demand (>20 percent annually) - Insufficient domestic production requires demand to be met by imports
Supply potential	Good: - Gambia has headroom for growth in both cultivated area and yields (2 t/ha actual yields versus 4–6 t/ha potential yields on average) - Local rice (US\$550–610/t) uncompetitive with imported rice (US\$507–565/t) on an import price parity basis - However, production potentially competitive if existing constraints are lifted to increase yields, reduce costs, and increase quality of local rice - Production would support significant investments in milling	Good: - Good agroclimatic conditions over large areas, of which planted area estimated at 25,000 ha and growing - Production variable but growing - Yields average but quality superior to neighboring countries - Exports of about 10,000 t of raw nuts through Banjul port	Medium-good: - Some important competitive advantages for mangoes: (i) different varieties can be harvested almost 6 months of the year, and (ii) Gambian production peaks from May–July, after mango seasons end in South America and Côte d'Ivoire - Highly profitable opportunity to export fresh mangoes by sea to EU with sizeable gap between reported farm-gate prices (US\$240/t at the high end) and export parity price at farm-gate (US\$388/MT at the low end) - Fruit flies are a major issue for mango production - The Gambia exports mangoes and (small quantities of) other high-value horticultural products such as chilies, green beans, okra, others. - Banjul port, although too congested, and Dakar, with small volumes going via air	Medium-good: - Domestic production currently price uncompetitive in urban markets, but could improve with development of a competitive local feed industry (under consideration by the largest egg producers) and domestic production of day-old chicks - Would also require improvement of supply chain, veterinary services, and trade logistics - Domestic production would need protection from cheap imports, as in other West African countries
Impact on poverty	High: - Around 200 000 producers, mostly women on small plots	High: - About 20,000 producers - Cashew production is climate-resilient and suitable for poor soils, which would have a positive impact on household income - Limited cashew processing currently but potential for development, which	Moderate: - Commercial production limited to a handful of larger producers, although opportunity to integrate a larger number of smallholders through outgrower schemes	Moderate: - Commercial production limited to a handful of larger peri-urban producers, although development of feed industry would impact domestic demand



		would generate high number of employment opportunities in rural areas		for agricultural products
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4. In collaboration with IFC, the project will identify and pursue more immediate agribusiness opportunities, providing support to establish or expand promising private agricultural or agro-processing companies ("low hanging fruit") in any agricultural value chain (regardless of whether it is a target value chain) and geographical area, based on the advantages of the business proposition, such as market prospects, investor profile, and detailed development plan.

5. The project will operate in five agricultural regions—West Coast (Brikama), North Bank (Kerewan), Lower River (Mansa Konko), Central River (Janjanbureh), and Upper River (Basse)—and two municipalities (Banjul and Kanifing Municipalities), which together comprise 35 districts of 43 nationally. These areas are targeted as priority areas because of their relatively good connectivity to poles of high and fast-growing demand for agricultural products (Banjul and its port/airport for exports, and the large regional capitals of the other regions, shown in parentheses), as well as their high potential for developing commercial agriculture.

## PROJECT BENEFICIARIES

6. Key project beneficiaries will be SME-scale farmers and their organizations, agricultural SMEs, and other private actors in the target value chains (traders, processors, exporters, service providers), with a focus on agribusinesses led by women and youth. The project is expected to benefit 50,000 value chain actors directly, including men, women (at least 50 percent), and youth (at least 30 percent), as well as their organizations. Additionally, at least 10 SMEs are expected to benefit directly from the project through capacity building and matching grants. Other beneficiaries include the public institutions responsible for the development of commercial agriculture and exports in The Gambia. Table A1.2 displays numbers of beneficiaries by project component and subcomponent.

**Table A1.2: GIRAV project beneficiaries**

Component	Estimated number of beneficiaries	Assumptions/comments
<b>Component 1: Improving the business environment for commercial agriculture development (US\$19.70 million—US\$18.00 million IDA and US\$1.70 million from GoTG)</b>	<b>15,000</b>	
<i>Subcomponent 1.1: Strengthening the capacity of key organizations and improving value chain coordination and partnership (US\$2.50 million IDA)</i>	<b>1,000</b>	<ul style="list-style-type: none"> <li>▪ Training and capacity building for 10 producer/value chain actor organizations of 50 members each (500 participants, including men, women, and youth)</li> <li>▪ Creation/strengthening of 10 IPs of 50 members, on average (500)</li> </ul>
<i>Subcomponent 1.2: Developing critical marketing infrastructures (US\$4.70 million—US\$4.00 million IDA and US\$0.70 million from GoTG)</i>	<b>4,000</b>	<ul style="list-style-type: none"> <li>▪ 10 storage structures, each serving 100 beneficiaries</li> <li>▪ 6 aggregation/logistics platforms (bulking, storage, conditioning, processing), each serving 500 beneficiaries</li> </ul>
<i>Subcomponent 1.4: Improving rural connectivity (US\$9.50 million—US\$8.50 million IDA and US\$1.00 million from GoTG)</i>	<b>10,000</b>	<ul style="list-style-type: none"> <li>▪ At least 2,000 beneficiaries in each of the 5 regions</li> </ul>



Component	Estimated number of beneficiaries	Assumptions/comments
<b>Component 2: Building a productive and climate-resilient agri-food system (US\$10.10 million—US\$9.00 million IDA and US\$1.10 million from GoTG)</b>	<b>32,100</b>	
<i>Subcomponent 2.1: Promoting modern irrigation in women and youth-led agribusiness firms (US\$5.76 million—US\$5.00 million IDA and US\$0.76 million from GoTG)</i>	<b>2,000</b>	<ul style="list-style-type: none"> <li>▪ 20 women-led agribusiness firms (100 ha and 5 ha per firm), each employing 50 women</li> <li>▪ 20 youth-led agribusiness firms (100 ha and 5 ha per firm), each employing 50 young men and women (10 per ha)</li> </ul>
<i>Subcomponent 2.2: Increasing access to technology, innovation, and advisory services (US\$4.34 million—US\$4.00 million IDA and US\$0.34 million from GoTG)</i>	<b>20,000</b> <b>5,000</b> <b>5,000</b> <b>100</b>	<ul style="list-style-type: none"> <li>▪ Rice: Seed distribution and multiplication – 400 tons (200 tons*2 years) distributed to 20,000 producers, each receiving 20 kg/ha to multiply under SRI</li> <li>▪ Maize: Seed distribution and multiplication – 100 tons (50 tons*2 years) distributed to 5,000 producers, each receiving 20 kg/ha to multiply</li> <li>▪ Dissemination of other climate-smart technologies and innovations and agricultural equipment: 5,000 beneficiaries</li> <li>▪ Training of Agricultural Advisory Services Technicians: 100</li> </ul>
<b>Component 3: Mobilizing productive private investments along the value chains (US\$13.92 million—US\$10.00 million IDA and US\$3.92 million from private capital)</b>	<b>8,010</b>	
<i>Subcomponent 3.1: Building the operating capacities of partner FIs (US\$0.50 million IDA)</i>	<b>250</b>	<ul style="list-style-type: none"> <li>▪ 20 participants from each of 12 Gambian FIs, including commercial banks and micro-finance institutions; 10 participants from the Central Bank</li> </ul>
<i>Subcomponent 3.2: Co-funding productive investment to leverage private capital mobilization (US\$12.92 million—US\$9.00 million IDA and US\$3.92 million from private capital)</i>	<b>3,010</b>	<ul style="list-style-type: none"> <li>▪ 500 PISs promoted by individuals funded through matching grants</li> <li>▪ 100 PISs promoted by groups (each with 25 members) funded through matching grants</li> <li>▪ 10 PISs promoted by SMEs funded through matching grants</li> </ul>
<i>Subcomponent 3.3: Technical assistance to smallholder and SME promoters of PISs (US\$0.50 million IDA)</i>	<b>3,010</b>	<ul style="list-style-type: none"> <li>▪ 500 PISs promoted by individuals funded through matching grants</li> <li>▪ 100 PISs promoted by groups (each with 25 members) funded through matching grants</li> <li>▪ 10 PISs promoted by SMEs funded through matching grants</li> </ul>
<b>Estimate of total number of beneficiaries</b>	<b>50,360</b>	<ul style="list-style-type: none"> <li>▪ Beneficiaries of Subcomponents 3.2 and 3.3 are same and counted only once.</li> </ul>



## PROJECT COMPONENTS

7. The project will consist of three interlinked technical components, organized to address the key binding constraints for the development of the agriculture and agribusiness sector: (i) Improving the business environment for commercial agriculture development; (ii) Building a productive and climate-resilient agri-food system; and (iii) Mobilizing productive private investments along the value chains. A fourth component (project implementation and coordination) will focus on project operations. These are described below.

### **COMPONENT 1. IMPROVING THE BUSINESS ENVIRONMENT FOR COMMERCIAL AGRICULTURE DEVELOPMENT (*US\$19.70 MILLION EQUIVALENT—US\$18.00 MILLION FROM IDA AND US\$1.70 MILLION FROM GoTG*)**

8. The objective of Component 1 is to establish an enabling environment that can foster private investment and build a competitive and sustainable commercial agriculture/agribusiness sector in The Gambia. This aim will be achieved by: (i) strengthening the capacity of the key organizations engaged in agri-food value chains and improving value chain coordination and partnership between actors; (ii) developing critical marketing infrastructure; (iii) improving rural connectivity; and (iv) strengthening quality and SPS control systems. In addition, this component will improve the capacity and resources available to enhance climate-informed decision making in the selected agri-food value chains through promoting climate-informed business plan development, prioritizing climate-smart investments, enhancing partnerships and encouraging dialogue on climate issues.

#### ***Subcomponent 1.1: Strengthening the capacity of the key organizations and improving value chains coordination and partnership (US\$2.50 million – US\$2.50 million from IDA)***

9. In cooperation with IFC, this subcomponent will focus on the following activities: (i) *Strengthening producer and professional organizations*. Given current and expected climate impacts in the agricultural sector, particularly in the target value chains, technical assistance and training will also cover climate vulnerabilities as well as climate adaptation and mitigation solutions for producer and professional organizations. (ii) *Enhancing value chain coordination and partnership*. IPs will be established at key locations in production areas and supported by dedicated facilitators, in coordination with existing initiatives (ROOTS) to build synergy and complementarity. These IPs will become the interprofessional organizations for the target value chains, bringing together all stakeholders to improve their coordination, increase their voice in the definition of relevant policies and programs, and adopt consensual “rules of the game” for managing the common goods of the value chain. The preparation, establishment, and operation of a Digital Market Platform for the target value chains will provide actors with real-time market information (in terms of market prices, supply and demand availability, transport services) and connect buyers and sellers. (iii) *Strengthening the capacity of GIEPA and GCCI for mobilizing, facilitating, and monitoring private investments in agriculture and agribusinesses*. And (iv) *Supporting public-private dialogue on specific issues and reforms required for the development of commercial agriculture*.

#### ***Subcomponent 1.2: Developing critical marketing infrastructure (US\$4.70 million—US\$4.00 million from IDA and US\$0.70 million from GoTG)***

#### ***Subcomponent 1.3: Strengthening quality and SPS control systems (US\$3.00 million—all from IDA)***

10. Subcomponent 1.3 will contribute to establishing the minimum platform for a coherent food safety and quality control system, which is critical for Gambian agricultural products to access export markets and for managing food health risks for Gambian consumers. Planned investments will complement past and ongoing activities in food safety and quality and focus on three levels of activity: (i) Strengthening the institutional and regulatory framework for food quality control and SPS management; (ii) Improving key laboratories; and (iii) Supporting value chain-specific compliance schemes.

***Subcomponent 1.4: Improving rural connectivity (US\$9.50 million—US\$8.50 million from IDA and US\$1.00 million from GoTG)***

11. Despite the relatively small size of The Gambia, it is very difficult for many farmers (especially women) and SMEs to access farms and markets, especially during the rainy season when roads can be flooded. A 2020 baseline survey of communities for the Program for Accelerated Community Development (PACD) Project found that 25 percent were located more than 5 km from the nearest main road, and 67 percent were more than 5 km from their nearest market. This challenge, coupled with the lack of proper facilities for post-harvest storage and handling of produce, leads to high post-harvest losses and transportation costs. The project aims to alleviate these constraints by developing and rehabilitating feeder roads, accompanied by a maintenance program to ensure sustainability and resilience to climate impacts. Subcomponent 1.4 will follow the National Rural Road Development and Maintenance Strategy, which features a partnership between GoTG, interprofessional bodies, and private operators to select roads that are high priorities for rehabilitation/maintenance or construction and to co-finance these activities.

12. This subcomponent will support the following activities:

(a) **Preparatory activities**, starting with selecting roads to repair and identifying new roads to build. The selection will be participatory, with beneficiary communities engaged in selecting the target roads based on the criterion of facilitating access to markets and farms and exposure to extreme climate events, especially by women and young people. Following the identification and prioritization of the target roads, the NRA will conduct feasibility studies and prepare detailed designs of the target roads. NRA will also prepare the Bill of Quantities (BOQ) and bidding documents to award contracts for building the roads. In line with WBG policies, the preparatory phase will include ESIAs and the accompanying mitigation measures. In addition, the GIRAV Project will sign a Memorandum of Understanding (MOU) with the NRA defining the NRA's role in implementing this subcomponent.

(b) **Rehabilitation or construction of roads** by contractors selected by the CPCU. NRA will supervise the contractors, based on the terms of the MOU between the GIRAV Project and NRA.

(c) **Maintenance of the new and rehabilitated roads** by contractors in partnership with beneficiary communities. Again, NRA will supervise this activity, with oversight from the GIRAV Project.

13. Following an inventory of rural roads in project areas, a rural road improvement program will be developed jointly by the Ministry of Agriculture and NRA, focusing on priority roads in areas where the production potential of target value chains is high. NRA, which is anchored in the Ministry of Transport Works and Infrastructures, is responsible for the planning, construction, and maintenance of the national road system. The project will finance the development and construction/rehabilitation of 200 km of feeder roads. Specific interventions on each road will be identified based on economic viability, considering disaster resilience, engineering assessments, and budget constraints. The types of interventions include, among others, reconstruction or rehabilitation of bridges and culverts, graveling, surface treatment, and routine/periodic maintenance to the prescribed level of service. The feeder roads program will incorporate measures to adapt to climate change risks, including basic drainage infrastructure, increasing vegetation buffers between the road and bushland, and maintenance of verge vegetation.

14. To the extent possible, road work will involve labor-intensive methods to provide local employment. To ensure the sustainability of this investment, a community-based road maintenance strategy will be developed, and road maintenance associations will be formed and strengthened at the community level. These associations will receive low-cost hand tools and equipment to undertake routine maintenance. In line with lessons from other projects, GIRAV will give particular attention to the quality of the feeder roads to ensure sustainability.



Subcomponent 1.4 will be implemented by the NRA through private civil works contractors recruited through competitive bidding under the coordination and fiduciary responsibility of the CPCU.

**COMPONENT 2: BUILDING A PRODUCTIVE AND CLIMATE-RESILIENT AGRI-FOOD SYSTEM (**US\$10.10 MILLION EQUIVALENT —US\$9.00 MILLION FROM IDA AND US\$1.10 MILLION FROM GOTG**)**

15. The objective of Component 2 is to increase agricultural productivity through climate-smart intensification of selected production systems, focusing on enhancing water management and fostering access to improved CSA technologies and innovations. This objective will be attained through two subcomponents, as follows.

***Subcomponent 2.1: Promoting modern irrigation in women and youth-led agribusiness firms (US\$5.76 million—US\$5 million from IDA and US\$0.76 million from GOTG)***

16. **Communication.** This opportunity will be communicated through special efforts to reach women's and youth groups, along with alumni and students of agricultural and business schools. The project will work closely with the Ministry of Youth and Sport and NEDI in particular to create synergies with their ongoing initiatives on involving youth in agricultural value chains.

17. **Selection of irrigation sites.** Sites will be selected to establish the horticulture firms led by women and youth based on a set of climatic (exposure to climate change), technical and socioeconomic criteria, including:

- (a) ***The location of sites*** in project districts with major agricultural production areas, access to markets, synergy with other projects, and the potential to maximize the impacts of GIRAV.
- (b) ***The availability of land*** (each firm will require 5 ha), secured through an official transfer certificate issued by the village head (Alcalo) to the project beneficiary and duly signed. During implementation, the CPCU will provide follow-up support for the beneficiary to obtain an official land transfer certificate from the district authority to further secure the land after the investments have been made and to allow beneficiary to use the land as collateral.
- (c) ***The availability of groundwater*** resources of suitable quality (namely, not saline) for irrigation. Given that the project will not use river water for these irrigation investments, they have no implications for international waterways and no impact on riparian countries.
- (d) ***Topographic considerations*** (slopes) and ***agronomic potential*** (soil texture and fertility).
- (e) ***Socioeconomic conditions***, including the presence of a women's or youth group that has already registered with the authorities or is willing to seek such registration with project support, and is already involved in horticulture or keen to become involved.

18. **Technical feasibility study.** This study is a prerequisite for adequately designing irrigation facilities, including a borehole, complete solar-water pumping system, drip or central pivot irrigation system, fencing, a processing platform, and facilities to store inputs and output. A study has already been conducted to identify irrigation technologies suitable for commercializing the operations of individual producers, which the project could support.

19. **Cropping cycle.** Irrigation development under the project will allow for at least double cropping, with some areas presenting opportunities for triple cropping by taking full advantage of crop rotations. The development of irrigation systems using solar pumps will provide opportunities for double cropping of high-value horticultural crops, while minimizing operation and maintenance costs. GCAV demonstrated the possibility of producing baby corn in continuous two-month cycles under a contract farming arrangement with an exporting firm. The project will attempt to scale up this and similar export market opportunities.

***Subcomponent 2.2: Increasing access to technology, innovation, and advisory services (US\$4.34 million—US\$4 million from IDA and US\$0.34 million from GoTG)***

20. This subcomponent will have a specific target for providing technologies and training to women, including the gender-sensitive technologies released by the NCoS and RCoE under WAAPP, which are available through CORAF's digital Market for Agricultural Innovations and Technologies (MITA).

21. Training in best agricultural practices, including SRI, will be supported to help producers realize the potential to raise yields through better soil fertility and water management and by saving seed. These activities will help producers recover from the adverse effects of the pandemic by providing sustainable access to quality inputs at the community level and to training and advice through the digital platform. This subcomponent will be jointly implemented by NSS; the Directorates of Agriculture, Livestock, and Horticulture; NARI; and CORAF for regional technology transfer and cooperation, in partnership with the organizations of producers and other value chain actors. In supporting seed cooperatives, the project will encourage the dynamic participation of women members. Seed multiplication programs will also emphasize the participation of women's associations and groups to ensure that women gain better access to improved seed to increase production and incomes.

***Component 3: Mobilizing productive private investments along the value chains (US\$13.92 million—US\$10.00 million from IDA and US\$3.92 million from private capital)***

22. Component 3 will support private investments in productive activities and related services by addressing the major market failures that constrain the financing of investments in agricultural value chains. It will: (i) develop the capacity of partner FIs to scale up their financing of agri-food value chain actors by building FIs' knowledge of the sector and capacity to evaluate agricultural investment proposals; (ii) establish a matching grant instrument to co-finance competitively selected private productive investments; and (iii) provide technical assistance and capacity building to strengthen technical, entrepreneurial, and management skills of smallholders and SMEs.

***Subcomponent 3.1: Building the operating capacities of partner FIs (US\$0.50 million—all from IDA)***

23. This subcomponent will enhance access to commercial credit for agri-food value chain actors. The project will identify partner FIs interested in growing this segment of their portfolio and help them, through technical assistance, to develop: (i) methodologies for more accurately assessing the creditworthiness of agricultural investments and investors, especially SMEs (for instance, innovative digital credit scoring mechanisms) and (ii) financing instruments better tailored to the cash-flow needs and other specific features of agricultural investments and SME investors (in particular appropriate repayment schedules, including grace periods if necessary). This subcomponent will finance the costs of the specialized service providers that will be recruited to deliver these capacity-building activities based on specific needs expressed by partner FIs. It will be implemented by the CPCU in close collaboration with the Central Bank of The Gambia.

***Subcomponent 3.2: Co-funding productive investments to leverage private capital mobilization (US\$12.92 million—US\$9.00 million from IDA and US\$3.92 million from private capital)***

24. Subcomponent 3.2 will co-finance competitively selected PISs developed by small private investors (individuals or groups) and agribusiness SMEs. These subprojects will focus on agricultural production, marketing, processing, or service provision in the target geographical areas and value chains. Additionally, on a case-by-case basis, this subcomponent will co-finance promising subprojects in any part of the country based on the investment's prospective impact on the local economy and contribution to the PDO. Subprojects using climate-smart technologies will be strongly encouraged and prioritized. Project funding will be provided under a single grant mechanism composed of two separate windows:



(a) **Window 1 (US\$5.00 million of matching grants).** This window will target small investments by individuals or groups of producers, traders, processors, and service providers. It will be divided into two subsidiary windows accommodating PISs promoted by (i) individuals and (ii) groups. In total, Window 1 will provide matching grants of up to 80 percent of the cost of the PIS, up to a maximum of US\$10,000 for the investment subprojects of individuals and US\$20,000 for those of groups. Beneficiaries will contribute at least 20 percent of the subproject cost in cash (either their own equity and/or a commercial loan). To receive funds, PIS beneficiaries will be required to have an account with a commercial bank or MFI. In total, it is estimated that Window 1 will co-fund at least 500 PISs promoted by individuals and 100 PISs promoted by groups.

Window 1 will co-finance a diverse range of small PISs to increase incomes and help beneficiaries develop more market-oriented behavior. Expenses funded may include the purchase of: (i) modern solar-powered irrigation technologies (drip or central pivot systems for large farms, pumps, boreholes, greenhouses, vertical farming structures, and others); (ii) farm machinery and processing equipment (including improvements to existing processing facilities); (iii) working capital and other business start-up costs; (iv) climate-smart technologies such as certified seed of improved varieties (high yielding, early maturing, drought resistant, salt tolerant) and environmentally friendly pest and disease management inputs; (v) training and professional services; (vi) transport services; or (vii) other needs. The impact on beneficiary income will be a key selection criterion for PISs, as well as the sustainability of the increased income resulting from the investment.

(b) **Window 2 (US\$4.00 million of matching grants).** This window will target larger investments by agribusiness SMEs all along the target value chains, particularly SMEs involved in processing and marketing high-value and high-quality produce for domestic and export markets. Investments by SMEs in innovative irrigation systems with solar pumps, water-efficient irrigation technology, and greenhouses to improve climate resilience will be targeted as well. This window will co-fund approximately 10 PISs promoted by SMEs and will provide matching grants of up to 60 percent of the total cost of the investment, up to a maximum of US\$500,000. The beneficiary SMEs will contribute at least 40 percent of the cost of the investment from their own equity or a commercial loan. Beneficiaries will be required to have an account with a commercial bank or MFI to receive matching funds from the project. Project funds will be released once the beneficiary SME has deposited its contribution in this account or formally mobilized a commercial bank credit to cover its contribution, as one purpose of the grant mechanism is for beneficiaries to develop sustained business relationships with FIs. To this end, FIs will be involved in selecting the PISs to be financed. SME business plans that incorporate contract farming to connect smallholders to markets will be strongly encouraged. By covering 60 percent of the investment cost, the matching grant is expected to considerably reduce the debt burden and related financing costs for SMEs, allowing them to participate and develop their agribusiness.

25. Table A1.3 summarizes the structure of the matching grant mechanism and the amount of private capital that it is expected to mobilize.

26. A targeted communication campaign will be undertaken to increase awareness and stimulate interest in the matching grant opportunities among smallholders and SMEs value chain actors. Also, PISs with a clear impact on agricultural production resilience, using climate-smart technologies, modern irrigation, contributing to food security, developing domestic market by particularly linking agriculture with the tourism industry, and promoting exports market, would be particularly targeted, along those presented by promoters directly impacted by the COVID-19 pandemic.

**Table A1.3: Structure of GIRAV Project matching grant mechanism and private capital mobilization**

Window	Number of PISs	PIS costs		Project matching grant (IDA)			Private capital to be mobilized: Beneficiary cash contribution		
		Average cost per PIS (US\$)	Total cost, all PISs (US\$ million)	Maximum matching grant per PIS		Total (US\$ million)	Minimum per PIS	Total (US\$ million)	
				US\$	Percent		Percent	US\$†	
Subwindow 1-I: Individual PISs	500	12,500	3.75	10,000	80	3	20	2,500	0.75
Subwindow 1-G: Group PISs	100	25,000	2.50	20,000	80	2	20	5,000	0.50
<i>Total Window 1</i>	<i>600</i>		<i>6.25</i>	<i>20,000</i>	<i>80</i>	<i>5</i>	<i>20</i>	<i>2,500</i>	<i>1.25</i>
<i>Window 2: SMEs</i>	<i>10</i>	<i>700,000</i>	<i>6.67</i>	<i>500,000</i>	<i>60</i>	<i>4</i>	<i>40</i>	<i>200,000</i>	<i>2.67</i>
<b>Total</b>	<b>610</b>		<b>12.92</b>			<b>9</b>			<b>3.92</b>

† Minimum contribution required to obtain the matching grant from the project.

27. Both windows emphasize investments in appropriate and water-efficient irrigation technologies and greenhouses to expand irrigated area, reduce dependence on rainfall, and increase resilience to climate change in line with Component 2. The project will develop a list of modern irrigation technologies, and beneficiaries will be supported in choosing their preferred technologies and learning to operate and maintain them.

28. Each window will have distinct eligibility criteria, application processes, guidelines for appraisal and approval, terms, and arrangements. All of these operational modalities will be detailed in a manual (MGIM) to be developed during project preparation and approved by the WGB prior disbursement under the matching grant subcomponent. This manual will be informed by consultations with key actors and potential beneficiaries to build citizen engagement, and by the experiences of successful grant programs in The Gambia and elsewhere. To the extent possible, modalities will be similar to those of other grant programs implemented in projects of other donors in the same geographical areas as GIRAV (ROOTS in particular).

29. The eligibility criteria for beneficiaries of matching grants are outlined in Table A1.4 and will be further detailed in the MGIM.

**Table A1.4: Eligibility criteria for GIRAV matching grant mechanism**

Eligibility criteria	Matching grant windows	
	Window 1: Small investments for individuals and groups	Window 2: Larger investments for SMEs
<b>General eligibility criteria for all beneficiaries</b>	<b>INDIVIDUALS</b> <ul style="list-style-type: none"> <li>▪ Principal activities of the individual must be concerned with irrigation, production, processing, marketing, or service provision in the target value chains indicated by the project and must be situated in the project area.</li> <li>▪ Must prove identity and residency in the targeted district.</li> <li>▪ Must have an account with a FI (commercial bank or microfinance institution).</li> <li>▪ Documented availability of resources (in cash) for contribution to matching grant as shown in a costed PIS.</li> <li>▪ Commit to participate in capacity-building activities as prescribed by the project, such as training and technical assistance to develop a business plan acceptable to the project.</li> <li>▪ Commit to respect all safeguard requirements of the project.</li> <li>▪ Beneficiary can submit only one PIS at a time and cannot benefit more than one time from any of the funding windows.</li> <li>▪ Beneficiary must be the primary beneficiary of the PIS.</li> </ul>	<ul style="list-style-type: none"> <li>▪ SMEs must demonstrate that investments are financially viable and serve to increase marketable surplus or the provision of goods or services specifically for project value chains, improve quality, or increase productivity.</li> <li>▪ SMEs must be legally registered and functioning for at least 2 years prior to the date of submitting their subproject concept.</li> <li>▪ SMEs must commit to participate in capacity-building activities as prescribed by the project, such as training and technical assistance to</li> </ul>



Eligibility criteria	Matching grant windows	
	Window 1: Small investments for individuals and groups	Window 2: Larger investments for SMEs
	<p style="text-align: center;"><b>GROUPS</b> (e.g., producer or value chain actor organization, association, farmer cooperative, commodity interest group)</p> <ul style="list-style-type: none"> <li>▪ The group's principal activities must be concerned with production, processing, marketing, or service provision in the target value chains indicated by the project and situated in the project area.</li> <li>▪ Established at least one year prior to requesting project support.</li> <li>▪ Provide proof of juridical existence (registration certificate).</li> <li>▪ Documented availability of resources (in cash) for contribution to matching grant as shown in a costed PIS.</li> <li>▪ Must have an account with a FI (commercial bank or microfinance institution).</li> <li>▪ Commit to participate in capacity-building activities as prescribed by the project, such as training and technical assistance to develop a business plan acceptable to the project.</li> <li>▪ Commit to respect all safeguard requirements of the project.</li> <li>▪ Beneficiary can submit only one PIS at a time and cannot benefit more than one time from any of the funding windows.</li> <li>▪ Beneficiary must be the primary beneficiary of the PIS.</li> </ul>	<ul style="list-style-type: none"> <li>▪ develop a business plan acceptable to the project.</li> <li>▪ SMEs must have an account with a FI (commercial bank or microfinance institution).</li> <li>▪ SMEs must mobilize sizeable equity contribution to match the grant.</li> <li>▪ SMEs must have a clear "route to market" strategy.</li> <li>▪ SMEs must meet all safeguard requirements and measures imposed on this investment lending operation.</li> <li>▪ SMEs can submit only one subproject at a time and cannot benefit more than one time from any of the funding windows.</li> <li>▪ SMEs must be the primary beneficiary of the subproject.</li> </ul>
Additional eligibility criteria for women and youth	<p style="text-align: center;"><b>WOMEN</b></p> <ul style="list-style-type: none"> <li>▪ Women-led groups and groups that have a majority of female members.</li> <li>▪ Women-led SMEs.</li> <li>▪ Eligible for start-up without prior experience.</li> </ul> <p style="text-align: center;"><b>YOUTH</b></p> <ul style="list-style-type: none"> <li>▪ Defined as women and men ages 18–35 years at the time of submission, interested in any of the eligible value chains.</li> <li>▪ Eligible for start-up without prior experience.</li> <li>▪ Youth-led groups and groups that have a majority of youth members.</li> <li>▪ Rural youth: interested in expanding their agricultural businesses, regardless of education level.</li> <li>▪ Accept to participate in a field incubation program (on-the-job training in a small or medium agribusiness enterprise in the target value chain).</li> <li>▪ <b>Urban youth:</b> <ul style="list-style-type: none"> <li>○ Graduated from agricultural institutes or business school.</li> <li>○ Graduated from entrepreneurial training, business incubator programs, or agricultural training programs, or willing to participate in such a training program.</li> </ul> </li> </ul>	

30. The project defines an SME that is eligible to apply for a matching grant as *any officially registered enterprise that employs at least 10 workers and has total assets or annual sales surpassing US\$20,000*. This definition is intermediate between the definition developed by GIEPA based on the data obtained during the MSME Mapping Exercise (summarized in Table A2.5) and the WBG definition of SMEs. The WBG defines small enterprises as having 10–50 employees and total assets/annual sales of US\$100,000–US\$3 million; it defines medium enterprises as those having 50–300 employees and total assets/ annual sales of US\$3–15 million.

**Table A1.5: SMEs defined in The Gambia National Policy for MSMEs**

Enterprise category	Employees (number)	Paid in capital / assets		Annual sales	
		GMD	US\$	GMD	US\$
SMALL	5- 49	25,000 - 1 million	500 -20,000	100,001 - 1 million	2,000 -20,000
MEDIUM	50-99	1-5 million	20,000 – 100,000	1 - 10 million	20,000 – 200,000
LARGE	> 100	> 5 million	> 100,000	> 10 million	> 200,000

Source: GIEPA (2013), The Gambia National Policy for MSMEs 2014–18.

***Subcomponent 3.3: Technical assistance to smallholder and SME promoters of PISs (US\$0.50 million—all from IDA)***

31. **The matching grant mechanism will be sustained with technical assistance and capacity building.** This support is designed to strengthen the technical, entrepreneurial, and management skills of PIS promoters to (i) prepare, improve, or finalize their business plans and (ii) successfully implement their investments. The types of technical assistance provided to the different categories of entrepreneurs may include (among others): market and supply chain analysis, preparation of business plans, selecting sites and securing access to land, selecting irrigation and other kinds of equipment, financial and accounting systems, governance, technical advice specific to a subproject (for instance, related to agricultural/industrial processes), safety and quality issues, contractual relations with outgrowers or raw material suppliers, environment and social risk management, climate-smart agricultural practices and technologies, support to mobilize funding from FIs, implementation support, and capacity-building support of PIS beneficiaries in creating partnerships between buyers and sellers. Through cooperation with IFC, this subcomponent will leverage advisory services and funding opportunities for SMEs to scale up their agribusinesses. Investors will be supported from the pre-investment phase and throughout the investment and start-up phases, up to the end of the project (GIRAV). The CPCU will look for potential subcontractors, providers of support services for entrepreneurs, and business incubators operating in The Gambia that the project may access.

32. **The CPCU will be responsible for managing the grant program and supervising technical assistance provided through the specialized firm hired to provide support services for the project.** The CPCU will maintain fiduciary responsibility for all aspects of this subcomponent. GIEPA, the Agribusiness Services Unit, and NEDI will be the implementing partners supporting the CPCU, in collaboration with the specialized firm.

33. **In addition to providing matching grants, the project will seek to facilitate financing from FIs for beneficiaries by identifying partnership opportunities with FIs.** There is evidence that FIs are more likely to finance agriculture if their understanding of acceptable levels of risk for agricultural activities is improved. The project will evaluate beneficiaries' needs for financial services, the supply and demand of these services, and opportunities for partnering with FIs to meet these needs. These efforts will fall within the technical assistance and convening activities of the support service provider.

34. **To support agribusiness in accessing credit and building more sustainable relationships with FIs, Component 3 will help to establish and implement a risk-sharing facility.** As mentioned, small investors and even SMEs have very restricted access to credit from FIs, which tend to provide only short-term credit for working capital. Although the matching grant component of GIRAV will temporarily reduce the perceived risk of FIs in lending to agriculture, the lack of credit will largely remain a binding constraint on the development of commercial agriculture in The Gambia. To reduce the inherent sectoral risk and incentivize lending to the sector, the project will collaborate with the Central Bank of The Gambia to accelerate the establishment and operationalization of the Partial Credit Risk Guarantee Fund (PCRGF), a government fund that will guarantee up to a maximum of 70 percent of the principal of loans extended to matching grant beneficiaries. The PCRGF is being prepared with the United Nations Capital Development Fund (UNCDF) in partnership with AfDB, under the Gambia Incentive-Based Risk Sharing for Agricultural Lending (GAMIRSAL) technical assistance facility. Technical assistance provided through GIRAV to FIs, smallholders, SMEs, and other value chain actors will contribute to the implementation of GAMIRSAL.

35. **The Gambia has 12 FIs, of which nine are commercial banks and three are MFIs.** Although the commercial banks display excess liquidity of 85 percent, agricultural financing remains a major challenge, with less than 5 percent of loans going to agriculture. The GIRAV matching grant mechanism, PCRGF, and related technical assistance are expected to leverage this excess liquidity to increase access to agricultural finance and investment



by smallholders and SMEs, boost the development of commercial agriculture, and accelerate sustainable and inclusive agricultural growth.

**Component 4: Project coordination, monitoring, and knowledge management (*US\$4.17 million—US\$3.00million from IDA and US\$1.17 million from GoTG*)**

36. This component aims to ensure that the project is efficiently managed and monitored, and that performance and outcomes are carefully tracked by the CPCU and implementing agencies. Component 4 will facilitate: (i) administrative, technical, and FM of the project; (ii) coordination among all institutional partners to ensure efficient flows of information and support to all value chain actors; (iii) effective contractual arrangements with key implementing partners and other private sector operators; (iv) M&E of the project's performance and its financial, environmental, and social impacts; and (v) communication activities to publicize and disseminate project results, best practices, and success stories. Under this component, the project will finance: (i) expenses incurred in implementing the project through the CPCU, the participating implementing agencies, and various service providers; (ii) technical assistance provided through consultancies, audits, and training to enhance implementation capacity of the CPCU; (iii) communication, knowledge production and sharing, and outreach activities; (iv) M&E of the project's financial performance, outcomes, and impacts; (v) citizen engagement; (vi) oversight of social and environmental safeguard policies; and (vii) institutional strengthening to ensure the sustainability of project results. This component will be implemented by the CPCU.

**Component 5: Contingent Emergency Response (*US\$0 million*)**

**Annex 2: Implementation Arrangements and Support Plan****Project Oversight**

1. The Ministry of Agriculture will be responsible for overall project implementation. It will collaborate closely with other relevant ministries and their respective departments and agencies, including (i) MOTIE for project activities focusing on value chain coordination, connecting producers to traders and agro-processors, building marketing infrastructure, and improving the SPS system to certify that agri-food products meet international quality standards; (ii) the Ministry of Youth and Sport and the Ministry of Women, Children and Social Welfare for project activities targeting youth and women and harnessing synergies with their ongoing initiatives; and (iii) the Ministry of Transport Works and Infrastructure for project activities related to improving mobility and connectivity.
2. An inter-ministerial PSC will provide strategic oversight of the project. The PSC will be chaired by the Ministry of Agriculture Permanent Secretary and meet at least twice a year. The secretariat of the PSC will be headed by the CPCU in the Ministry of Agriculture. Membership of the PSC will include the Project Coordinator, with representatives from GCCI (vice-chair of the PSC); the Ministry of Finance and Economic Affairs; MOTIE; the Ministry of Youth and Sport; the Ministry of Women, Children and Social Welfare; the Ministry of Environment, Climate Change and Natural Resources; NEA; Directorate of Agriculture; NEDI; the Ministry of Transport Works and Infrastructure; GIEPA; Gambia Public Procurement Authority (GPPA); SMEs engaged in agribusiness; NACOFAG; Gambia Women' Federation; youth organizations (to be determined); and civil society organizations (to be determined).
3. The PSC will have six main responsibilities. It will: (i) provide strategic and policy guidance to the CPCU for implementation and coordination of activities; (ii) ensure overall conformity with government policies and strategies; (iii) review and assess project progress and performance; (iv) approve the AWPB; (v) resolve implementation problems or conflicts; and (iv) assist the CPCU in obtaining, whenever needed, government assistance and contributions to the project.
4. At the technical and operational level, a PTC will be established. The PTC will be chaired by a Permanent Secretary of the Ministry of Agriculture. Its membership will consist of senior technical personnel of key implementing agencies and supporting partners. The country technical team used during project preparation will be expanded to serve as the PTC during the implementation phase of the project. The PTC will assist the CPCU in day-to-day project management and coordination. The PTC will meet every month during the first year of implementation to ensure a smooth start, and every two to three months as the project progresses. Terms of reference for the PTC will be elaborated in the PIM.

**Project Coordination and Implementation Unit**

5. The CPCU within the Ministry of Agriculture has overseen preparation of GIRAV and will be responsible for project coordination and implementation. In 2014, the Ministry of Agriculture established the CPCU for centralized coordination and implementation of all projects funded by development partners in the agricultural sector, to avoid a multiplicity of project implementation units, create synergies between projects, strengthen capacity, and build continuity in project management. The CPCU has amassed experience in coordinating GCAV and projects funded by other donors (ROOTS, among others). CPCU staffing will be strengthened to meet the specific needs of GIRAV. Additional staff will include a director of operations, under the direct hierarchy of the coordinator, who will assist in coordinating technical activities and supervising technical experts to ensure smooth



implementation and good project performance; a rural/civil engineer in charge of irrigation equipment, feeder roads and marketing infrastructure; a grant management specialist to manage and implement the matching grant mechanism; an agribusiness specialist to oversee coordination of the value chains, the establishment of productive partnerships or contract farming between value chain actors (particularly producers and buyers), and implementation of agribusinesses selected for financing; a social development specialist in charge of social safeguards, GBV, SEAH, gender, and youth; an environmental specialist in charge of preparing and implementing environmental safeguard instruments; a communication and knowledge management specialist in charge of outreach activities, awareness campaigns, social engineering, and the promotion and communication of project achievements; a digital technology (computer/software) specialist in charge of designing, updating, and implementing digital platforms, including platforms for M&E, value chain actors, e-extension, matching grant applications, and so on; and key support staff. The social and environmental specialists are already hired to support project preparation. The reinforced CPCU will coordinate overall project implementation on a day-to-day basis, coordinate and consolidate AWPBs, and oversee all other technical implementing agencies. It will be responsible for all fiduciary aspects of the project (procurement, disbursement, accounting, and financial reporting) and M&E. It will prepare bi-annual progress reports and ensure the annual auditing of all project accounts by independent auditors acceptable to IDA. Audit reports will be submitted to IDA no later than six months after the closing of the fiscal year. The CPCU will also act as the secretariat for the PSC.

### Project Implementing Agencies

6. Specific implementation arrangements are defined for each component and subcomponent, under the overall oversight of the CPCU. Results-based partnership agreements will be signed by the CPCU with each directorate or institution in charge of implementing a component or subcomponent. The partnership agreements will define the assigned objectives; annual action plan; obligations and responsibilities of contracting parties; administrative, technical, and financial implementation modalities; date of effectiveness and duration; allocated budget; and categories of eligible expenditures. Through these partnership agreements, the CPCU will delegate to the relevant directorate or partner the technical responsibility for component and subcomponent implementation while maintaining overall fiduciary responsibility. Partnership agreements will be signed by CPCU with the following implementing agencies:

- (a) ***Soil and Water Management Services and Horticultural Technical Services*** of the Ministry of Agriculture and NEDI to implement Subcomponent 2.1 (Promoting modern irrigation in women and youth-led agribusiness firms) and PISs on irrigation implemented through matching grants under Subcomponent 3.2 (Co-funding productive investments to leverage private capital mobilization).
- (b) **NRA**, responsible for the planning, construction, and maintenance of the national road system in the Ministry of Transport Works and Infrastructures, to implement Subcomponent 1.4 (Improving rural connectivity).
- (c) **NARI, NSS, public advisory services** (including the Directorates of Agriculture and Livestock), and **producer organizations** for the implementation of Subcomponent 2.2 (Increasing access to technology, innovation, and advisory services) and of Subcomponent 1.1 (Strengthening the capacity of key organizations and improving value chain coordination and partnership).
- (d) **CORAF**, as a regional body, to implement Subcomponent 2.2 by facilitating the transfer of technologies across the region. CORAF will facilitate: (i) The Gambia's integration into the networks of NCoSs and RCoE established under WAAPP, and the country's ongoing regional cooperation in agriculture; (ii) updating of the national extension system; (iii) the promotion of CSA practices; (iv) communication for development; (v) the consolidation of gender mainstreaming; and (vi) capacity building for the project implementation team in M&E, results-based management, and other competencies as needed.



7. More specifically, CORAF partnership will help to:

- (a) **Connect NARI with RCoE** to strengthen regional cooperation in generating technologies and innovations and sharing experience, knowledge, training, and research products. Through RCoE, the Gambia will benefit from: (i) information exchange flows and participation in regional workshops and innovation fairs; (ii) support for specialized consultations on demand, including strategic agricultural research and development studies; (iii) participation in regional coordination activities and events to showcase agricultural technologies; and (iv) participation in the clusters of National Centers of Specialization (NCoS) and/or RCoE.
- (b) **Upgrade the national research system.** For the Gambia's scientists to effectively participate to the NCoS and/or RCoE networking, its research infrastructures, equipment and personnel, for at least the target value chains, must be at a certain level of international standards. CORAF will facilitate the process.
- (c) **Update the national extension system** through the promotion of strategies and approaches, including: (i) Integrated Agricultural Research for development (IAR4D) for out-scaling target value chain IPs; (ii) e-extension; (iii) digital agriculture; and (iv) full participation of farmer organizations and private sector.
- (d) **Develop and implement an action plan for CSA practices**, including: (i) production and dissemination of agro-meteorological information; (ii) building the capacity of farmers on the use of this information; and (iii) availing climate-smart technologies and innovations and quality agri-inputs packages.
- (e) **Develop and implement a communication-for-development action plan** based on the regional communication strategy of CORAF to accelerate the sharing of agricultural technology, tools, and best practices.
- (f) **Consolidate gender mainstreaming** based on the strategy prepared by CORAF which includes empowering women, youth and vulnerable groups with gender sensitive-technologies and innovations, access to these technologies and the markets of products.

8. Figure A2.1 summarizes the organizational structure of the project.

9. The CPCU will engage and work closely with key supporting partners, including: (i) GCCI, GIEPA, Agribusiness Services, and NACOFAG to implement Subcomponent 1.1 (Strengthening the capacity of key organizations and improving value chain coordination and partnership), Subcomponent 1.2 (Development of critical market infrastructure), and Component 3 (Mobilizing productive private investments along the value chains); (ii) NEDI, a government agency under the Ministry of Youth and Sport, to implement all activities related to youth-led agribusiness under Components 1, 2, and 3; and (iii) TGSB, FSQA, and Plant Protection Services to implement Subcomponent 1.3 (Strengthening quality and SPS control systems). The CPCU will implement Subcomponent 3.1 (Building the operating capacities of partner FIs) and Subcomponent 3.3 (Technical assistance to smallholder and SME promoters of PISs) with support from specialized service providers, and it will implement Component 4. The CPCU will also implement Component 5, if activated.

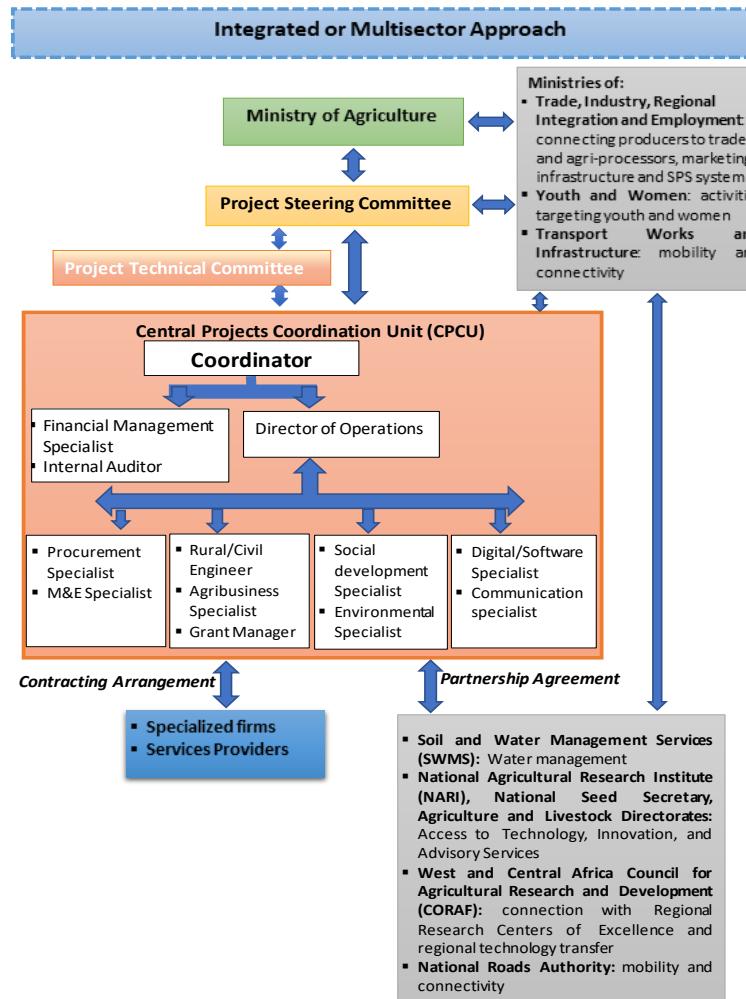
10. Implementation arrangements will be further refined in the PIM and MGIM.

#### **Project Implementing Manuals**

11. A PIM is being prepared and will be completed and validated prior to effectiveness. The PIM details the organizational and technical procedures that govern the project, including FM, procurement, M&E, and the GM.



**Figure A2.1: Project organizational structure**



12. A separate MGIM will be prepared and validated prior to any grant disbursement. The MGIM will include: (i) eligibility criteria; (ii) selection procedure and appraisal criteria; (iii) co-financing arrangements, including eligible expenditures; (iv) processing cycle and timing; (v) management responsibilities; (vi) training and technical assistance; (vii) fiduciary aspects; (viii) safeguard aspects; and (ix) templates for matching grant agreements for each window. The MGIM will be informed by learning from experience with matching grants under GCAV and projects of other development partners<sup>38</sup> in Africa and South Asia.

13. The operations manual for the CERC will be prepared and will be validated prior to any disbursement under the component.

#### **Matching Grant Mechanism**

14. The CPCU will have a grant manager who will be responsible for managing the subcomponent and coordinating with other parties involved, such as the Matching Grant Selection Committee, technical assistance providers, and beneficiaries. Grant agreements and FM will be managed by the Finance and Administration team

<sup>38</sup> NEMA: Land and Water Management Development Project funded by IFAD; FASDEP: The Food and Agriculture Sector Development Project funded by the AfDB; ROOTS: Resilience of Organizations for Transformative Smallholder Agriculture Programme, co-funded by IFAD, AFD and GEF.



of the CPCU using a matching grant software module that will capture financial transactions and other information to facilitate M&E and reporting.

15. **Information and communication.** The CPCU will advertise and promote matching grants through communication channels appropriate for reaching producers, small-scale processors, agricultural SMEs, and their organizations across the country and particularly in the target areas. To ensure that all PISs are completed by the project closing date, the CPCU will complete two rounds of the grant award process—issuing a call for proposals and then screening and selecting PISs—no later than the fourth year after effectiveness. The project is expected to begin the first round 12–18 months after effectiveness. The second round will begin 6–12 months after the first round to enable the team to assess impact and make improvements and adjustments before the next round.

16. The CPCU will organize outreach activities to inform beneficiaries about the project, followed by training sessions at the local level where beneficiaries can receive assistance in preparing PIS proposals. This assistance may be necessary only for the promoters of PISs.

17. **Screening proposals for eligibility and business plan development.** Prospective beneficiaries will submit PIS proposals to the CPCU, which will assess their eligibility and then perform a high-level screening of PISs and beneficiaries. The project will develop three separate templates for PIS proposals—one each for small individual and group PISs under Window 1, and one for larger SME PISs under Window 2. Templates for the smaller Window 1 subprojects will be simpler than templates for the larger Window 2 subprojects, which will require more detail on the subproject, the promoter's experience and capabilities, and financial information. Proposals will be submitted through a digital application portal (e-PIS) to be developed for the project website and demonstrated when the grant program is launched. Templates will also be available in hard copy for rural target groups. The application process will be facilitated for “off-grid” and illiterate smallholders and groups of value chain actors by establishing application centers in each of the project districts to support their online applications. SMEs must submit their application online under their respective window.

18. The CPCU will rank PIS proposals according to criteria laid out in the MGIM and then select the proposals that will be developed into full business plans. The selection methodology will be available to the public, including the criteria and the weight assigned to each. Criteria will include, among others, return on investment, likelihood of project sustainability and growth, jobs created, feasibility of technical approach, climate-smartness, estimated positive externalities of the project, and inclusiveness of the project with respect to the livelihoods of women and youth.

19. After proposals are selected to go forward, beneficiaries will be required to enter into an agreement with the CPCU, meet all obligations with respect to eligibility requirements, and pledge their participation in training and advisory activities. SME promoters applying for grants under Window 2 will be trained, coached, and assisted by business support service providers to develop their proposals into viable business plans. Four months may be needed to develop each SME business plan, build sufficient technical capacity, and put other prerequisites into place for signing an agreement with SME recipients of PIS matching grants. Training and business plan development for individuals and groups applying for grants under Window 1 will be shorter (completed within one–two months), followed by the selection process and signing of the matching grant agreement. A transparent process validated by stakeholders and approved by the World Bank is necessary, as the PIS grants are likely to be heavily oversubscribed and elite capture needs to be prevented.

20. **Selection.** Selection criteria and weights will differ for the two windows. Selection criteria under Window 1 will emphasize the potential impacts of PISs on vulnerable beneficiaries and on helping producers to integrate modern technologies, such as irrigation, into their production systems to increase their marketable surplus. Selection criteria under Window 1 will also emphasize the potential for value addition by small businesses and



consequently target downstream actors in the value chains to improve processing, packaging, and marketing. These criteria will also be important for the SMEs applying for larger grants under Window 2, but selection criteria for Window 2 will also consider and assign different weights to the novelty of the approach and the potential of the PIS to generate positive externalities for others in the community and sector; emphasize the use of contract farming or productive partnership; and encourage businesses that have already demonstrated market-oriented behavior.

21. Business plan proposals for all PISs will be submitted to a Matching Grant Selection Committee, to be proposed by the PSC and approved by the WGB. Because the business plans submitted under each window will differ in complexity, the composition of the selection committee may vary for plans submitted by individuals and groups under Window 1 and for plans submitted by SMEs under Window 2. In general, it is envisioned that the committee will be composed of CPCU staff (project coordinator, grant manager, agribusiness specialist, and other technical and financial specialists), other experts as determined by the PSC, and representation of any FIs that may be providing credit for specific PISs. The objectives for constituting the selection committee are to ensure technical skill, impartiality, efficiency, economy, confidentiality, and avoid conflicts of interest and any elite capture. A Regional Approval Committee composed of stakeholders will be established in each district where the project is active to vet the selected PISs submitted by individual and groups under Window 1. All PISs selected for funding will sign a matching grant agreement and receive financing under the terms of the agreement, which will require grant recipients to open an account in a FI with sufficient equity or loan funds already secured to match the grant.

22. **Disbursement procedure.** Upon approval, the Matching Grant Selection Committee will notify the CPCU of the approval of the grant amount and request the CPCU to initiate the disbursement procedure for the grant amount. The CPCU will send the approved files to the WBG Task Team for no objection. Upon receipt of the no objection clause from World Bank, the CPCU will instruct the Central Bank to disburse the funds to the concerned FI. Upon receipt of the amount, the FI will disburse the grant to the beneficiary and use a portion of the aggregated funds (loan and/or equity contribution and matching grant) to pay suppliers directly. The remaining share related to working capital will be disbursed into the account of the beneficiary. Direct payments to suppliers of irrigation and processing equipment or agricultural machinery will prevent misuse of the matching grant funds.



### Annex 3: Economic and Financial Analysis

#### INTRODUCTION

1. The economic and financial analysis of the proposed GIRAV Project is based on a cost-benefit analysis of eight representative investments (namely, PISs) supported through the matching grant mechanism. The carbon balance of the project is assessed using EX-ACT, a tool developed by FAO. The sections that follow describe the methodology and underlying assumptions for the analysis; the data sources and assumptions used to construct the financial models; and results of the financial analysis, economic analysis (including the estimated economic benefits from feeder road improvement), GHG accounting, and sensitivity analysis.
2. Overall, GIRAV is a viable project, generating **at a 6 percent discount rate** (i) an **EIRR of 21 percent and NPV of US\$70.95 million** without environmental benefits; (ii) an **EIRR of 21 percent and a NPV of US\$71.05 million** with environmental benefits included valued at the low estimate range (on average 49 US\$/tCO<sub>2</sub>e); and (iii) **n EIRR of 21 percent and a NPV US\$71.20 million** with environmental benefits included valued at the high estimate range (on average 97 US\$/tCO<sub>2</sub>e) on a total budget of US\$40 million in IDA financing (including direct and indirect costs, operating costs, training etc). Considering only the direct costs related to each type of project-funded activity results to a NPV of US\$104 million of which US\$53 from agricultural value chains activities and US\$51 million from feeder roads including its externalities. Table A3.1 summarizes the breakdown NPV by project type of activity and in overall. Sensitivity analysis indicates that results remain robust under various adverse and positive scenarios, including: (i) increased project costs; (ii) increased project benefits; (iii) reduced project benefits; (iv) delayed project benefits; and (v) a higher discount rate.

**Table A3.1: Estimation of the NPV per activity and for overall project**

Project activities	NPV @ 6% 20 years (US\$)	
	At SPC US\$49	At SPC US\$97
SRI Irrigated rice	585,483	585,483
Rainfed rice	12,162,995	12,162,995
Maize	751,342	751,342
Women and youth-led modern agribusiness firms	7,251,318	7,251,318
Poultry - broiler	11,137,622	11,137,622
Poultry - layer	4,106,597	4,106,597
Rice seed production	492,101	492,101
Horticultural production	1,684,467	1,684,467
Land preparation services	2,044,826	2,044,826
Mobile rice milling service	372,639	372,639
Cashew Processing SME	7,088,066	7,088,066
Horticulture Enterprise	5,183,173	5,183,173
Feeder roads	51,182,551	51,182,551
Environmental benefits	143,537	286,973
<b>Overall project</b>	<b>104,186,715</b>	<b>104,330,151</b>
<i>Project other economic costs</i>	33,127,901	33,127,901
<b>Overall project considering all economic costs</b>	<b>71,058,814</b>	<b>71,202,249</b>



## METHODOLOGY AND ASSUMPTIONS

3. The methodology is a cost-benefit analysis<sup>39</sup> of quantifiable projected benefits and costs generated/incurred by the project over a period of 20 years.<sup>40</sup> A “with project” (WP) scenario is compared to a “without project” (WOP) scenario to assess the net incremental benefits arising from implementation of the project, and indicators of financial and economic profitability (FIRR, NPV, and EIRR) are calculated. A discount rate of 6 percent is used to compute the financial and economic NPVs. This rate is in line with World Bank guidance<sup>41</sup> and rates used to evaluate similar projects in The Gambia. The exchange rate used is 50 Gambian dalasi (GMD) for 1 United States dollar.

4. Project activities are expected to generate multiple benefit streams. Based on available information and assumptions, four main benefit streams are considered in this analysis: (i) the production benefits arising from direct support for farmers to produce rice, maize, and horticultural crops under best agricultural practices, leading to higher yields,<sup>42</sup> quality, market prices, and household revenues; (ii) benefits from matching grant financing of PISs; (iii) environmental co-benefits arising from the adoption of solar energy systems and other climate-smart technologies, including seed of drought-resistant varieties, improved water management, and others; and (iv) benefits from improved feeder roads.

5. The productivity and income benefits obtained by farmers are the result of project investments under Component 1 (building the capacity of individuals and organizations in the target value chains, developing and strengthening IPs, promoting the adoption of best agricultural practices and innovations, and improving aggregation/logistics capacity) and Component 2 (developing modern agribusinesses operated by women and youth on 200 ha, using best agricultural practices<sup>43</sup> to produce rice on 20,000 ha and maize on 5,000 ha, promoting the diffusion of climate-smart technologies, and improving agricultural advisory services).

6. The benefits from matching grants are the result of project support for PISs promoted by individuals (500), groups (100), and SMEs (10) under Component 3 (technical assistance and implementation support for competitively selected PISs in irrigation, agricultural production, livestock, processing, or service provision in target regions and value chains will improve private sector participation and performance, particularly by smallholders and SMEs).

7. Environmental benefits in the form of reduced GHG emissions and enhanced carbon sequestration are the result of project investments in sustainable production systems and improved water management under Component 2 (mainly the adoption of SRI on 20,000 ha of rice and more efficient, solar-powered irrigation systems on 200 ha of horticultural crops produced by women- and youth-led agribusinesses).

8. The other benefits of GIRAV are multiple but challenging to quantify for this analysis. They include: (i) **Improved capacity in key institutions** involved in the target value chains, including producer and professional organizations, GCCI, and GIEPA, and **stronger, better coordinated agricultural value chains**; (ii) **Increased capacity and space for private sector participation in agriculture and agribusiness**, as a result of increased access to finance for agriculture, an improved policy and regulatory environment for agribusiness, and the reduction of transaction costs and risks.; (iii) **Improved livelihoods of rural households** as a result of better food security and nutrition in the target regions; (iv) **Poverty reduction**, through the substantial monetary and nonmonetary

<sup>39</sup> This is the standard approach described in Gittinger (1982) and Belli et al. (2001) and recommended by the World Bank; see Independent Evaluation Group (2010), “Cost-Benefit Analysis in World Bank Projects,” Washington, DC, <https://openknowledge.worldbank.org/handle/10986/2561>.

<sup>40</sup> The appendix presents results over 15, 10, and 5 years.

<sup>41</sup> *Discounting Costs and Benefits in Economic Analysis of World Bank Projects*, OPSPQ, 2016.

<sup>42</sup> Assuming that the resulting increased yield and production will be offset by better market demand and access and therefore have no significant negative effect on market price developments.

<sup>43</sup> Based on access to improved maize and rice seed and SRI for rice.



benefits realized from developing modern agribusinesses led by women and youth; and (v) **Better access to healthcare**, development of **trade**, and **reduced vehicle operating costs** as a result of improved feeder roads.

#### FINANCIAL MODELS

9. The analysis is based on eight financial models: (i) rainfed rice; (ii) intensive irrigated rice, based on SRI; (iii) maize, in conjunction with (iv) poultry broilers and (v) layers; and (vi) women and youth-led modern agribusiness firms; and (for SMEs focused on exports) (vii) processed cashew nuts and (viii) horticulture enterprises.

10. These models are considered to be reasonably representative of the PISs that are likely to be developed under GIRAV, especially SRI, poultry layers, poultry broilers, horticulture production, rice seed production, land preparation services and mobile rice milling services under matching grant Window 1, and processed cashew nuts and horticulture enterprises under matching grant Window 2. The economic and financial analysis is based on best judgments about the PISs that beneficiaries are likely to choose and the resulting mix of benefits, incorporating plausible assumptions derived from experience with the GCAV and ROOTS projects, agricultural statistics, and technical discussions with the CPCU team.

11. **Key assumptions for rice and maize models.** As shown in Table A3.1, WOP and WP parameters for two rice production systems are modelled: SRI irrigated rice (produced over two seasons, with improved seed and water management) and rainfed rice (produced only in the wet season, with improved seed and agricultural practices). The proposed yield increases are significant yet realistic, developed on the basis of planned project activities and data collected during fieldwork for this analysis. The main assumption for the maize model is the increase in yield from 1,000 kg/ha to 1,500 kg/ha due to access to improved seed.

12. **Key assumptions for modern agribusiness firms for women and youth.** Women and youth produce a wide range of vegetables, based on market demand. The modern agribusiness firm model was developed for the four most widely cultivated vegetables: tomatoes, onions, cabbages, and chili peppers.<sup>44</sup> The model assumes that these firms have land utilization rates of 80 percent, drip irrigation systems on the entire production area, and that beneficiaries are trained to use agricultural best practices, resulting in higher productivity levels.

**Table A3.2: Key parameters of the rainfed and irrigated rice models used in the GIRAV economic and financial analysis**

Rice models: Key parameters		Target Yields (kg/ha)			Target Yields (kg/ha)				
		WOP Situation		WOP Yield (wet)	WOP Yield (dry)	WP Situation		WP Yield (wet)	WP Yield (dry)
<b>SRI Irrigated rice</b>	Existing sites	Rain fed, traditional tidal production (local seeds, no/limited fertilizer application)	2,500	2,500	2-season cultivation, with improved water control, better agronomical practices and use of improved seeds and fertilizer	5,000	5,000		
<b>Rainfed rice</b>	Existing sites	Rain fed, wet season traditional production (local seeds, no/limited fertilizer application)	2000	N/A	Wet season cultivation with better agronomical practices, use of improved seed and fertilizer	3,000	N/A		

13. **Key assumptions for poultry activities.** Reflecting lessons from other projects and expected demand from beneficiaries, the project will include poultry activities. The layer and broiler production models developed for this analysis are based on data collected during the fieldwork and on standard parameters for these activities. The broiler model features a 1,000-bird broiler unit using day-old chicks, with production cycles of seven weeks

<sup>44</sup> Production of baby corn is also expected, based on lessons from GCAV.



followed by a rest period of three to four weeks, for five production cycles per year. The mortality rate is assumed to be 5 percent, and uptake will occur over three years. For layers, the model consists of a similar 1,000-bird unit using day-old chicks, with a mortality rate of 10 percent, an average laying rate per production cycle of 78 percent, and gradual uptake over three years.

**14. Key assumptions for SMEs activities.** Based on data available during the fieldwork, cashew processing<sup>45</sup> and horticulture enterprises<sup>46</sup> were selected as representative PIs that are likely to be co-financed under matching grant Window 2. Depending on the grant ceiling, a 10-year<sup>47</sup> cash flow is estimated and included in the overall aggregated economic analysis.

**15. Other PIs are considered likely candidates for co-financing under matching grant Window 1—horticulture production, rice seed production, land preparation services, and mobile rice milling services—but they could not be modeled in detail owing to insufficient data.** A brief literature review indicates that these activities are expected to have rates of return between 20 percent and 40 percent, strongly correlated with business size. In light of lessons from other projects and expected demand from beneficiaries, the present analysis adopted the following, rather conservative, internal rate of return (IRR) as indicative rates for the economic analysis: 24 percent for horticulture production, 38 percent for rice seed production, 24 percent for land preparation services and 26 percent for mobile rice milling services.

## FINANCIAL RESULTS

**16.** All of the models are financially viable, generating significant additional household income and attractive returns on investment over 20 years (Table A3.3). All models have positive NPVs and very attractive IRRs.

**Table A3.3: Financial profitability indicators for GIRAV Project activities over a 20-year period**

Financial model	Unit	Additional benefits/year		FIRR		NPV @ 6%
		(GMD)	(US\$)	(%)	(GMD)	
SRI Irrigated rice	ha	53,224	1,064	20	311,858	6,237
Rainfed rice	ha	21,925	439	23	11,643	233
Maize	ha	2,094	42	72	186,509	370
Modern agribusiness firms for women and youth	unit (5 ha)	1,509,233	30,185	27	10,600,573	212,011
Poultry - broiler	unit	280,600	5,612	76	2,586,019	51,720
Poultry - layer	unit	276,625	5,533	51	2,370,525	47,410
Rice seed production	unit			38	1,877,478	37,550
Horticulture production	unit			24	1,648,685	32,974
Land preparation service	unit			24	2,171,121	43,422
Mobile rice milling service	unit			36	1,427,824	28,556
Cashew processing by SMEs for export	unit	13,668,000	273,360	23	84,683,602	1,693,672
Horticulture enterprises of SMEs for export	unit	119,864,650	2,397,293	37	428,823,935	8,576,479
<b>Average</b>				<b>37</b>		

<sup>45</sup> In the cashew processing model, manual technology is complemented by mechanization for some processing operations, including mechanized shellers, pelers, and graders such as those used in India, which are capable of processing 1,500–3,000 tons per year (Technoserve-PSAC report, November 2015).

<sup>46</sup> Reflecting lessons on horticulture enterprises related to the production of fresh mangoes, mango pulp, mango juice, mango jam/sauce, and dried mango slices (Implementation Completion and Results Report, GCAV).

<sup>47</sup> See the appendix for analysis over periods of 20, 15, 10, and 5 years.



## ECONOMIC RESULTS

### *Economic Analysis of the Project Productive Investments*

17. The economic analysis is based on the following assumptions: (i) financial benefits and costs used in the models discussed previously are converted into economic values; (ii) project costs include the costs of all components, excluding the cost of direct support provided to project beneficiaries (to avoid double counting costs reflected in the models), and excluding half of the costs of the project in its final year (to reflect the recurrent costs to the public sector over years 6–20 for post-project activities and maintenance of the infrastructure); (iii) 100 percent of additional project revenues; and (iv) the long-term capital opportunity cost (discount rate) retained is 6 percent, calculated over a period of 20 years<sup>48</sup>, which corresponds to the lifetime of key infrastructure developed under the project. The estimated benefits are aggregated to assess the project's value from a social standpoint. To determine the overall economic viability of the project, the environmental co-benefits are added to the aggregated incremental economic benefits, and the economic costs of the project are subtracted.

### *Economic Analysis of Feeder Roads*

18. The project will finance the construction and/or rehabilitation of 200 km of feeder roads to improve access to and from production areas and facilitate the marketing of agricultural products. The expected results include: (i) increased producer prices due to improved market access for local production; (ii) increased trade through reduced transport costs and time; (iii) increased yields and/or area planted through improved physical access to agricultural inputs and support services; (iv) reduced post-harvest losses through improved transport conditions and increased market opportunities; (v) decreased cost of operating vehicles (maintenance, repair, fuel consumption, depreciation); and (vi) improved access to health and education centers, which will have a positive impact on the development of human capital.

19. The following benefits were taken into account in the calculations: (i) a 20 percent increase in cultivated area; (ii) a 5 percent reduction in post-harvest losses of maize; and (iii) a 5 percent increase in producer prices. Other benefits were not taken into account, however, including: (i) easier access to education and health centers; (ii) the development of trade, services, and income-generating activities; and (iii) the lower cost of operating vehicles. The calculations reflect the additional production costs resulting from the increase in planted area, and the annual cost of maintaining feeder roads constructed under the project (equivalent to 5 percent of their total cost). The economic model also assumes that feeder roads have a zone of influence with a radius of 7 km on each side; 6 percent of this zone of influence is estimated to be used for rice and maize production. Based on these assumptions, the investment in feeder roads yields an EIRR of 68 percent and NPV of US\$51 million.

### *Greenhouse Gas Accounting*

20. **Environmental co-benefits.** GIRAV is expected to generate several environmental benefits. The adoption of climate-smart production practice and solar energy will be a key source of carbon sequestration. The climate resilience of agriculture and rural livelihoods will benefit from the adoption of SRI on 20,000 ha and modern horticulture agribusinesses on 200 ha.

21. **Estimating the carbon balance.** The carbon balance of the project was estimated using the EX-ACT tool.<sup>49</sup>

<sup>48</sup> See the appendix for analysis over periods of 15, 10, and 5 years.

<sup>49</sup> EX-ACT is a land-based accounting system for estimating the impact of Agriculture, Forestry, and Other Land Use (AFOLU) development projects, programs, and policies on the carbon-balance. EX-ACT estimates carbon stock changes (i.e., emissions or sinks of CO<sub>2</sub>) as well as GHG emissions per unit of land, expressed in equivalent tons of CO<sub>2</sub> per hectare and year. The tool helps project designers to estimate and prioritize project activities with high benefits in terms of economic and climate change mitigation. Data from the "Guidelines for National Greenhouse Gas Inventories" (NGGI-IPCC, 2006) furnishes EX-ACT with recognized default values for emission factors and carbon values in soils and biomass (the so-called "Tier 1 level" of precision).



The carbon balance is defined as the net balance from all GHGs expressed in tons of carbon dioxide equivalent that are emitted or sequestered as a result of implementing the project (WP), compared to a business-as-usual scenario (WOP). The GHG accounting for GIRAV is based on the climate and soil profile of the zone where the project will operate. The Intergovernmental Panel on Climate Change classifies the project zone as having a tropical moist climate and low-activity clay soils. Land use and crop management practices were defined for the WP and WOP scenarios (Table A3.4). Changes resulting from the project were factored into the EX-ACT modules in accordance with the assumptions and budget provisions in the economic and financial analysis.

**Table A3.4: Data inputs for scenarios with and without the project used in the GHG accounting**

Activity	Without project scenario	With project scenario
Rice under SRI	20,000 ha of rice under traditional production practices	20,000 ha of rice under SRI †
SRI irrigated rice	100 ha of rice under traditional irrigation system	100 ha of rice under SRI and improved water management ‡
Modern agribusiness firms for women and youth	200 ha of degraded land	200 ha of modern agribusiness firms under improved water management
Maize produced under best agricultural practices	5,000 ha of maize under traditional production practices	5,000 ha under improved production practices §
Fertilizer	No fertilizer	No fertilizer ††
Construction –wall/grid/warehouse	No construction	400 m <sup>2</sup> for market infrastructure/feeder roads
Liquid or gaseous–Gasoil/diesel	0	20 m <sup>3</sup> per year

† GIRAV Project outcome related to Subcomponent 2.2.; ‡ GIRAV Project outcome related to Subcomponent 2.1.; § GIRAV Project outcome related to Subcomponent 2.2.; †† Fertilizer consumption in WP scenario adjusted based on the use of organic material combined with mineral fertilizers.

**Results.** The difference in gross results between the WOP and WP scenarios yields a total carbon balance for the project of 4,293 tCO<sub>2</sub>-e sequestered over the full project implementation period (Table A3.5). Under the WOP scenario, GHG emissions add up to 225,387 tCO<sub>2</sub>-e. The GHG accounting also identifies the practices and activities contributing to the positive carbon balance of the WP scenario; as shown in Table A3.4, land use changes due to the project are the major contributors to carbon sequestration.

**Table A3.5: Detailed results, GIRAV Project**  
(continent: Africa; climate: Tropical moist; dominant regional soil: Low-activity clay)

Component	Gross fluxes: All GHGs in tCO <sub>2</sub> eq; positive = source, negative = sink		
	Without project	With project	Balance
<b>Land use changes (LUC)</b>			
Other LUC	0	-7,457	-7,457
<b>Agriculture</b>			
Annual	-276,358	-276,358	0
Rice	501,745	503,939	2,194
<b>Grassland &amp; Livestock</b>			
Grasslands			
<b>Degradation &amp; Management</b>	0	0	0
<b>Coastal wetlands</b>	0	0	0
<b>Inputs &amp; Investments</b>		970	970
<b>Fishery &amp; Aquaculture</b>	0	0	0
<b>Total</b>	<b>225,387</b>	<b>221,094</b>	<b>-4,293</b>
<b>Per hectare</b>	<b>9</b>	<b>9</b>	<b>-0.2</b>
<b>Per hectare per year</b>	<b>0.4</b>	<b>-0.4</b>	<b>-0.01</b>



22. **Calculating the economic value of the mitigation potential.** According to the World Bank Guidance Note on the Social Value of Carbon (2014), the value of carbon can be derived from three different measures: (i) the social cost of carbon; (ii) the marginal abatement costs; and (iii) the carbon market prices. The social cost of carbon attempts to capture the marginal global damage (cost) of an additional unit of CO<sub>2</sub>e emitted. The Guidance Note on Shadow Price of Carbon in Economic Analysis (US, Carbon Price Index adjusted, 2021) recommends “projects’ economic analysis use a low and high estimate of the carbon price starting at US\$44 and \$87, respectively, in 2020 and increasing to US\$70 and \$140 by 2041”. Following these World Bank guidelines, this analysis uses the yearly average between these two scenarios in the valuation of environmental benefits.

23. **Overall project results, including environmental benefits.** The analysis conducted based on the aforementioned assumptions results in an **EIRR of 21 percent and NPV of US\$71.05 million**, including environmental benefits valued at the low estimate range (on average 49 US\$/tCO<sub>2</sub>e), and an **EIRR of 21 percent and a NPV US\$71.20 million** with environmental benefits included valued at the high estimate range (on average 97 US\$/tCO<sub>2</sub>e). The EIRR is estimated at **21 percent and NPV at US\$70.95 million** without environmental benefits. These results are conservative, given the difficulty of quantifying ex-ante the project’s impact on nutrition and health, rural-urban migration, emigration, import substitution for rice, and other project impacts.

### **Sensitivity Analysis**

24. Sensitivity analysis shows that the baseline results are robust under most scenarios. The robustness of these results was explored by testing the effects of changes in several critical parameters: (i) increased project costs; (ii) increased project benefits; (iii) reduced project benefits;<sup>50</sup> and (iv) delayed project benefits. The sensitivity analysis also tested for an increase in the discount rate, to arrive at the break-even point of the project. The NPV remains positive until the social discount rate reaches 15 percent, suggesting robust results. The findings are summarized in Table A3.6.

**Table A3.6: Sensitivity analysis including environmental benefits, GIRAV Project**

Scenarios		6 percent discount rate					
		EIRR (%)	NPV at Low Carbon Price (on average 49 US\$/tCO <sub>2</sub> e)		EIRR (%)	NPV at High Carbon Price (on average 97 US\$/tCO <sub>2</sub> e)	
			GMD billion	US\$ million		GMD billion	US\$ million
<b>Base scenario</b>		<b>21.2</b>	<b>3.4</b>	<b>71.1</b>	21.2	3.4	71.2
Costs +	10%	20.0	3.3	67.7	20.0	3.3	67.9
Costs +	20%	18.8	3.1	64.4	18.9	3.1	64.6
Costs +	50%	15.9	2.6	54.5	15.9	2.6	54.4
Benefits –	10%	19.8	2.9	60.6	19.9	2.9	60.8
Benefits –	20%	18.3	2.4	50.2	18.3	2.4	50.3
Benefits –	50%	10.8	0.8	15.7	10.8	0.8	15.7
Benefits delayed 1 year		18.7	2.9	60.7	18.8	2.9	60.8
Benefits delayed 2 years		16.6	2.4	51.0	16.6	2.4	51.1
Benefits delayed 3 years		14.7	2.0	41.9	14.7	0.8	42.0
Benefits delayed 4 years		12.9	1.6	33.5	13.0	2.9	33.6

<sup>50</sup> The worst scenarios, in which yields or prices fall by 10 percent, 20 percent, and 50 percent.



Discount rate (%)	NPV at Low Carbon Price (on average 49 US\$/tCO <sub>2</sub> e) US\$ million	NPV at High Carbon Price (on average 97 US\$/tCO <sub>2</sub> e) US\$ million
8	52.1	52.2
10	37.6	37.7
12	26.6	26.7
15	14.5	14.5



## Annex 4: Financial Management

1. **Budgeting:** The project budgeting process will be described in the PIM. The budget would be reviewed and adopted by the PSC, before the beginning of each fiscal year. Annual draft budgets would be submitted to IDA's non-objection no later than November 30<sup>th</sup> before adoption and implementation. Any changes in the budget and work plans would be approved by the PSC and receive a World Bank non-objection opinion. The PSC would also: (i) discuss and review the quarterly budget execution report; and (ii) monitor and assess the implementation progress and results of the project. Periodic reports of budget monitoring and variance analysis will be prepared by the CPCU.
2. **Accounting:** The CPCU will use the cash basis to maintain the project's accounts which will be supported with appropriate records and procedures to track commitments and to safeguard assets. The project financial statements will be prepared using International Public-Sector Accounting Standards (IPSAS) considering IDA requirements and specificities related to external financed investment projects. Accounting and control procedures will be documented in the PIM. The current CPCU's accounting software will be customized to accommodate the bookkeeping of the project. The project accounting will be managed through the existing accounting software which has multi-project and multi-donor features, it will be customized for the bookkeeping of the new project. An accountant will be dedicated to the bookkeeping of this project.
3. **Internal control and internal auditing arrangements:** The PIM will include the FM and disbursement arrangements and the internal controls mechanism, budgeting process, assets' safeguards, and clarify roles and responsibilities of all stakeholders. A separate matching grant manual will be elaborated to describe the eligibility criteria, the disbursement and reporting procedures. An internal auditor will be recruited to conduct ex-post reviews of the project activities and submit an internal audit report on a quarterly basis. The internal auditor pays particular attention to the matching grants activities and express his opinion on the matching grant payment.
4. **Financial reporting arrangements.** The CPCU will prepare quarterly unaudited IFRs reflecting operations of the designated account (DA) and submitted to the World Bank, within 45 days after the end of each calendar quarter. The IFR format would comprise the following: (i) report on the sources and use of funds by disbursement category and by component, in a cumulative basis (project-to-date; year-to-date) and for the period, showing budgeted amounts versus actual expenditures, including a variance analysis; and (ii) forecast of sources and uses of funds.
5. The PCU will also produce the projects Financial Statements and these statements will comply with the IPSAS principles and World Bank requirements. These Financial Statements will be comprised of: (i) A Statement of Sources and Uses of Funds which includes all cash receipts, cash payments and cash balances; (ii) A Statement of expenses; (iii) Accounting Policies Adopted and Explanatory Notes; and (iv) A Management Assertion that project funds have been expended for the intended purposes as specified in the relevant financing agreements.
6. **Funds Flow and Disbursement Arrangements**
  - (a) **Disbursement methods:** The following disbursement methods may be used under the project: reimbursement, advance, direct payment and special commitment as specified in the Disbursement and Financial Information Letter (DFIL) and in accordance with the Disbursement Guidelines for IPF, dated February 2017. Disbursements would be **transactions based** whereby withdrawal applications will be supported with Statement of Expenditures (SOE). The DFIL will provide details of the disbursement methods, required documentation, DAs ceiling and minimum application size. These were discussed and agreed during negotiations of the Financing Agreement.

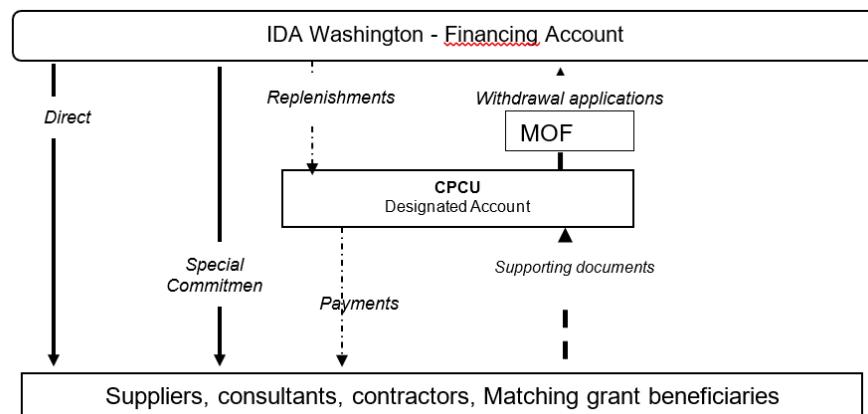


(b) **Banking arrangement:** A DA will be opened at the Central Bank of the Gambia. For the project implementation the DA will be replenished through the submission of withdrawal applications. Requests for reimbursement and reporting on the use of advances will be accompanied by SOE providing information on payments for eligible expenditures and records required by the World Bank. All supporting documentation will be retained at the CPCU and must be made available for periodic review by the World Bank's missions.

7. **Auditing arrangements.** The financing agreement will require the submission of Audited Financial Statements for the project to IDA within six months after the project closing date. An external auditor with qualification and experience satisfactory to the World Bank will be appointed to conduct yearly audit of the project's financial statements. A single opinion on the Audited Project Financial Statements in compliance with International Federation of Accountant (IFAC) will be required. The external auditors will also prepare a Management Letter giving observations and comments, and providing recommendations for improvements in accounting records, systems, controls and compliance with financial covenants stipulated in the General Agreement.

8. In accordance with World Bank Policy on Access to Information, the Recipient is required to make its audited financial statements publicly available in a manner acceptable to the Association; following the World Bank's formal receipt of these statements from the Recipient, the World Bank also makes them available to the public. The external auditor would express an opinion on the matching grant activities to ensure that the funds went to the eligible beneficiaries and were used for the intended purposes.

**Figure A4.1: The funds flow diagram**



**Table A4.1: Eligible expenditure by category**

Category	Amount of the Grant Allocated (expressed in SDR)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, works, non-consulting services, and consulting services, training and operating costs for the project (except Parts 3.2 and 5 of the project)	21,300,000	100%
(2) Matching Grants under Part 3.2 of the project	6,400,000	100%
(3) Emergency Expenditures under Part 5 of the project	0	100%
(4) Refund of Preparation Advance	700,000	Amount payable pursuant to Section 2.07 (a) of the General Conditions
<b>TOTAL AMOUNT</b>	<b>28,400,000</b>	



9. The following actions need to be taken to enhance the FM arrangements for the project:

**Table A4.2: FM action plan, GIRAV Project, The Gambia**

No	Action	Due Date	Responsible
1	Update of the PIM	By project effectiveness	CPCU
	Preparation of the matching grant manual	Before disbursement of the matching grant	PCU
2	The customization of the existing accounting software to include the bookkeeping of the project	No later than four months after effectiveness	CPCU
3	Recruitment of an internal auditor	No later than four months after effectiveness	CPCU
4	Recruitment of an external auditor	No later than four months after effectiveness	CPCU

10. **Financial Covenants.** Financial covenants are the standard FM requirements that are covered under Section 5.09 of the IDA General Conditions and the DFIL. Additional covenants will be added to the Financing Agreement to reflect actions set out as legal covenants in the FM action plan.

11. **Implementation Support Plan.** Based on the outcome of the FM risk assessment, the following implementation support plan is proposed. The objective of the implementation support plan is to ensure the project maintains a satisfactory FM system throughout the project's life.

**Table A4.3: Implementation support plan, GIRAV Project, The Gambia**

FM Activity	Frequency
<b>Desk reviews</b>	
Interim financial reports review	Quarterly
Audit reports review	Yearly
Review of other relevant information such as interim internal control systems reports.	Continuous as they become available
<b>On site visits</b>	
Review of overall operation of the FM system	Each semester ISM, and Annual when the risk become Moderate
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
<b>Capacity building support</b>	
FM training sessions	As and when needed.



## Annex 5: Procurement

1. Procurement for Goods, Works, Non-consulting, and Consulting Services for the GIRAV Project will be carried out in accordance with: (i) procedures specified in the World Bank Procurement Regulations for IPF Borrowers, dated November 2020; (ii) the “Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants,” dated October 15, 2006 (revised in January 2011 and as of July 1, 2016); and (iii) other provisions stipulated in the Financing Agreement, using the Standard Procurement Documents accompanying the Procurement Regulations. STEP will be the platform for preparing, submitting, reviewing, and clearing Procurement Plans and prior review procurement activities. STEP will also be used for uploading the documents and evaluation reports for Post Review Contracts. The PIM will provide details on the procurement procedures, Standard Procurement Documents, and model contracts associated with the market approaches and selection methods for various procurement categories. The details of the Procurement Plans are in STEP.

### PROCUREMENT CAPACITY AND RISK ASSESSMENT

2. **Capacity and risks.** The World Bank conducted a procurement risk assessment of the CPCU in May 2021. Anchored in the Ministry of Agriculture, the CPCU will be responsible under the GIRAV Project for: (i) finalizing procurement documents prepared by the CPCU or technical structures; (ii) preparing the advertisement notices; and (iii) presiding over tender committees and drafting contracts for approval. The tender committee comprises both internal and external members.

3. The procurement assessment indicated that the GCAV procurement team comprised one senior procurement specialist and one procurement assistant, who have experience with WBG Procurement Regulations and will continue to provide procurement support under GIRAV. The assessment concluded, however, that CPCU procurement staffing should be reinforced for GIRAV, given that the CPCU manages procurement for many other donor-funded projects. The assessment also identified: (i) significant delays in the procurement process; (ii) insufficient archiving of documentation in STEP; and (iii) the need to update the GCAV Procurement Manual to reflect the requirements of the GIRAV Project. The assessment rates overall procurement risk as **substantial**.

4. **Procurement risk mitigation measures.** Several measures are proposed to mitigate the various procurement risks identified at the project and country level (Table A5.1). With the implementation of these corrective measures, the residual risk can be downgraded to **moderate**.

**Table A5.1: Procurement risk mitigation measures, GIRAV Project, The Gambia**

Implementing Agency	Risk mitigation measures	By when
CPCU/WBG	Ensure that provision of procurement documents (bidding documents, requests for quotations, contracts) comply with the WBG anti-corruption policy, the WBG right to sanction, and the WBG's inspection and audit rights, as well as relevant WBG SEAH requirements.	Throughout implementation
CPCU/WBG	Finalize the PPSD and submit for WBG internal review and approval.	Done
CPCU/WBG	Retain current CPCU procurement specialist and recruit (or attach from the Ministry of Agriculture) a procurement assistant.	At implementation
WBG	Train staff in the new procurement framework (online and/or in person) and STEP, which will be used to manage all contract transactions and related documents	Throughout implementation
CPCU	Develop a contract management system to ensure that all contracts identified in the PPSD are managed effectively	Throughout implementation



## APPLICABLE PROCUREMENT RULES AND PROCEDURES

5. **Procurement documents.** For international competitive procurement for works, goods, non-consulting services, and consulting services, the Borrower shall use the World Bank's Standard Procurement Documents with minimum changes, acceptable to the WBG, as necessary to address any project-specific conditions.
6. **Procurement information and documentation—filing and database.** Procurement information will be recorded and reported as follows: (i) **Complete procurement documentation** for each contract, including bidding documents, advertisements, bids received, bid evaluations, letters of acceptance, contract agreements, securities, and related correspondence will be maintained at the level of the respective ministries in an orderly manner, readily available for audit. (ii) **Contract award information** will be promptly recorded and contract rosters, as agreed, will be maintained; and (iii) **Comprehensive quarterly reports** will be prepared, indicating: (i) revised cost estimates, where applicable, for each contract; (ii) status of ongoing procurement, including a comparison of originally planned and actual dates of the procurement actions, preparation of bidding documents, advertising, bidding, evaluation, contract award, and completion time for each contract; and (iii) updated Procurement Plans, including revised dates, where applicable, for all procurement actions.
7. **Procurement notices and contract awards.** General Procurement Notice, Specific Procurement Notices, Requests for Expression of Interest, and results of the evaluation and contracts award should be published in accordance with advertising provisions in the Procurement Regulations. For request for bids and request for proposals that involve international bidders/consultants, the contract awards shall be published in United Nations Development Business, in line with the provisions of the Procurement Regulations.
8. **Training, workshops, study tours, and conferences.** Training (including training material and support), workshop, and conference attendance (based on individual needs as well as group requirements), as well as on-the-job training, will be carried out based on an approved annual training and workshop/conference plan that will identify the general framework of training activities for the year. A detailed plan and terms of reference specifying the nature of the training/workshop, number of trainees/participants, duration, staff months, timing, and estimated cost will be submitted to IDA for review and approval before initiating the process. The appropriate methods of selection will be derived from the detailed schedule. After the training, each beneficiary will be requested to submit a brief report indicating what skills have been acquired and how these skills will contribute to enhance his/her performance and contribute to the attainment of the PDO. Reports by the trainees, including completion certificate/diploma upon completion of training, will be provided to the project coordinator, retained in the records, and shared with the WGB, if required.
9. **Procurement manual.** Procurement arrangements, roles and responsibilities, methods, and requirements for carrying out procurement will be elaborated in detail in the Procurement Manual, which will be a section of the PIM. The fragility context of the country and the capacity constraints will be considered, and simplified procurement arrangements will be designed accordingly. The PIM will be prepared by the Recipient and adopted before effectiveness.
10. **Operating costs.** Operating costs financed by the project are incremental expenses incurred by the CPCU, as approved by the WBG, on account of project implementation, management, and M&E, including utilities; office space rental; office supplies; bank charges; vehicle operation, maintenance, and insurance; maintenance of equipment and buildings; communication costs; travel and supervision costs (that is, transport, accommodation, and per diem); and salaries of contracted and temporary staff. They will be procured using the procurement procedures specified in the project's manual of administrative, financial, accounting, and procurement procedures accepted and approved by the World Bank.



11. **Procurement implementation.** Procurement for the GIRAV Project will be executed by the Project Implementing Agency (CPCU), which will carry out the following activities: (i) managing the overall procurement activities and ensuring compliance with the procurement process described in the relevant manuals; (ii) ensuring compliance of bidding documents, draft requests for proposals, evaluation reports, and contracts with World Bank procedures; (iii) preparing and updating the Procurement Plan; (iv) monitoring the implementation of procurement activities; (v) developing procurement reports; and (vi) seeking and obtaining approval of internal designated entities and then of IDA on procurement documents, as required. The CPCU will participate in the process of all of these procurement activities and will notably support: (i) preparation of terms of reference and the bidding documents; (ii) preparation of evaluation reports and contracts related with World Bank procedures; and (iii) participation in procurement commission activities and all related meetings.

12. **Procurement procedures.** When approaching the national market, the country's own procurement procedures may be used with the requirements set forth or referred to in paragraphs 5.3 to 5.6 related to National Procurement Procedures and subject to certain requirements for national open competitive procurement. Other national procurement arrangements (other than national open competitive procurement) that may be applied by the Recipient (such as Limited/Restricted Competitive Bidding, RFQ, Shopping, Local Bidding, and Direct Contracting) will be consistent with the WBG's core procurement principles and ensure that the WBG Anticorruption Guidelines and Sanctions Framework and contractual remedies set out in its Legal Agreement apply. This includes codes of conduct that contain prohibitions against SEAH, clear disciplinary sanctions against SEAH, and remedies for non-compliance.

13. **Frequency of procurement supervision.** In addition to the prior review supervision which will be carried out by the WBG, semi-annual supervision missions are recommended. Annual WBG procurement post review will be conducted by the WBG Procurement Specialists. The sample size will be based on the procurement risk rating for the Implementing Agency. The prior review procurements will be reviewed and cleared in STEP by the WBG Procurement Specialist.

14. Thresholds for market approaches, procurement methods, and WBG prior review are indicated in Table A5.2.

**Table A5.2: Procurement methods and thresholds**

Category	Prior review threshold (US\$ millions)	Procurement method thresholds (US\$ millions)				
		Open International	Open National	RFQ	Short list of national consultants	
					Consulting services	Engineering and construction supervision
Works	≥10	≥3	<3	≤0.2	N/A	N/A
Goods, IT, and non-consulting services	≥ 2	≥0.3	<0.3	≤0.1	N/A	N/A
Consultants (firms)	≥ 1	N/A	N/A	N/A	≤0.2	≤0.2
Individual consultants	≥0.3	N/A	N/A	N/A	N/A	N/A

15. **Contract management and administration.** For all prior review contracts, contract management plans (in line with the provisions of Procurement Regulations Annex XI) will be developed during contract creation and completed at the time the contracts are signed.

16. **Summary of the PPSD.** The PPSD and Procurement Plan detailing the first 18 months of implementation were prepared by the Recipient and approved by the World Bank. The project envisages several goods such vehicles (motorcycles in particular), irrigation equipment, and storage and processing facilities, among others. The



most sensitive issue will be the procurement of works, since the project will finance small works such as construction of feeder roads, irrigation, and marketing infrastructure in many dispersed locations. The consultant services are the selection of research services (intellectual services), some of which concern technical engineering and vocational training and others advice and legal assistance (drafting of regulatory texts and communication/awareness in various forms), technical studies, and environmental and social studies, among others. The PSD indicates the existence of a good number of local qualified firms and companies for studies, civil works and supply of equipment required for the project. Regarding the international open competition, the foreign firms based at the subregional or regional level could participate. The different approaches, selection methods, need for pre-qualification, estimated costs, prior review requirements, and timeframe are agreed between the Recipient and the WBG in the Procurement Plans. The initial Procurement Plans was approved by the WBG during the negotiations. During implementation, the Procurement Plans will be updated as required and at least annually, to reflect actual project implementation needs and improvements in institutional capacity. While open national competition is generally the preferred method, in some areas the market and security situation might lead to other options.

**Annex 6: Addressing Gender Disparities in Gambian Agriculture****COUNTRY CONTEXT AND GENDER POLICY**

1. Despite significant progress in recent decades, women's empowerment is still weak in day-to-day life in The Gambia. In Gambian patriarchal society, gender disparities are still significant. Socio-cultural practices and constraints in education, health, income, voice, and legal rights prevent women from participating effectively in the country's economic development. This annex analyzes the gender disparities and describes actions planned under the proposed GIRAV Project to close gender gaps. The annex also demonstrates that the project is deemed to be gender tagged in terms of analysis, action, and M&E.
2. The GoTG has long recognized that the country's sustainable economic and social development require full participation of women. Under article 28 of the 1997 Constitution (amended in 2002), women in Gambia are accorded equal rights with men, and Gambia has ratified the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa. The country is also a signatory to many international conventions, agreements, and declarations that directly affect women's rights. At the national level, GoTG established the Women's Bureau and National Women's Council (NWC) in 1980, the Ministry of Women's Affairs in 1996, and the National Federation of Gambian Women in 2010. The Women's Act (2010) calls on political parties, the Government, and the private sector to enact measures to ensure gender equality. The Act does not, however, regulate family matters for the Muslim population, and thus issues of marriage, widow and women's inheritance rights, polygamy, divorce, and child custody remain subject to customary and Sharia law. The Gender Mainstreaming and Women Empowerment Strategic Plan (2010–15) and National Gender and Women Empowerment Policy 2010–20 were prepared to facilitate gender mainstreaming in all development initiatives and interventions, including those in the agricultural sector. The Local Government Act also calls for equal representation of women and men on Village Development Committees, which are the community entry points for all development programs.

**Gender and Rural Institutions**

3. The GoTG has formulated a wide range of policy frameworks to support women's empowerment and address gender inequalities in key areas of Gambian development. The National Policy for the Advancement of Gambian Women (NPAGW 1990–2009) was the first policy instrument mainly focused on women's development. It was followed by the National Gender and Women Empowerment Policy 2010–2020, which was supported by the establishment of the National Federation of Gambian Women. The Federation serves as the umbrella organization for all women's organizations in Gambia, with the aim of empowering women to become valued stakeholders in national development. The six priority areas in which the Federation works are business, skills and vocations, and the social, professional, farming, and worker sectors. The Federation provides research support on women's issues, engages with village groups through a series of networks, and provides training in women's empowerment and gender mainstreaming. Many projects have also supported the development of women's groups and cooperatives, particularly in horticultural production. Even so, the voice of women in policy making remains weak, and their representation in key rural institutions such as cooperatives is low. A scaled-up effort is needed to promote a more active role for women in decision-making positions in key local (cooperatives) and national (federations) institutions and strengthen the capacity of these institutions to address women's specific needs and implement women-specific activities. Continued efforts are also required to improve female education, conduct awareness campaigns to familiarize women with their rights, and deepen constructive dialogue with rural communities on customs and social norms that limit women's empowerment, especially those related to land, property, and household roles.



## Poverty and Gender Development and Inequality

4. Poverty in The Gambia has remained relatively flat since 2010, with the proportion of the population living under the poverty line hovering around 48 percent. Yet, since 2019 poverty in urban areas has fallen by about 5 percent, whereas rural areas experienced an increase in poverty of about 5 percent. Poverty also tends to be deeper and more severe in rural areas of The Gambia compared to urban areas (GBOS 2017), and it affects women more than men. In 2019, the Gender Development Index value for The Gambia was 0.846, lower than the value for SSA as a whole (0.894). The Gambia also has a very high Gender Inequality Index (GII)<sup>51</sup> of 0.612, ranking 148 out of 162 countries in the overall 2019 index.<sup>52</sup>

**Table A6.1: Gambia's GII for 2019 relative to selected countries and groups**

	GII value	GII Rank	Maternal mortality ratio	Adolescent birth rate	Female seats in parliament (%)	Population with at least some secondary education (%)		Labour force participation rate (%)	
						Female	Male	Female	Male
<b>Gambia</b>	0.612	148	597.0	78.2	10.3	31.5	44.4	51.2	68.0
<b>Central African Republic</b>	0.680	159	829.0	129.1	8.6	13.4	31.3	64.4	79.8
<b>Lesotho</b>	0.553	139	544.0	92.7	23.0	33.0	25.5	60.2	75.9
<b>Sub-Saharan Africa</b>	0.570	—	535.2	104.9	24.0	28.8	39.8	63.3	72.7
<b>Low HDI</b>	0.592	—	571.8	102.8	22.2	17.2	30.1	57.7	72.3

Maternal mortality ratio is expressed in number of deaths per 100,000 live births and adolescent birth rate is expressed in number of births per 1,000 women ages 15-19.

## ANALYSIS OF GENDER DISPARITIES

5. Despite the positive institutional developments reviewed above, and some progress in fighting discrimination against women, much remains to be done. The analysis that follows begins with an overview of women in the Gambian agricultural economy and then focuses on specific gender disparities that affect women in agriculture and agribusiness.

6. **Women in the agricultural economy.** It estimated that women comprise over 67 percent of the economically active population working in agriculture, compared to men at just 33 percent. Women's significant profile in the agricultural workforce and value chains indicates that agriculture and its related sectors are strategic entry points to promote gender equality and women's economic empowerment.

7. A distinct gender division of labor exists in Gambian agricultural production systems. Men primarily grow sorghum, millet, maize, and groundnuts. Women primarily grow lowland rice, while engaging in horticultural production on a small scale to supply the household and earn a little cash income from sales in local markets. In the last decades, as rice and horticultural crops have become cash crops, men have become more involved in their production, and they tend to own the irrigated production schemes for these crops. Women also raise and manage most of the small ruminants and rural poultry, yet it is men (particularly young men) who have taken the lead in developing intensive poultry production operations. Most women farmers and agricultural workers are unskilled and often work under the supervision of men.<sup>53</sup> Women's limited opportunities—for education,<sup>54</sup> owning or controlling land, and obtaining inputs, credit, advice, and technology—reduce the productivity of their agricultural

<sup>51</sup>The GII reflects gender-based inequalities in three dimensions – reproductive health, empowerment, and economic activity.

<sup>52</sup>UNDP. 2021. *Human Development Report 2020. The Next Frontier: Human Development and the Anthropocene*. Briefing note for countries on the 2020 Human Development Report – Gambia.

<sup>53</sup>According to The Gambia's 2011/12 Census of Agriculture, only 9 percent of households were estimated to be headed by women.

<sup>54</sup>In The Gambia, 62 percent of women have no schooling, compared to 49 percent of men, and adult female literacy is 34 percent.



enterprises and limit their capacity to embark on more viable agribusiness or entrepreneurial activities. For that reason, few women have been able to profit from technological progress and engage in intensive, productive, and profitable production systems.

8. **Access to land.** The Women's Act states that "women shall have the right to equal treatment in land and agrarian reform, as well as in land resettlement schemes," and the Lowlands Agricultural Development Program (1997–2005) redistributed land to landless farmers, many of whom were women. The program gave women the right to retain ownership of this land and pass it on to their children. For the great majority of women, however, access to land is still based on customary law, under which women gain access to land only through "user rights" assigned by their husbands, families, or communities. Many women are also obliged to provide labor on the collectively cultivated land in return for usufructs rights to individual fields. Most women who own land are joint owners (with an estimated 15.4 percent of all privately owned land); only 4.4 percent are sole owners. As expected, the average area of agricultural land is smaller for female-headed households (0.8 ha) compared to male-headed households (1.4 ha). Since women farmers only have (usually yearly) user rights, they can grow only short cycle food crops (no perennial crops), which limits their options for engaging in agri-forestry and investing in their land for long-term benefits.

9. **Agricultural advisory services, technologies, and innovations.** The Ministry of Agriculture has overall responsibility for agricultural advisory (extension) services in The Gambia through its Department of State for Agriculture. These services are generally inadequate owing to insufficient funding and the lack of trained personnel. Extension workers are not equipped with essential working tools (mobility, appropriate extension messages, skills, and knowledge) to efficiently transfer appropriate technologies or provide much-needed advice to help producers manage their enterprises. Extension services are largely geared toward male-dominated agricultural activities such as the production of cash and export crops, and services for the horticultural and livestock subsectors are particularly weak. It is evident that little extension outreach is directed to women farmers, and little attention is given to their gender-specific needs for technology and information. These problems restrict women's access to technology and their ability to use it efficiently, which is compounded by their lack of financial resources to buy inputs and equipment.

10. **Agricultural processing and marketing.** According to the 2011/12 Agricultural Census, about 50 percent of agricultural households sell part of their produce and only 4 percent sell all their production. Women have key roles in processing and marketing food crops. Most sell their products in local markets; only 16 percent travelled more than 5 km to sell their produce.<sup>55</sup> The main modes of transporting produce to market are horse/donkey carts (85 percent) and head-(9 percent). Until recently, downstream value addition was uncommon. With support from development partners, the quality of production (targeting the domestic market for horticultural crops, for instance) and food processing have improved, particularly among urban women, who mainly engage in agro-processing of cereals, fruits, and forest products for retail sale. The main requirements for starting a processing enterprise are the necessary skills<sup>56</sup> and financing, but most individual processors, particularly women, cannot afford to set up a cottage industry of this kind. The Ministry of Agriculture should investigate the possibility of establishing pilot regional processing plants, which could serve as incubator training and promote value addition.

11. **Credit.** Inequalities in land ownership and control created by the traditional land tenure system also greatly disadvantage women farmers from accessing credit for inputs (fertilizer, pesticide, and quality seed), irrigation equipment, and other machinery. Gambian law does not discriminate against women in terms of access

<sup>55</sup> Some social and cultural norms which prevent women from traveling long distances using public transports or interacting with men other than close relatives also pose a significant barrier to women.

<sup>56</sup> The Food Technology Services (FTS) Unit, the technical arm of the Directorate of Agriculture, is engaged in capacitating both rural and urban (mainly women) processors with the required skills in food processing and preservation.



to financial services, but women nevertheless encounter significant obstacles in doing so. Access to financial services is very limited for agricultural households in general, for women in such households it is nearly non-existent. Only 9 percent of rural women are estimated to have a bank account, against 20 percent of urban women. Most FIs will not grant credit unless the applicant has adequate security or collateral and, in most cases, they will insist on property in the form of land. Since access to land is problematic for Gambian women, so is access to credit. In addition, high interest rates charged by FIs are very dissuasive, even for short-term credit. As a result, women gain most if not all of their access to financial resources through specific development programs, and almost exclusively in the form of grants. Major efforts are required to gradually increase sustainable access to credit (in addition to grants) for women actors in agricultural value chains to purchase inputs and invest in assets such as equipment. Such efforts will enable women to develop the skills to access and use credit. They will also include inducements for FIs to design services and products that rural women can use even with their lack of property for collateral and limited education. Such inducements could include a partial guarantee mechanism that will reduce the perceived risk of lending to small-scale agriculture among FIs.

#### **PROJECT ACTIONS IN ADDRESSING GENDER DISPARITIES**

12. Given women's major roles in agricultural value chains (from production to processing and marketing), improvements in agricultural productivity and entrepreneurship among women could be a major driver of overall agricultural growth, poverty alleviation, and food security. Scaled-up efforts are needed to increase women's access to productive resources, technical and financial services, and markets. Complementary efforts are required to expand female leadership, participation, and decision making in key local institutions (cooperatives, organizations of value chain actors) and national institutions (federations), to address women's specific needs and agricultural activities.

13. Against this background, the proposed project will undertake integrated and coordinated activities to reduce gender disparities that hold back women's agricultural productivity and entrepreneurship in the project areas. It will expand the array of productive resources and agribusiness opportunities available to women in the target value chains by closing gender gaps in access to knowledge, improved technologies and innovations, markets, and finance. Specific activities will:

(a) ***Improve women's access to modern irrigation technologies to develop a horticulture agribusiness.*** This activity will make it possible to scale-up cropped area, improve productivity, increase the supply of horticultural products to respond to market demand, and build resilience to climate change (Component 2). The project will equip 20 women-led and 20 youth-led agribusinesses (each operating 5 ha, for a total of 200 ha) with on-farm drip, sprinkler, or central pivot irrigation equipment powered by a solar-pumping system. Secure access to land will be negotiated with local authorities, and official certificates transferring the land to these 40 entrepreneurs will secure the agribusiness investments supported through the project.

(b) ***Target women in the diffusion of improved technologies and innovations, best practices, and knowledge.*** Working through dedicated outreach mechanisms to reach women farmers and strengthening the gender-sensitivity of advisory services (to take the mobility and preferences of women as well as men into account), the project will enable women's access to improved seed, climate-smart technologies, agricultural machinery, processing and marketing technologies, and other innovations (Component 2). Crops and practices favored by women farmers will be singled out to ensure that they receive inputs and services as well. CORAF will facilitate regional transfer of gender-sensitive technologies generated by the national and regional research system under WAAPP through its digital platform (MITA). The use of women-focused methods to diffuse these technologies will be important and accounted for.



(c) ***Build technical capacity for improved production, processing, and commercialization, in addition to organizational, entrepreneurial, and managerial skills.*** To create business and market-oriented behavior (Component 1), the project will support training for women leaders in organizations of value chain actors, specifically designed to increase their participation in decision making and contribute to their social and economic empowerment. Female leaders will also be put at the center of the value chain coordination and partnership supported by the project to increase women's access to markets. To ensure that women's specific needs are taken into account, and build ownership and sustainability, women will actively participate in the identification, implementation, and management of marketing infrastructure and feeder roads constructed under the project to improve connectivity and access to markets and social services.

(d) ***Provide matching grants for productive investments and linking women with FIs*** (Component 3). Women (individuals, women's groups, and women-led agribusiness SMEs) will obtain technical and financial support to start or expand their activities in the target value chains and develop their entrepreneurial skills. This support will be adapted to address the specific constraints that prevent women from accessing credit, including limited collateral, higher risk, lower capacity, and so on. The gender gap in access to agricultural credit and lack of skills to set up cottage industries will inform the design of the specific grant and support in access to FIs.

14. In sum, the project will help to expand productivity, market access, and agribusiness opportunities for women in the target value chains, with long-term impacts on household income and welfare. The project is expected to benefit women in their roles as producers, processors, marketers, and service providers and to have a particularly strong and positive impact on women-owned small agribusinesses. In this way, the project will encourage a transformational shift among women from subsistence-oriented agriculture to more commercially oriented and women-led agribusinesses.

15. The project is consistent with the GNAIP II and CPF objective of ensuring gender equality and equity by promoting economic independence and equitable access to economic resources for women and youth. It is fully aligned with the four pillars of the WBG Gender Strategy by seeking to close gender gaps in human endowments, more and better jobs, ownership and control of assets, and women's voice and agency.

#### **MEASURING PROJECT PROGRESS TOWARD CLOSING GENDER GAP**

16. Gender-disaggregated data will be collected on the following indicators and reflected in the results framework (see Section VII) to measure progress in closing specific gender gaps in women's access to technologies, innovations, finance, and information and knowledge that are useful to them: (i) increase in the volume of marketed output by women direct beneficiaries of the project; (ii) number of farmers reached with agricultural assets or services, of which at least 50 percent women; (iii) number of farmers using/adopting climate-smart technologies, of which 50 percent women (PDO indicators); (iv) number of women producer organizations, other professional organizations, and institutions that are beneficiaries of technical assistance, training, coaching, and mentoring (Component 1 result indicator); (v) number of women-led agribusiness firms fully equipped with modern irrigation equipment (Component 2 result indicator); (vi) number of PISs financed through the matching grant mechanism, of which at least 40 percent are for women; (vii) number of subproject promoters that are beneficiaries of technical assistance and capacity building in entrepreneurship, of which at least 40 are women; and (viii) number of women benefitting from tailored financing, skills and technology package (Component 3 result indicators). The extent to which the targets for these indicators are achieved will reflect the effectiveness of the investment made in women through the project.



## Annex 7: Climate Mitigation and Adaptation by Project Indicator

Indicator	Climate Change Benefits	
	Mitigation	Adaptation
<b>PDO indicator:</b> Increase in the volume of marketed output by project direct beneficiaries (percentage, disaggregated by women, youth, smallholders, and SMEs)		Critical marketing infrastructure that is climate resilient and energy efficient will be developed to support the establishment/improvement of aggregators/logistics platforms (bulking, storage, conditioning/processing) and transportation at critical locations in the project areas, based on key needs identified in consultations with value chain actors.
<b>PDO indicator:</b> Farmers using/adopting climate-smart technologies (number, disaggregated by women and youth)		The technical assistance, training, coaching, and mentoring will increase access to, and wide-scale adoption of improved technologies, innovations, and advisory services adapted to the needs and scale of farmers and SMEs, to increase productivity, competitiveness, and resilience at the farm level as well as downstream in the target value chains. Technology transfer will focus on: (i) climate-smart technology packages; (ii) improved land and water management technologies; (iii) climate-smart practices that will reduce greenhouse gas emissions, and conserve natural resources; and (iv) technologies that address the main farming and processing constraints all along the value chain. Hundred percent of project beneficiaries are expected to use at least one climate smart technology.
<b>IRI:</b> Producer organizations and other professional organizations, and institutions beneficiaries of technical assistance, training, coaching, and mentoring (number, disaggregated by women and youth)	Coordination along the target value chains will be strengthened to increase their efficiency and facilitate partnerships between their actors to respond to market demand/opportunities. An operational development program, a communication strategy and outreach campaign, and public-private dialogue that integrate information on climate risks and promote climate adaptation and mitigation investments will be prepared and implemented.	The technical assistance provided will enhance discussion and engagement on climate issues and ensure that business plans consider current and expected climate impacts and integrate relevant climate considerations.
<b>IRI:</b> IPs established and/or strengthened for value chain actors (number)	For each target value chain, the establishment or strengthening of an IP will bring together key stakeholders (producers, processors, traders, transporters) around common issues regarding the value chain's market demands, climate change risks, information on appropriate technologies (including CSA	



	technologies), and others.	
<b>IRI:</b> Food-safety laboratories rehabilitated or constructed (number)	A coherent food safety and quality control system will be established that will include procedures to regulate food imports and exports, and monitor climate impacts on food quality and safety as a result of extreme climatic conditions e.g., higher temperatures, as well as upgrade food safety laboratories.	
<b>IRI:</b> Agribusiness firms fully equipped with modern irrigation equipment (ha, led by women, by youth)	The development of new agribusiness firms led by women and youth (ages 18–35) will be promoted. These firms will be equipped with energy efficient infrastructure such as solar energy systems.	The development of new agribusiness firms led by women and youth (ages 18–35) will be promoted. These firms will be equipped with greenhouses and modern irrigation technologies to produce horticultural crops using climate-smart practices that will improve climate resilience.
<b>IRI:</b> Improved technologies transferred from the region and disseminated with CORAF support (number)		Improved technology transfer and dissemination will increase technology adoption and in turn increase climate resilience, reduce postharvest losses, and improve processing.
<b>IRI:</b> Improved climate-smart varieties of certified seed produced (metric ton)		This area will contribute to adaptation through the (i) introduction, distribution and multiplication of genetic material; (ii) strengthen the public seed control/certification system; (iii) the transfer, demonstration and dissemination of improved technologies and innovations; (iv) strengthen technology transfer systems; and (v) develop an e-extension platform.
<b>IRI:</b> Productive Investment Sub-Projects financed through the matching grant mechanism using climate-smart technologies (number)	This area will contribute to mitigation using energy efficient systems such as solar powered irrigation, thus reducing GHG emissions..	The matching grant windows will finance water efficient irrigation systems e.g., drip irrigation and climate smart technologies such as certified seed of improved varieties and environmentally friendly pest and disease management inputs in order to improve climate resilience. At least 50 percent of matching grant will finance climate smart technologies.

IRI – intermediate results indicator



### Annex 8: Project Map

