Document of

The World Bank

FOR OFFICIAL USE ONLY

Report No: PAD5350

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON A

PROPOSED ADDITIONAL GRANT

IN THE AMOUNT OF SDR 51.3 MILLION
(US$68.0 MILLION EQUIVALENT)
OF WHICH US$10.0 MILLION EQUIVALENT
FROM CRISIS RESPONSE WINDOW – EARLY RESPONSE FINANCING

TO THE REPUBLIC OF THE GAMBIA

FOR THE

GAMBIA INCLUSIVE AND RESILIENT AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT

April 3, 2024

Agriculture and Food Global Practice
Western and Central Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective February 29, 2024)

Currency Unit =	Gambian dalasi (GMD)
GMD 67.9800 =	US$1
SDR 0.75326 =	US$1

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Ousmane Diagana
Country Director:	Keiko Miwa
Regional Director:	Chakib Jenane
Practice Manager:	Abel Lufafa
Task Team Leaders:	Aifa Fatimata Ndoye Niane, Harold Esseku and Linus Pott

ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
ALC	Agri-Logistic Center
AM	Accountability Mechanism
CAD	Current Account Deficit
CPCU	Central Projects Coordination Unit
CRW	Crisis Response Window
E&S	Environmental and Social
EIRR	Economic Internal Rate of Return
ERF	Early Response Financing
ESCP	Environmental and Social Commitment Plan
ESMF	Environmental and Social Management Framework
ESS	Environmental and Social Standard
GBA	Greater Banjul Area
GBV	Gender-based Violence
GCAV	Gambia Commercial Agriculture and Value Chain Management Project
GDP	Gross Domestic Product
GERMP	Gambia Electricity Restoration and Modernization Project
GGC	Gambian Groundnut Cooperation
GHG	Greenhouse Gas
GIRAV	Gambia Inclusive and Resilient Agricultural Value Chain Development Project
GM	Grievances Mechanism
GMD	Gambian Dalasi
GRS	Grievance Redress Service
IDA	International Development Association
ITC	Information and Communication Technology
LMP	Labor Management Procedures
MG	Matching Grant
MGS	Matching Grant Scheme
MLRG&RA	Ministry of Lands, Regional Government, and Religious Affairs
MoFWRNAM	Ministry of Fisheries, Water Resources and National Assembly Matters
MOPE	Ministry of Petroleum and Energy
NAWEC	National Water and Electricity Company
NDC	Nationally Determined Contribution
NEA	National Environment Agency
NPF	New Procurement Framework
NPV	Net Present Value
OMVG	*Organisation pour la Mise en Valeur du Fleuve Gambie* - The Gambia River Basin Development Authority
PDO	Project Development Objective
PIS	Productive Investment Sub-project
PSC	Project Steering Committee
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
SME	Small and Medium-sized Enterprise

TOC	Theory of Change
WASH	Water, Sanitation and Hygiene
WBG	World Bank Group
WYLAF	Women and Youth-Led Agribusiness Firms

Gambia, The

Additional Financing for the Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV)

TABLE OF CONTENTS

BASIC INFORMATION – PARENT (Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV) - P173070)

Country	Product Line	Team Leader(s)		
Gambia, The	IBRD/IDA	Aifa Fatimata Ndoye Niane		
Project ID	Financing Instrument	Resp CC	Req CC	Practice Area (Lead)
P173070	Investment Project Financing	SAWA4 (10130)	AWCF1 (6550)	Agriculture and Food

Implementing Agency: Ministry of Lands, Regional Government, and Religious Affairs, Ministry of Petroleum and Energy, Ministry of Agriculture

Is this a regionally tagged project?
No

Bank/IFC Collaboration	Joint Level
Yes	Complementary or Interdependent project requiring active coordination

Approval Date	Closing Date	Expected Guarantee Expiration Date	Environmental and Social Risk Classification
24-Nov-2021	31-Dec-2026		Substantial

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach [MPA]	[✓] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[ ] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[✓] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a Non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made disaster
[ ] Alternate Procurement Arrangements (APA)	[ ] Hands-on Expanded Implementation Support (HEIS)

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.

Ratings (from Parent ISR)

	Implementation			
	18-Feb-2022	15-Sep-2022	16-Mar-2023	15-Sep-2023
Progress towards achievement of PDO	S	S	S	S
Overall Implementation Progress (IP)	S	MS	MS	MS
Overall ESS Performance	S	S	S	S
Overall Risk	S	S	S	S
Financial Management	S	S	MS	MU
Project Management	S	MS	MS	MS
Procurement	S	MS	S	S
Monitoring and Evaluation	S	S	MS	S

BASIC INFORMATION – ADDITIONAL FINANCING (Additional Financing for the Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV) - P180656)

Project ID	Project Name	Additional Financing Type	Urgent Need or Capacity Constraints
P180656	Additional Financing for the Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV)	Cost Overrun/Financing Gap, Restructuring, Scale Up	No
Financing instrument	Product line	Approval Date	

Investment Project Financing	IBRD/IDA	25-Apr-2024	
Projected Date of Full Disbursement 30-Mar-2029	Bank/IFC Collaboration No		
Is this a regionally tagged project? No			

Financing & Implementation Modalities

[ ] Series of Projects (SOP)	[ ] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[✓] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a Non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made disaster
[ ] Alternate Procurement Arrangements (APA)	[ ] Hands-on Expanded Implementation Support (HEIS)
[✓] Contingent Emergency Response Component (CERC)	

Disbursement Summary (from Parent ISR)

Source of Funds	Net Commitments	Total Disbursed	Remaining Balance	Disbursed
IBRD				%
IDA	40.00	21.34	16.64	56 %
Grants				%

PROJECT FINANCING DATA – ADDITIONAL FINANCING (Additional Financing for the Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV) - P180656)

FINANCING DATA (US$, Millions)

SUMMARY (Total Financing)

	Current Financing	Proposed Additional Financing	Total Proposed Financing
Total Project Cost	47.89	73.00	120.89
Total Financing	47.89	73.00	120.89
of which IBRD/IDA	40.00	68.00	108.00
Financing Gap	0.00	0.00	0.00

DETAILS - Additional Financing

World Bank Group Financing

International Development Association (IDA)	68.00
IDA Grant	68.00

Non-World Bank Group Financing

Counterpart Funding	5.00
Local Beneficiaries	5.00

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
Gambia, The	0.00	68.00	0.00	0.00	68.00
National Performance-Based Allocations (PBA)	0.00	58.00	0.00	0.00	58.00
Crisis Response Window (CRW)	0.00	10.00	0.00	0.00	10.00
Total	**0.00**	**68.00**	**0.00**	**0.00**	**68.00**

COMPLIANCE

Policy

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

[ ] Yes [✓] No

Does the project require any other Policy waiver(s)?

[ ] 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	Not Currently 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).

INSTITUTIONAL DATA

Practice Area (Lead)

Agriculture and Food

Contributing Practice Areas

Transport
Urban, Resilience and Land
Water

Climate Change and Disaster Screening

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

PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
Aifa Fatimata Ndoye Niane	Team Leader (ADM Responsible)	Agriculture Economics	SAWA4
Harold Esseku	Team Leader	Water and Sanitation	SAWW4
Linus Benedikt Pott	Team Leader	Land Administration	SAWU4
Brahim Hamed	Procurement Specialist (ADM Responsible)	Procurement	EAWP1
Haoussia Tchaoussala	Procurement Specialist	Procurement	EAWP1
Fatou Mbacke Dieng	Financial Management Specialist (ADM Responsible)	Finance	EAWG1
Ahmed Fall	Environmental Specialist (ADM Responsible)	Environment	SAWE1
Mamadou Moustapha Ndoye	Social Specialist (ADM Responsible)	Sociology	SAWS4
Aissata Delphine Bama Nati	Team Member	Irrigation	SAWW1
Anta Tall Diallo	Procurement Team	Administration	AWCF1
Atte Melanie Ahoba	Team Member	Agriculture Economics	SAWA4
Boury Ndiaye	Team Member	Administration	AWCF1
Hatem Chahbani	Team Member	Transport	IAWT4
Hawanty Page	Team Member	Operations	SAEA3
Kara Michelle Scheiden	Team Member	Counsel	LEGAM
Mohammad Ilyas Butt	Procurement Team	Procurement	EAERU
Ndiga Akech Odindo	Counsel	Counsel	LEGAM
Nightingale Rukuba-Ngaiza	Counsel	Counsel	LEGAM
Seynabou Thiaw Seye	Team Member	Operations	AWMGM
Yassin Saine Njie	Team Member	Administration	AWMGM

Extended Team

Name	Title	Organization	Location

I. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING

A. Introduction

1. This Project Paper seeks the approval of the Executive Directors of grants amounting to SDR 51.3 million (US$68.00 million equivalent) from the International Development Association (IDA), of which US$10.00 million equivalent is from IDA 20 Crisis Response Window - Early Response Financing (CRW-ERF) as additional financing (AF) for The Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV - P173070). This would be the first AF to the project and will be used to: (i) replenish resources diverted from the project in October 2022 to finance and subsidize the provision of fertilizers to smallholders in response to the then prevailing global fertilizer price spikes and the need to increase agricultural productivity, and build resilience, to mitigate climate-change adverse effects; (ii) respond to an emerging food crisis in the country, driven by increased consumer prices, and unfavorable seasonal rainfall, exacerbated by climate change, by promoting adoption of climate-smart innovations and technologies; (iii) expand irrigation and access to potable water and sanitation in rural areas to strengthen climate-resilience of agriculture, and promote better health and welfare; and (iv) improve The Gambia's land administration system and tenure security, especially for female horticultural producers.

B. Climate vulnerability context

2. **The Gambia ranks among the world's most vulnerable countries with respect to climate change.** 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[1]. At the same time, mean annual rainfall has been decreasing since 1960 with the total national area receiving less than 800 millimeters of rainfall increasing 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. In addition, The Gambia's low-lying topography, high dependance on subsistence rainfed agriculture, and inadequate rainwater drainage and management are compounding risks related to climate change. 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, complex and insecure land tenure, insufficient information, and impediments to obtaining finance.

C. Project background and status

3. The project development objective (PDO) of the parent project-GIRAV is to promote the development of inclusive, resilient, and competitive agricultural value chains, focusing on smallholder farmers and

[1] The Gambia – Climate Change Knowledge Portal. *https://climateknowledgeportal.worldbank.org/country/gambia/climate-data-projections*.

agribusinesses in project target areas. Designed as a five-year intervention, the project was approved on November 24, 2021, for an IDA Grant in the amount of US$40.00 million equivalent. It became effective on March 15, 2022, and is scheduled to close on December 31, 2026. The project has five components:

(a) Component 1: Improving the business environment for commercial agriculture development (US$19.70 million). This component aims at (i) strengthening the capacity of key organizations and improving value chain coordination and partnerships; (ii) developing critical marketing infrastructure; (iii) strengthening quality and sanitary and phytosanitary control systems; and (iv) improving rural connectivity.

(b) Component 2: Building a productive and climate-resilient agri-food system (US$10.10 million). This component focuses on (i) promoting modern irrigation in women and youth-led agribusiness firms (WYLAF) and (ii) increasing access to technology, innovation, and advisory services adapted to the needs and scale of farmers and small and medium-sized enterprises (SMEs), to increase productivity, competitiveness, and resilience at the farm level as well as downstream in the target value chains.

(c) Component 3: Mobilizing productive private investments along the value chains (US$13.92 million). This component supports private investments in productive activities and related services by addressing the major market failures that constrain the financing of investments in agricultural value chains. Project support goes towards: (i) developing the capacity of partner Financial Institutions (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) matching grants to co-finance competitively selected private productive investments; and (iii) providing technical assistance and capacity building to strengthen technical, entrepreneurial, and management skills of smallholders and SMEs.

(d) Component 4: Project coordination, monitoring, and knowledge management (US$4.17 million). This component aims at ensuring that the project is efficiently managed and monitored, and that performance and outcomes are carefully tracked by implementing agencies.

(e) Component 5: Contingent Emergency Response (CERC - US$0.00 million). Given The Gambia's vulnerability to shocks, the project includes a CERC, with a zero-dollar provision, as a mechanism to finance a response to a natural disaster, disease, or other eligible emergency.

4. Project progress towards achievement of the PDO is rated Satisfactory, while overall implementation progress is rated Moderately Satisfactory mainly due to delays observed in finalizing the feasibility and designs of agro-logistic centers (ALC), planned irrigation works, and the feeder roads. Several actions agreed to, including close monitoring of consultants, are already underway to remedy these delays. Feasibility studies and design of the ALCs and preparation of tender documents are completed. Overall Environmental and Social (E&S) performance is Satisfactory, and so is procurement and project monitoring and evaluation. Financial management (FM) performance rating is upgraded to Moderately Satisfactory due to timely submission of interim financial reports. The external auditor expressed an unqualified opinion on the 2022 financial statements. All dated covenants were complied with and out of the US$40.00 million grant, US$20.30 million (53.57 percent) has been disbursed as of February 15, 2024.

5. To date, the project has financed the procurement and distribution of 500 tons of improved maize and rice seed varieties (high-yielding, early maturing, salt-tolerant, drought-resistant and highly nutritious) reaching a total of 27,197 farmers (55 percent women and 22 percent youth) through a digital seed

platform developed by the project. Beneficiaries' use of improved seeds provided by the project has helped push maize yields to 2-4 t/ha and rice yields to 6-8 t/ha, compared to the 1-2 t/ha obtained by their peers using traditional seed varieties.

6. Two sites have been identified for the construction of ALCs - one each in Wassu and Maka-Farafenni districts in Central River Region North and North Bank River Region, respectively, and sensitization and engagement completed with local authorities, institutions, and communities to ensure ownership of these marketing infrastructure. After a successful sensitization campaign and call for proposals, the project has selected 40 WYLAF proposals for support with modern irrigation equipment. The technical feasibility study of the irrigation system of the WYLAF is completed and the selection process of the company for the construction works is on-going. Additionally, the project has identified 221 km of roads (out of the 200 km expected) - offering connectivity for agribusiness firms to be rehabilitated or developed and tendering for these has begun.

7. With respect to the Matching Grant Scheme (MGS) for smallholders and SMEs, 19 SMEs operating across the project targeted value chains have so far received support from the project – a total of US$3.98 million. Screening and processing of the applications is being completed for the smallholders and groups, with final grant recipients selected.

8. **Procurement and distribution of the fertilizers is being done by the Central Projects Coordination Unit (CPCU) in partnership with the Gambia Groundnut Corporation (GGC) and in an innovative way.** A digital platform was designed to ensure targeting, transparency and efficiency as experimented with the seeds program. Adding fertilizers to the high-yielding varieties of seeds will lead to increased agricultural productivity and production and consequently more surplus for the market as aimed by the project. This increased production will contribute to improve Gambia food security in line with Government objective. Thus, this AF responds to an emergent need and will contribute to scale-up activities related to improving access to quality inputs and technologies to enhance development impact on the agri-food sector.

D. Rationale for additional financing

9. **The Gambia is facing a challenging economic context with slowing economic growth, widening current account deficit (CAD), and high levels of inflation including for food, fuel, and fertilizer prices.** The CAD widened from 8 to 14.6 percent of gross domestic product (GDP) between 2021 and 2022, driven by higher global commodity market prices and lower remittances[2]. In 2022, inflation reached double digits for the first time in three decades, driven by higher prices for commodities, energy, transportation, and food. In 2023, headline inflation maintained an upward trend, averaging 16.7 percent year on year between January and November 2023, driven by both food and energy prices. Fertilizer prices in the country rose unprecedently from US$230 to US$800 per ton between 2021 and 2023 - a 257 percent increase. According to data from The Gambia Bureau of Statistics, food price inflation reached 21 percent, with high increases in milk, cheese, and eggs (28.7 percent), vegetables, root crops and tubers (28.7 percent), bread and cereals (21.5 percent) between April 2022 and 2023.

10. **This persistently high food inflation continues to limit the pace of poverty reduction and affects food security, especially among the most vulnerable.** Data from the Harmonized Framework (Cadre Harmonisé, CH) for The Gambia indicates that the number of people expected to be in Integrated Food Security Phase Classification (IPC) 3 and above (IPC3+) between June and August 2024 is an estimated

[2] Macro Poverty Outlook 2023; The Gambia Bureau of Statistics database, 2023.

226,724 or 9 percent of the analyzed population.

11. **Agriculture as the backbone of Gambia's economy is and will continue being central to ameliorating these economic challenges.** Stronger and sustained agricultural sector performance is required for overall economic growth, reduced food security- as a supply response, and narrowing the CAD, especially if the country can increase the volume and competitiveness of its agricultural exports.

12. **However, challenges related to availability and use of improved climate-smart agriculture inputs/innovations, water, and land tenure security continue to hinder the optimal performance of The Gambia's agriculture sector and overall livelihoods, especially those in the rural space.** Small scale farmers for example, still face difficulties in accessing and adopting the use of essential climate-smart and productivity-enhancing technologies and inputs due to a lack of access to credit, constrained availability of such technologies and inputs in remote areas, affordability, as well as farmers' aversion to risk and inadequate extension services. This results in lower productivity and hampers the sector's overall growth. Increased and more wide-spread adoption of quality inputs including climate-smart seed varieties, organic and mineral fertilizers along with the use of water-efficient irrigation technologies is still needed to boost agricultural productivity, climate-resilience, food security, and overall sector performance.

13. **Additionally, even when The Gambia is endowed with ample water resources, its value for agriculture and overall livelihood improvement is not fully exploited under this climate change context.** Most farmers therefore continue to rely on the increasingly erratic rainfall for agriculture production while many households, especially those in rural areas face challenges accessing clean and safe water. Out of a potential of nearly 0.62 million hectares, less than 3 percent is under irrigation and only 9 percent of the potable water distributed by the National Water and Electricity Company (NAWEC) - the only water utility company - is available to rural households. Increasing water supply for both agriculture and household use is not only key to increased agriculture productivity and climate resilience but also to improved health and well-being of smallholder farmers.

14. **Finally, The Gambia's inefficient land administration processes, insecure land tenure, and land disputes, especially in rural areas negatively affect the performance of the agriculture sector.** Security of land tenure incentivizes landholders to invest in improved climate-smart varieties, fertilizers, mechanization, and improved management practices (including conservation), all of which are key to increased agriculture productivity and climate resilience. However, a quarter of the population (24 percent) feels insecure about their land tenure[3], which directly impacts agriculture. Additionally, high costs and time to register property is frequently cited by the private sector as a major constraint to the commercialization of agriculture, while a patrilineal customary system disenfranchises a significant number of women of land rights, thereby undermining their contribution to agriculture sector performance.

15. **The proposed AF is fully aligned with Gambia Country Partnership Framework (CPF) for the period FY22-26**[4]. The activities related to provision of fertilizers along with improved technologies and innovations (climate-smart seed varieties, machinery, greenhouses, drones) and water supply and sanitation contribute to achieve CPF objectives to *Increase access to sustainable energy and clean water* and *to transition from subsistence to commercial-oriented agriculture* under CPF Focus Area 2 *Enable Inclusive and Resilient*

[3] Property Rights Index (Prindex), 2018. Gambia. Securing Land and Property Rights.
[4] World Bank Group (2022): Country Partnership Framework for Republic of The Gambia for the Period FY22-FY26 (Report No. 154485-GM).

Private Sector Driven Job Creation.

16. **Similarly, land administration reforms and land registration are consistent with the development priorities identified in the CPF.** The CPF recognizes that the multilayered land tenure system of The Gambia and institutional shortcomings have created a situation with considerable and growing potential for land disputes. The CPF describes that the weaknesses of the land tenure system in The Gambia and its enforcement are exacerbated by increasing land scarcity and pressure due to urbanization. Focus Area 2 of the CPF aims to address the "tensions over land" to promote inclusive and sustainable economic growth.

17. **This AF is in response to The Government of Gambia request dated November 8, 2023, to seek additional funding for further support to address food insecurity** by scaling-up implementation of impactful activities under GIRAV parent project, improve water availability and land tenure to contribute to build a climate-resilient agriculture. This AF of US$68.00 million will comprise of US$58.00 million in national IDA grant and US$10.00 million in CRW resources. The short and medium term-emergency response under CRW ERF is about improving access to (i) mineral fertilizers combined with organic fertilizers and improved management, that can lead to healthier soils with significant adaptation and mitigation benefits, and (ii) improved seed varieties (high-yielding and early-maturing) and other climate-smart innovations to smallholders. The CRW ERF resources will contribute to support early responses to slower-onset food insecurity and prevent any potential to escalate into major crisis that would be difficult to address. In line with CRW ERF principles, the AF, through its multisectoral approach, will contribute to boost productivity and production with the use of the quality inputs and innovations for better food security and more surplus to commercialize to increase income and improve farmers' resilience.

II. DESCRIPTION OF ADDITIONAL FINANCING

18. The following changes are proposed: (i) revision to PDO, key performance indicators, and theory of change (TOC); (ii) revisions to the project component structure and components costs; (iii) revisions to the results framework; (iv) extension of the project closing date; and (v) changes to the implementing agencies.

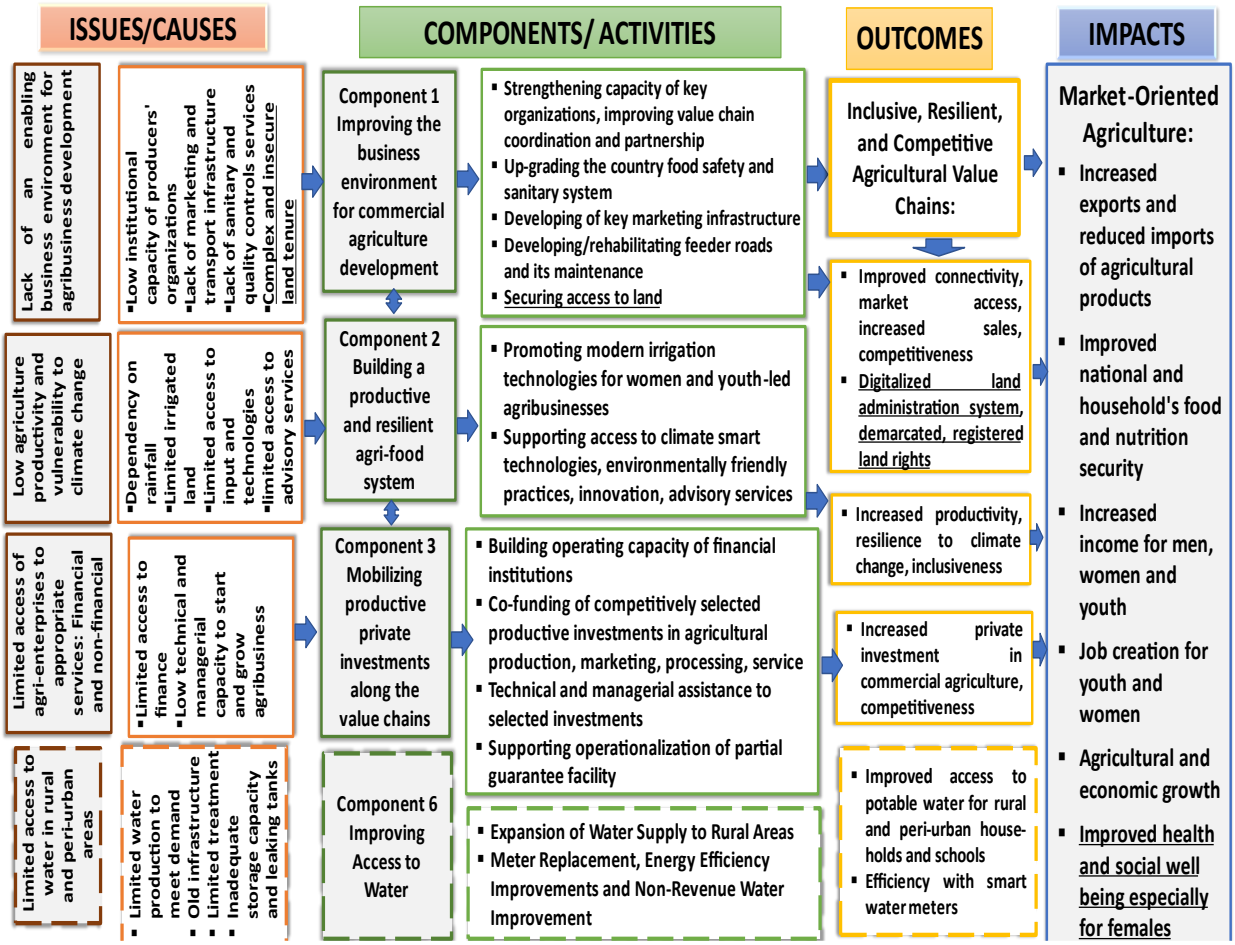
A. Revision to PDO, Key Performance Indicators, and Theory of Change

19. The original PDO is to promote the development of inclusive, resilient, and competitive agricultural value chains, focusing on smallholder farmers and agribusinesses in project target areas. The proposal is to revise the PDO thus is "to promote (i) the development of inclusive, resilient, and competitive agricultural value chains, focusing on smallholder farmers and agribusinesses, and (ii) improved water supply and sanitation in project target areas. The proposed change reflects the increased focus of the AF on promoting improved water supply in targeted areas. Against this backdrop, two new PDO-level indicators are added: "*People provided with access to improved water sources (number, disaggregated by gender)" and "People provided with access to improved sanitation services (number, disaggregated by gender)"*. In addition, to align with the new World Bank Group (WBG) Scorecard (Outcome Area 7 - Sustainable Food Systems), a third PDO-level indicator is added: *"People with strengthened food and nutrition security (number)"*.

20. **The TOC is revised to reflect the water activities and further highlight the land activities.** The design of the project supports The Gambia in transforming the agricultural sector into a competitive and resilient commercial agri-food sector while improving access to water services for irrigation and household use. 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 and renewed political

commitment to the agricultural sector development; (ii) no extreme weather condition like drought or flooding that could drastically affect agriculture production; (iii) moderating agriculture input inflation; and (iv) continued support from Government and customary authorities for land sector reforms.

Figure 1: Project's theory of change



B. Revisions to project component structure

21. **First, the proposal is to add a new subcomponent (Subcomponent 1.5) on *"securing access to land"* under Component 1.** With an estimated cost of US$9 million, the objective of support under the proposed subcomponent is to improve The Gambia's land administration system and contribute to secure land tenure and climate-resilient spatial planning. Lessons learned from the parent project and the previous Gambia Commercial Agriculture and Value Chain Management Project (GCAV, P125024) indicate that further investments in the land sector would support increased productivity. A review of GCAV registration of women's vegetable gardens demonstrated that beneficiaries feel more confident to invest in their farms after receiving a Certificate of Occupancy, which they felt assured their rights to continue to use the farms regardless of their marital status. The GCAV experience also highlighted the importance of simplifying land registration procedures and making them more affordable to have more impact. Based on these experiences, this subcomponent will finance three key activities:

(a) Institutional and legal support to land administration institutions with the objective to enhance the capacities of land sector institutions, mainly the Ministry of Lands, Regional Government, and Religious Affairs (MLRG&RA) as well as relevant village/town and district authorities (formal and customary). The project will finance: (i) a capacity development program for MLRG&RA, local authorities, customary institutions, civil society, and the private sector in fit-for-purpose surveying, land registration, land dispute resolution, property valuation, climate-resilient spatial planning and other relevant disciplines with a specific focus on the participation of women to strengthen women's representation in the land administration professions; (ii) development of strategies for organizational restructuring, improved coordination mechanisms and financial sustainability of the land administration system, including the project investments; (iii) legal assessment and reforms, including consultations with relevant stakeholders to update the existing land laws including but not limited to strengthening women's land rights; and (iv) an awareness raising program to inform the general public about any institutional and legal changes in the land sector, including those related to climate-resilient spatial planning. Altogether, these activities will lead to an innovative land tenure administration system enabling the agribusiness environment and creating incentive for more investment and wide adoption of innovations including climate-smart technologies to increase productivity while reducing emissions.

(b) Digitalization of the land administration system with a focus on providing support for establishing a digital land information system that will combine geospatial parcel data with ownership information and make land data available for climate-resilient land use planning and disaster risk management. The project would finance (i) re-engineering of existing land administration processes and development of a land information system, incorporating climate-resilient design standards and energy-efficient technologies. This includes training and digitizing of paper-based land records; (ii) supply and installation of information and communication technology (ICT) equipment with a focus on energy-efficient devices and technologies; (iii) minor renovations of decentralized MLRG&RA offices to enable use of ICT in priority project intervention areas incorporating energy-efficient building materials and design standards to enhance climate resilience; and (iv) re-establishment of the geodetic reference network. MLRG&RA will obtain satellite imagery from the Gambia Bureau of Statistics, which would form a base layer in the land information system for georeferencing gender-disaggregated land ownership information with land parcel information.

(c) Demarcation and registration of land rights, which will include a pilot program for developing a systematic, cost- and time-efficient, participatory and gender-sensitive customary land rights registration process and program, focusing on communities and specifically women horticultural producers, building on the GCAV experience. By ensuring that women have secure access to land, land administration institutions can contribute to gender-responsive climate adaptation and mitigation efforts. Specifically, the pilot would include climate-resilient spatial planning at the community level to demarcate and support protection of forests, mangroves, and other natural resources and ecologically sensitive areas. The target areas are being discussed and final decisions will be made based on criteria such as high presence of women's community vegetable farms, accessibility, commitment from customary leaders and communities, as well as minimal presence of land disputes to ensure successful implementation. The AF will finance: (i) a consultancy services to support MLRG&RA with developing and implementing a customary land rights demarcation and registration pilot, climate-resilient land use planning, and preparing strategies and technical support for scaling up the pilots; and (ii) goods required for demarcating and registering customary land and preparing climate-resilient land use plans in priority project intervention areas and specifically in a region selected for the piloting (e.g., mobile data collection devices, surveying

equipment, drones, vehicles). The activities will follow the principles of fit-for-purpose technologies, systematic registration, full participation of community members, registration of women's land rights (communal, individual, or jointly with husbands), and will ensure that field staff is recruited locally and from the target areas as needed, with a focus on recruiting female staff to strengthen women's representation and participation in land administration.

22. **Second, the proposal is to add a new US$23.00 million component (Component 6 - Improving Access to Water, Sanitation and Hygiene - WASH) to the project design.** The objective of this new component is to increase water supply to promote irrigation to boost agribusiness, and to improve access to WASH in rural areas. It includes three subcomponents as follows:

(a) Subcomponent 6.1: Provision of Water for Irrigation (US$4.50 million). The objective of this subcomponent is to further support the development of irrigation services. It will finance: (i) consultancy services for the mapping of groundwater resources in terms of availability, quantity and quality, which will help in identifying areas that have faced or may face in the future increased water stress of changes in groundwater recharge patterns due to climate change induced variability; (ii) technical assistance for an updated assessment of the actual irrigated land areas and the potential of irrigable land using climate-smart irrigation techniques such as drip, sprinklers or micro-pivot irrigation systems to improve water use efficiency and resilience to climate extremes such as droughts or floods; (iii) sustainable infrastructure and equipment to connect boreholes with horticultural perimeters for irrigation, following climate-resilient design standards to withstand extreme weather events and considering energy-efficient technologies to minimize greenhouse gas (GHG) emissions associated with irrigation pumping; (iv) upgrade GCAV women-led agribusiness firms irrigation system to address water deficit they are facing using climate-resilient design standards and energy-efficiency considerations; and (v) associated training to increase water use efficiency using climate-smart irrigation techniques (drip, sprinkler and micro-pivot irrigation system), maintenance and sustainability of infrastructure and equipment.

(b) Subcomponent 6.2: Expansion of Water Supply and WASH to Selected Schools in Rural Areas (US$14.00 million). The objective of this subcomponent is to improve access to water supply in rural areas[5] and to provide improved WASH in selected schools.

(i) Interventions to be funded would include: (i) drilling new boreholes, construction of pump headworks and on-site generation of solar energy; (ii) extension of water distribution networks including construction of tanks and centralized treatment centers where necessary, and (iii) new household connections. These interventions will include features such as durable materials and backup systems for water storage to ensure the resilience of the connections in the face of climate-related shocks. The on-site solar energy connections will greatly contribute to building climate resilience in the water supply systems. The priority areas to be served in the rural areas include (i) Greater Soma; (ii) Greater Basse; (iii) Greater Barra-Kanuma; (iv) Greater Farafenni; and (v) Greater Bansang which particularly faces peculiar water quality challenges. A feasibility study to use water from the Gambia River through Riverbank Filtration method to augment or serve as an alternative source to groundwater has been completed. A water treatment station would be constructed at Bansang following climate-resilient design

[5] The World Bank-funded Gambia Electricity Restoration and Modernization Project (GERMP, P163568) supported NAWEC to provide water in the GBA and therefore this AF will focus mainly on the rural area.

standards and energy-efficiency considerations. Rural area will be prioritized. However, peri-urban areas in Greater Banjul Area (GBA) which do not have regular water supply and have been especially affected by the changing water patterns due to climate change will also be served. Each WYLAF will also have a toilet with handwashing station and basic hygiene training will be undertaken during construction of the toilets.

(ii) ***Provision of WASH in selected schools:*** Support will be provided to selected schools with water supply connection, toilet facilities and handwashing stations. This pilot will cover up to five selected schools located along the water distribution mains. Training will be provided to ensure the facilities are well managed and menstrual health and hygiene incorporated in the training.

(c) Subcomponent 6.3: Meter Replacement, Energy Efficiency Improvements and Non-Revenue Water (NRW) Improvement (US$3.50 million). This subcomponent will fund:

(i) Meter Replacement Program. The use of smart meters ensures the process of billing and reading of the water meters is automated. As a result, it will also enhance water management and reduce water losses and wastage through real-time monitoring and leak detection, aligning with climate adaptation goals. Under the Gambia Electricity Restoration and Modernization Project (GERMP -P163568, P173161), NAWEC was supported to procure 15,000 smart water meters to replace faulty ones and use for new connections. The use of the smart meters and the development of the district metering areas contributes to the non-revenue water management. The proposed AF will support the scale-up of the smart water meter initiative in the rural areas, prioritizing communities vulnerable to climate-related water stress. It will procure 25,000 of the smart water meters. This will help address part of the commercial losses for NAWEC.

(ii) Improvement in Non-Revenue Water (NRW) Management. NRW is estimated at about 40 percent. The estimate may be incorrect since there are many factors impacting on the estimate including incorrect sizing of meters, incorrect pump rating, age of pumps and meters and outdated technology. The project will address the technical losses, active leak detection and pressure management with the engagement of the appropriate technical assistance and the procurement of the relevant equipment and spares. This intervention will ensure water conservation in the face of climate-induced water scarcity and enhance its availability at times of increased water demand such as droughts. Support will be provided for the ongoing NRW reduction program in the GBA and new NRW program in the rural areas.

(iii) Energy efficiency improvements of the water business. NAWEC has completed a feasibility study of energy efficiency, renewable energy potentials and load management options of the water and sewerage business unit operations under the GERMP. These studies are aimed at reducing the carbon footprint of the Water and Sewerage Business Unit of NAWEC. The project will support the implementation of some of the recommendations of the study to ensure sustainability, prioritizing energy-efficient solutions to reduce the carbon footprint of water and sewerage operations including renewable energy integration such as solar-powered water pumps, to reduce energy consumption while enhancing climate resilience.

(iv) Technical Studies for Water Supply Masterplan and Groundwater Monitoring. A climate-resilient water supply masterplan is to be developed for the GBA with support from French Development Agency (*Agence Française de Développement*, AFD). There are ongoing discussions with other development partners on the development of a masterplan for the rural areas. The

AF will finance the preparation of a water supply and sanitation masterplan for the rural areas and a groundwater management and monitoring plan for The Gambia, integrating climate change considerations and resilience measures. There shall be coordination with other stakeholders in the development of the plan.

C. Revisions to components costs

23. **The proposed revised costs per component are detailed in Annex 1.** The proposed changes reflect: (i) a US$24.00 million increase in IDA allocation to Component 1, US$9.00 million of which is proposed to go to the new subcomponent on securing land access (US$2.05 million for institutional and legal support to land administration institutions, US$3.45 million for digitalization of the land administration system, and US$3.50 million for demarcation and registration of land rights) and US$15.00 million to cover cost over-runs tied to feeder roads construction; (ii) a US$17.00 million increase in allocation to Component 2, US$10.00 million of which is intended as replenishment of the resources already used for the purchase and distribution of fertilizers, and the remaining US$7.00 million to scale-up the adoption of improved climate-smart technologies and innovations like new high-yielding, early-maturing, drought-resistant and salt-tolerant varieties, agricultural machinery for a sustainable mechanization, greenhouse and drones to build a modern and climate-resilient agriculture and support access to improved WASH facilities for WYLAF and selected schools; (iii) US$23.00 million allocated to the proposed new Component 6 on improving access to water in a climate-efficient way using solar pumping system; and (iv) an increase to US$4.00 million allocated to Component 4 on project coordination, monitoring, and knowledge management to cover the relevant costs related to implementing the additional activities.

24. Furthermore, fertilizers procured under the parent project are sold to farmers at a 50 percent subsidy rate. Out of a total of US$10.00 million spent by Government on these fertilizers, US$5.00 million is expected to be received from farmers and will be used to strengthen the country's seed system to (i) support seed growers organizing them into seeds cooperatives and providing them with foundation seeds of new climate-smart varieties, seed processing equipment and storage facilities equipped with solar energy (US$3.00 million); (ii) to finance modern irrigation schemes for National Seed Secretary (NSS) and National Agricultural Research Institute (NARI) for good seed quality (US$1.00 million); and (iii) institutional support to the Ministry of Agriculture to improve sectoral and policy coordination (US$1.00 million). In parallel, the plan is to push for a general reform on the fertilizer distribution by harmonizing the use of the digital application developed by the project to build targeting, transparency and efficiency using as financing instrument the new development policy financing being initiated.

D. Revisions to the results framework

25. The proposal is to revise the results framework to incorporate three new PDO-level indicators (see Section A) and new intermediary results indicators to track the new activities related to access to water and securing access to land, and to adjust the targets of the core PDO indicators. These changes are summarized in Table 1 below and the detailed updated result framework is presented in section VIII.

Table 1. Summary of changes made in the result framework

Indicators	Change made	Current end target	Revised end target with AF	Rational for change
PDO-level indicators				
Farmers reached with agricultural assets or services (CRI, Number) - Women (at least 35 percent) - Youth (at least 20 percent)	Revision	100,000 35,000 20,000	200,000 75,000 40,000	The targets were revised to consider beneficiaries of access to water estimated at 50,000, other innovations estimated at 30,000 and to registered land rights estimated at 20,000 of which at least 10,000 women (50 percent) and 8,000 youth (40 percent)
Farmers using/adopting climate-smart technologies (Number, disaggregated by women and youth) - Women (at least 50 percent) - Youth (at least 30 percent)	Revision	50,000 25,000 15,000	100,000 50,000 30,000	The targets were revised to consider the AF allocated to the promotion of the adoption of climate-smart technologies and innovations.
People with strengthened food and nutrition security (Number, disaggregated by women and youth) - Women (at least 50 percent) - Youth (at least 30 percent)	New		800,000 400,000 240,000	This new indicator was added in line with the new WBG Scorecard (Outcome Area 7-Sustainable Food Systems). All the beneficiaries of climate-smart technologies (high-yielding and biofortified seed varieties, modern irrigation, mechanization, fertilizers, greenhouse, best cropping practices, etc.) will have their food and nutrition security strengthened. Given the average Gambian household size of 8 members, an end target of 800,000 people (100,000 farmers * 8) is expected.
People provided with access to improved water sources (CRI, Number, gender disaggregated) - Women	New		50,000 25,000	New indicator added to capture the beneficiaries of water supply services in rural area. The indicator is gender disaggregated to ensure that women be part of the beneficiaries.
People provided with access to improved sanitation services (Number, disaggregated by gender)	New		2,500	To improve access to school water supply, sanitation, hand washing and menstrual hygiene services for school pupils
Intermediary results indicators				
Improved climate-smart varieties of certified seed produced, of which: (Metric ton) - Rice - Maize	Revised	600 500 100	1,000 500 500	The targets were revised to consider the AF allocated to the seed's funds to further support seed cooperatives, NARI and NSS to boost multiplication of new climate-smart varieties of seeds and improve processing quality.
Land information system with gender-disaggregated data reporting function developed	New		Yes	

Indicators	Change made	Current end target	Revised end target with AF	Rational for change
Target population with land tenure rights (ownership, joint-ownership, collective ownership, leaseholder/usage) recorded as a result of the project" (Number) - Women - Youth	New		20,000 10,000 8,000	
Smart water meters provided to households (Number)	New		12,000	To support the non-revenue water management and to improve operational efficiency
Solar energy efficient pumps provided/ rehabilitated (Number)	New		12	To reduce the carbon footprint of the water production systems
New/rehabilitated water production centers with high capacity for water supply (Number)	New		5	To increase production capacity for water supply
Schools and healthcare facilities connected to water supply system with smart meters (Number) Schools Hospitals	New		20 5 15	To ensure school pupils have access to water for drinking and hand washing and hospital acquired infections are reduced
Irrigated surface developed with the central borehole connection (Hectares)	New		250	To increase the irrigated crop production during dry season and secure crop production in rainy season to promote commercial agriculture and climate-resilience

E. Extension of the project closing date

26. **The project closing date will be extended by two years.** The project closing date of December 31, 2026, will be extended to December 31, 2028, to allow adequate implementation and completion of the new activities related to land and water.

F. Implementing Agency institutional and implementation arrangements

27. **The existing project institutional and implementation arrangements will be maintained and reinforced with additional implementing partners needed for the new activities.** Regarding project oversight, the Ministry of Agriculture remains responsible for overall project implementation. It will collaborate closely with MLRG&RA, Ministry of Petroleum and Energy (MOPE) and National Water and Electricity Corporation (NAWEC), Ministry of Fisheries and Water Resources and National Assembly Matters (MoFWRNAM) in addition to other relevant ministries and their respective departments and agencies, including (i) Ministry of Trade, Industry, Regional Integration, and Employment; (ii) the Ministry of Youth and Sport; (iii) the Ministry of Transport Works and Infrastructure; and (iv) Ministry of Basic and Secondary Education. The established inter-ministerial Project Steering Committee (PSC) chaired by the Ministry of Agriculture Permanent Secretary will be extended with new membership including representatives from MLRG&RA, MoFWRNAM and MOPE. The Central Projects Coordination Unit (CPCU) within the Ministry of Agriculture remains responsible for project coordination and implementation. The

CPCU staff will be strengthened with a Land Administration Specialist who will work closely with the MLRG&RA and a Civil Engineer in charge of infrastructures including feeder roads, ALCs and others through a strong partnership with MOPE and NRA.

28. **Regarding implementing agencies, as the new activities related to water supply and land would be executed by specialized public agencies, the CPCU will sign partnership agreements with them.** Thus, the CPCU will sign an agreement with the existing Project Coordination Unit (PCU) of the GERMP to implement the water activities under the project. The Water Engineer at the GERMP PIU will be responsible for the water activities and shall work in close collaboration with the Projects and Planning Directorate of NAWEC to ensure all the water activities are mainstreamed into NAWEC activities. The two projects will also ensure that project supervision missions overlap to make implementation support missions less cumbersome. The CPCU will sign a partnership agreement with MLRG&RA. The focal person for the activities will be the Permanent Secretary from MLRG&RA. The multistakeholder technical working group on land will continue to converge during implementation and will function as the technical committee for reviewing and planning the implementation of the land sector activities.

29. **These partnership agreements will be well defined.** They will include 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. The project implementation manual (PIM) will be updated, before project effectiveness, accordingly, to include these new implementing partners. The updated PIM will include detailed guidelines and procedures related to personal data collection and processing in accordance with good international practice and acceptable to IDA to mitigate personal data protection risks.

III. KEY RISKS

30. **The overall risk rating of the proposed AF and the parent project and is assessed as "Substantial".** The risk descriptions and mitigation measures are described as follows.

31. **Political and governance risk is substantial.** Despite achieving a track record of governance reforms, The Gambia continues to suffer from a complex political economy, weak governance, and political tensions. The GoG has undergone political reshuffling, and political opposition has increased, as noted during the last presidential elections. Although the Local Government elections and the Chairmanship and Mayoral elections were held without any major issues last year, the specter of political tensions still looms. If these were to materialize to a significant level, they would negatively affect attainment of the PDO.

32. **Macroeconomic risk is substantial.** The Gambia has made headway on fiscal and economic reforms, but COVID-19 exacerbated further by the induced spillover effects of the Russia's invasion of Ukraine has dampened the short-term economic outlook. Despite Gambia having a track record of solid macroeconomic performance, it is still vulnerable and relies heavily on external donor support and constrained fiscal space. To mitigate the risk related to the limited fiscal space, no additional counterpart funding from the Government is requested for the AF.

33. **The risk related to sector strategies and policies is substantial in light of the proposed land activities.** The land sector of The Gambia operates a tripartite legal framework, combining customary land tenure

systems, *Sharia'h* Law (Islamic Law), freehold and statutory regulations. There is no clear and unified land policy in The Gambia. The complex customary land tenure system and outdated land laws pose risk to the recording of customary land rights. The overlap of customary systems and state land systems could uncover existing multiple competing claims to land, which could frustrate the land interventions. The project will mitigate these risks by coordinating closely with the West Africa Coastal Areas Resilience Investment Project 2 (P175525), which is supporting government to develop The Gambia's first ever national land policy. This will allow the World Bank to engage in a continuous land policy dialogue, which will provide guidance to the GIRAV land activities. Further, the land activities will be implemented based on the findings and relationships with key land sector institutions established by the World Bank as part of The Gambia Integrated Urban, Coastal Resilience, and Land Program (P172822). The project will work with multi-sectoral land sector technical working groups that have already been established for the land policy development process. Finally, the sector risks are going to be addressed by the proposed activities by piloting time- and cost-efficient approaches and updating the legal framework to address the land sector issues directly through a participatory, multi-stakeholder, and multi-sectoral approach, based on the existing structures and coordination mechanisms.

34. **Technical design risk rating is Substantial.** The original project design already featured several components and implementing agencies. The proposed AF will add more complexity. Particularly, the proposed land sector activities include institutional and legal support to land administration institutions; digitalization of the land administration system; and the piloting of registering customary land rights. Many of these activities are new in The Gambia. This in combination with low institutional capacities poses a risk to the successful implementation of the activities. Capacity building activities will be key to ensure the sustainability of the activities. Land sector digitalization activities are based on an incremental approach, building on existing systems, and employing a modular approach to enhancing the land information system. The registration of customary land will follow the fit-for-purpose approach, which promotes low-cost and basic technological solutions instead of overly complex surveying equipment and standards. Further, the registration activities will include a pilot phase before scaling up activities are implemented. As an added measure, the CPCU will be staffed with a land specialist who will work closely with the MLRG&RA to ensure smooth technical implementation.

35. **The risks related to institutional capacity for implementation and sustainability is substantial given the land activities.** Low human and institutional capacities of the land sector pose significant risk to the proposed activities. The capacities within MLRG&RA have consistently decreased over time due to a lack of investments in continuous capacity building. To mitigate the capacity risks, the project will build on GCAV and GIRAV experience on securing land ownership rights for women horticultural producers. Besides, the project will provide prior training and workshops to increase capacities, harmonize, and continue digitization efforts, while preparing the National Land Policy in parallel to provide enabling environment for institutional and legal reforms. Overlaps between land agencies have not been addressed or harmonized, and the differing mandates of district authorities and *Alkalolu* with respect to land are not sufficiently spelt out. To mitigate this risk, the project would adopt a participatory approach to land identification, cadastral mapping, and land registration with a parallel policy dialogue of the involved stakeholders.

36. **Fiduciary risk rating is substantial.** The AF is increasing the number of implementing partners adding fiduciary risk. As a mitigation measure, like the parent project, the CPCU will have fiduciary responsibility for the AF given its experience in fiduciary management of IDA-financed projects, including GCAV.

Following previous FM assessment and recommendation, an internal auditor was hired and an additional support staff as well to reinforce CPCU fiduciary staffing.

37. **Environmental and social risk is rated Substantial.** The construction of boreholes, tanks and water treatment centers will be done in selected areas to be identified in consensus with community beneficiary to avoid any economic loss that could call for compensation. The project will give special attention to avoiding any involuntary resettlement (physical and economic displacement) of local populations for the Agriculture and Water subprojects. Risks of gender-based violence (GBV) and sexual exploitation, abuse and harassment (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. Regarding the fertilizer program, the use of mineral fertilizers will contribute to increase agricultural productivity particularly, when combined with other innovations including improved varieties of seeds, greenhouse and adapted agricultural machinery. However, it may rise some E&S risk such as pollution and degradation of water resources that could impact farmers environmental health. To mitigate these risks, the CPCU safeguard team through a collaboration with the National Environment Agency (NEA) will work with communities providing them with sensitization and training on fertilizer best application practices and individual protection equipment needed. The training sessions will take place at the appropriate locations in the regions. They will include making decisions to the judicious use of fertilizers, transport, storage, in case of ammonium use for example, handling, distribution and safe application of inorganic pesticides, organic pesticides and bio-pesticides. Regarding land, the proposed land administration reform and land registration are expected to have positive environmental impacts in the long-term, and positive social impacts are likely to be associated with project activities to benefit women. Demarcation and registration of land rights is however likely to unearth pre-existing land disputes. Intercommunal conflict and tensions over land already exist due to the absence of land records and land boundaries issues. Risks of GBV and SEAH abound due to improved land-related decision-making powers of women, which might be challenged by men. To manage the potential E&S risks and ensure compliance with Environmental and Social Standards (ESSs), the CPCU social and environmental specialists will work closely with the MLRG&RA team and the World Bank's land administration specialists to identify and mitigate any potential risks. Participatory methods and targeted awareness raising campaigns will form part of the mitigation activities.

38. **Stakeholder risk rating is Substantial.** While the AF activities related to access to fertilizer and water may be low risk in terms of stakeholders, the risks related to land are substantial. The proposed land interventions by nature, are participatory, involving multiple stakeholders, including MLRG&RA, Lands Commission, women and youth groups, customary leaders, district authorities, and non-governmental and civil society organizations. However, land rights have profound social and economic implications because they are a major determinant of social status, wealth, and political power. Land demarcation and registration as well as land sector digitalization will lead to more transparency and accountability of those governmental and customary actors involved in the processes. Those benefitting from the non-transparent and convoluted status quo could seek to undermine the land sector reforms. To this end, the activities will ensure that the multistakeholder technical working group on land will remain playing a key role to monitor the activities and provide inputs. Further, the awareness raising activities will include key messages and provide opportunities for dialogue with all stakeholders – those supporting and those resisting any changes in the land administration system. The project has already established a grievance mechanism (GM) to arbitrate potential conflicts between stakeholders and to respond to incidents related to SEAH. The GM will be strengthened to specifically address land-related grievances and to add support to address land disputes as part of the customary land registration process under Subcomponent 1.5.

39. **"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.

IV. APPRAISAL SUMMARY

A. Economic and Financial Analysis

40. **The Economic and Financial Analysis (EFA) has been updated to reflect the AF and it demonstrated that the project remains economically viable.** The project generates an economic internal rate of return (EIRR) of 29.89 percent and a net present value (NPV) of US$160.02 including environmental benefits valued at the low estimate range (on average, US$49.00/tCO2e) and an economic IRR 29.93 percent and a NPV of US$160.11 million including environmental benefits valued at the high estimate range (on average, US$97.00/tCO2e) based on a total budget of US$108.00 million from IDA financing (US$40.00 million for the original project and US$68.00 million for the AF). The economic analysis results without GHG benefits showed an EIRR of 29.86 percent and a NPV of US$159.87 million. The sensitivity analysis indicated that results remained robust under various scenarios (see detailed EFA in Annex 3).

B. Technical

41. **Innovative features of the original project and the AF design are its integrated and inclusive approach.** The original project considers agriculture, as a whole, focusing on the diverse nature of farm household livelihoods and bringing together the different line ministries including agriculture, trade, transport, women, and youth to build synergies and better coordinate actions. The AF amplifies the integrated approach bringing additional line ministries related to water and land for greater development outcomes. The AF will be instrumental in contributing to building inclusive and climate-resilient agricultural value chains by securing access to land and promoting access to fertilizers, to climate-smart innovations and to water for irrigation for increased agricultural productivity and production. Improved access to drinking water for rural households, schools and health centers will contribute to family health and welfare.

42. **The AF is based on a gender tagged approach.** It is acting to close gender gaps in access to productive resources, services, and economic opportunities. The project is explicitly designed to increase women's economic empowerment by (i) expanding their access to modern irrigation technologies, climate-smart innovations and technologies, knowledge and skills (best agricultural practices, business skills); (ii) securing their access to and control over land with registered ownership rights; and (iii) access to potable water supply services for drink and domestic use, and sanitation and preventing women from the burden of spending hours to fetch water from wells. By targeting some hospitals and schools, for the water services along with some sanitation infrastructures, the project will contribute particularly to women and girls' health.

Paris Alignment

43. **The AF is consistent with The Gambia's and the World Bank's climate commitments.** Project activities will support implementation of The Gambia's Second Nationally Determined Contribution (NDC),[6] the Gambia National Adaptation Programme of Action on Climate Change (2007), National Climate Change Policy of The Gambia (2016),[7] and The Gambia's Long-Term Climate-Neutral Development Strategy (2022).[8] The Long-Term Strategy seeks to reach net-zero carbon emissions by 2050, with enhanced adaptive capacities and resilience. One of the key pillars of the Climate Change Policy seeks to support climate-resilient food systems and landscapes, including agriculture, food security, forestry, and natural resources, including water, biodiversity, and wildlife. The new land activities are aligned with the NDC's planned adaptation actions on (i) climate-resilient land use mapping, planning and information systems; and (ii) developing integrated approaches to build rural climate resilience in The Gambia.

44. **Assessment and reduction of adaptation risks**: The AF activities do not pose any major risks to adaptation and resilience goals. Risks from climate hazards like drought and inundation may arise but could have minimal material impact on the operation given the adaptation measures included in its design. Regarding the agriculture activities, the project will promote adoption of climate-smart technologies and innovations including high-yielding, early maturing, drought-resistant and salt-tolerant varieties, combination of mineral and organic fertilizers and best agricultural practices to mitigate adverse effects of any irregular or insufficient rainfall on agricultural productivity and production. Furthermore, through the adoption of water-efficient technologies powered with solar energy, the project aims at developing irrigated agriculture to reduce dependance on rainfall and build a climate-resilient and environmentally friendly agriculture. Regarding the land activities, The Gambia's land administration systems is prone to hazards such as increased flooding as land records in paper format are held in low level buildings without adequate protection. Land users are generally impacted by droughts and increased floods, which could lead to future land use changes. The project seeks to mitigate these risks by digitizing land records and ensuring that the installation of respective ICT hardware will take flood risks into account. To support communities to adapt to droughts and floods, the project will support resilient spatial planning as part of the piloting of the registration of customary land.

45. **Assessment and reduction of mitigation risks:** None of the proposed activities pose a risk of having a negative impact on The Gambia's net-zero goal and the AF includes measures to reduce mitigation risks to low. The agriculture, water, and land activities are considered universally aligned with the Paris Agreement's mitigation goals based on the minor risks and their mitigation measures outlined below. Regarding the agriculture activities, investing in climate-smart technologies, innovations, and management practices will reduce GHG emissions. The minor renovations will be minimal to improve the working environment but will not include the construction of data centers, or any other energy-intensive activity. Solar-power solutions will be used to improve energy access of MLRG&RA offices. Water supply and school WASH interventions will adopt the use of renewable energy, including the use of solar-powered boreholes and energy-efficient pumps. Where practical the water supply systems will include a single stage of pumping into storage tanks and distribution by gravity. Further details on the adaptation and mitigation

[6] Ministry of Environment, Climate Change, and Natural Resources (2021): Second Nationally Determined Contribution of The Gambia.
[7] Ministry of Environment, Climate Change, Water (2016): National Climate Change Policy of The Gambia.
[8] Government of The Gambia (2022): The Gambia's Long-Term Climate-Neutral Development Strategy 2050.

measures supported by the AF are outlined in Annex 4.

C. Financial Management

46. In line with the guidelines stated in the FM Manual issued on March 1, 2010 (last updated Septmeber 2021), an FM assessment was conducted for the parent project. The FM arrangements for this AF will be the same as those under the parent project, including the FM risk assessed, which is Substantial. As all mitigation measures identified have been implemented for the parent project to address FM capacity constraints, the FM satisfies the World Bank's minimum requirements.

47. The overall FM performance of the project is rated Moderately Unsatisfactory due to weaknesses highlighted in the internal audit report such as (i) non-adherence to agreed roles and responsibilities for the sales and distribution of fertilizers; (ii) the project digital platform for the registration of beneficiaries is not being used effectively for fertilizers; and (iii) non-adherence to the imprest retirement procedure by GIRAV staff. However, the project's bookkeeping is up to date and the interim financial reports are submitted on time and their quality is acceptable. The external auditor expressed an unqualified opinion on the 2022 financial statements.

48. **Several measures will be taken to accommodate the AF in the existing FM system and ensure readiness for implementation**: (i) update of the FM Manual to reflect specificities of the AF; (ii) update of the accounting software used for the parent project for the bookkeeping of the AF activities; (iii) amendement of the external auditor contract to include the AF in its audit scope; (iv) update of the internal auditor terms of references to include the AF in its scope of intervention; and (v) recruitment of a third party monitoring agent to ensure that fertilizers are distributed to eligible benificiaries and field activities are conducted as planned.

49. Disbursement for the project will follow the existing disbursement arrangements for the original project. Disbursements under the ongoing project are statement of expenditure based. Direct Payment method will apply as appropriate. A pooled designated account will be used for the AF.

D. Procurement

50. **Institutional Arrangements:** The preparation and implementation of the AF will be conducted by the CPCU. The CPCU has a Procurement Specialist and two Procurement Assistants.

51. **CPCU's capacity in procurement.** The project team in charge of the procurement has the necessary competencies and can continue to execute the contracts planned in the AF. The CPCU has a manual describing the procurement procedures. This manual will be updated to consider the new institutional arrangements that are aligned with World Bank Procurement procedure dated September 2023.

52. **The procurement risk is low**. The mitigation measures proposed to improve the quality of project procurement are: (i) update of the administrative and financial procedure and procurement manual of the project; and (ii) training of the Coordinator, the Procurement Specialist and Assistants as well as other project staff on the New Procurement Policy for Investment Projects.

53. **New Procurement Framework (NPF)**: The AF will be subject to the NPF. Therefore, the CPCU updated the PPSD to include the different Components of the AF. Support by the World Bank team was provided to assist the project in developing this Strategy that was completed prior to negotiations along with the project's procurement plan for the first 18 months.

E. Legal Operational Policies

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

F. Environmental and Social

54. Under this AF, the project intends to: (i) replenish resources used to procure fertilizers and to procure other innovations to improve agricultural productivity and production; (ii) increase water supply to further promote irrigation and access to WASH in rural areas; and (iii) to improve The Gambia's land administration system and contribute to secure land tenure especially for women horticultural producers. If no mitigation and enhancement measures are taken, certain products such as fertilizers for the improvement of production and the protection of crops could generate pollution and degradation of water resources.

55. Eight ESSs are relevant to the AF activities. Related to the ESS 1 - Assessment and management of E&S risks and impacts, the CPCU already has an organizational structure with qualified staff including an environmentalist and a social development specialist, and resources to support management of environmental and social health safety (ESHS) risks and impacts of the Project. GERMP, the executing partner for water activities, has among its staff social and environmental specialists who will support the implementation of the AF. The CPCU shall hire a Land Administration specialist experienced in community engagement, conflict management and women promotion towards access to land. The Land Administration Specialist will work closely with the MLRG&RA. These specialists should remain operational until the completion of the project to guarantee the implementation and monitoring of the measures contained in the safeguard instruments throughout the AF life cycle and to ensure continuity. The CPCU will ensure that the supervising engineer and contractors recruit social and environment experts for the timely monitoring of E&S aspects during the construction, renovation and extension works in accordance with the project E&S instruments.

56. The Environmental and Social Management Framework (ESMF) including a social assessment and SEA/SH risk assessment and an Action Plan, adopted on October 15, 2021, was updated and disclosed on March 7, 2024[9]. Like the ESMF, the Labor Management Procedures (LMP) adopted on October 26, 2021, was also updated, and disclosed on March 7, 2024[10]. The ESMP and the Environmental and Social Impact Assessment (ESIA) shall be prepared, disclosed, consulted upon, and adopted during the preparation of the sub-projects and before the commencement of works, particularly for water subprojects that may impact the environment or the communities' assets. The updating of the instruments was done in an inclusive manner with the consultation of all stakeholders including administrative authorities such as actors from the Water and Land sectors, local and customary authorities in all regions of the project. The feedback received shows a strong commitment from stakeholders.

57. The environmental and social commitment plan (ESCP) for the AF has been prepared and it shall supersede previous versions of the ESCP for the parent project and shall apply both to the parent project

[9] https://nea.gm/all-downloads/
10 https://www.cpcu.gm/Reports-Publications

and the AF. The final ESCP is agreed upon with the client and publicly disclosed in country's website and World Bank intranet, on April 3, 2024. The GM was established and operational. It will be strengthened to specifically address land-related grievances.

V. WORLD BANK GRIEVANCE REDRESS

58. ***Grievance Redress.*** **Communities** and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank'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 Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the Bank's Accountability Mechanism, please visit https://accountability.worldbank.org.

VI SUMMARY TABLE OF CHANGES

	Changed	Not Changed
Implementing Agency	✓	
Project's Development Objectives	✓	
Results Framework	✓	
Components and Cost	✓	
Loan Closing Date(s)	✓	
Cancellations Proposed		✓
Reallocation between Disbursement Categories		✓
Disbursements Arrangements		✓
Legal Covenants		✓
Financial Management		✓
Procurement		✓
Other Change(s)		✓

VII DETAILED CHANGE(S)

IMPLEMENTING AGENCY

Implementing Agency Name	Type	Action
Ministry of Agriculture	Line Ministry/Ministerial Department	No Change
Ministry of Lands, Regional Government, and Religious Affairs	Line Ministry/Ministerial Department	New
Ministry of Petroleum and Energy	Line Ministry/Ministerial Department	New

PROJECT DEVELOPMENT OBJECTIVE

Current PDO

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.

Proposed New PDO

The Project Development Objectives (PDO) are to promote (i) the development of inclusive, resilient, and competitive agricultural value chains, focusing on smallholder farmers and agribusinesses, and (ii) improved water supply and sanitation in project target areas.

COMPONENTS

Current Component Name	Current Cost (US$, millions)	Action	Proposed Component Name	Proposed Cost (US$, millions)
Component 1. Improving the business environment for commercial agriculture development	19.70	Revised	Component 1. Improving the business environment for commercial agriculture development	43.70
Component 2: Building a productive and climate-resilient agri-food system	10.10	Revised	Component 2: Building a productive and climate-resilient agri-food system	32.10

Component 3: Mobilizing productive private investments along the value chains	13.92	No Change	Component 3: Mobilizing productive private investments along the value chains	13.92
Component 4: Project coordination, monitoring and knowledge management	4.17	Revised	Component 4: Project coordination, monitoring and knowledge management	8.17
Component 5: Contingent Emergency Response	0.00	No Change	Component 5: Contingent Emergency Response	0.00
	0.00	New	Component 6: Improving access to water, sanitation and Hygiene (WASH)	23.00
TOTAL	**47.89**			**120.89**

LOAN CLOSING DATE(S)

Ln/Cr/Tf	Status	Original Closing	Current Closing(s)	Proposed Closing	Proposed Deadline for Withdrawal Applications
IDA-D9190	Effective	31-Dec-2026	31-Dec-2026	31-Dec-2028	30-Apr-2029

Expected Disbursements (in US$)

Fiscal Year	Annual	Cumulative
2022	2,386,019.81	2,386,019.81
2023	12,068,485.24	14,454,505.05
2024	8,000,000.00	22,454,505.05
2025	20,000,000.00	42,454,505.05
2026	30,000,000.00	72,454,505.05
2027	25,000,000.00	97,454,505.05
2028	10,000,000.00	107,454,505.05
2029	545,494.95	108,000,000.00

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Latest ISR Rating	Current Rating
Political and Governance	Substantial	Substantial
Macroeconomic	Substantial	Substantial
Sector Strategies and Policies	Moderate	Substantial
Technical Design of Project or Program	Substantial	Substantial
Institutional Capacity for Implementation and Sustainability	Moderate	Substantial
Fiduciary	Substantial	Substantial
Environment and Social	Substantial	Substantial
Stakeholders	Low	Substantial
Other	Moderate	Moderate
Overall	Substantial	Substantial

LEGAL COVENANTS – Additional Financing for the Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV) (P180656)

Sections and Description
Schedule 2, Section I - G. Preparedness Plan: The Recipient shall ensure that no later than twelve (12) months after the Effective Date, a Preparedness Plan is prepared and adopted in form and substance acceptable to the Association.
Schedule 2, Section I - 2. Central Projects Coordination Unit : (c) the Recipient, shall not later than six (6) months from the Effective Date, recruit a land administration specialist and civil engineer with experience and under terms of reference satisfactory to the Association.

Conditions

Type	Financing source	Description
Effectiveness	IBRD/IDA	Article IV - Effectiveness: Termination - 4.01- The Additional Conditions of Effectiveness consist of the following, namely, the Recipient shall update and adopt the Project Implementation Manual in form and substance satisfactory to the Association.

VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Gambia, The

Additional Financing for the Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV)

Project Development Objective(s)

The Project Development Objectives (PDO) are to promote (i) the development of inclusive, resilient, and competitive agricultural value chains, focusing on smallholder farmers and agribusinesses, and (ii) improved water supply and sanitation in project target areas.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
To support the development of competitive agricultural value chains									
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	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension.***								

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Smallholders (Percentage)		0.00	0.00	20.00	50.00	75.00	100.00	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***To extend the targets to 2028 following project closing date extension.***								
Women (Percentage)		0.00	0.00	20.00	50.00	75.00	100.00	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***To extend the targets to 2028 following project closing date extension.***								
youth (Percentage)		0.00	0.00	20.00	50.00	75.00	100.00	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension.***								
Small and Medium Enterprises - SMEs (Percentage)		0.00	0.00	20.00	50.00	75.00	100.00	100.00	100.00
Action: This indicator has been Revised									
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	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***Targets extended to 2028 following closing date extension.***								

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Rice (Percentage)		0.00	20.00	50.00	50.00	100.00	100.00	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following extension of project closing date.***								
Maize (Percentage)		0.00	20.00	50.00	50.00	100.00	100.00	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***Targets extended to 2028 following project closing date extension.***								
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	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***Extend target following extension of project closing date.***								
To support the development of inclusive agricultural value chains									
Farmers reached with agricultural assets or services (CRI, Number)		0.00	10,000.00	20,000.00	50,000.00	100,000.00	150,000.00	180,000.00	200,000.00
Action: This indicator has been Revised	***Rationale:*** ***The targets were revised to consider beneficiaries of access to water estimated at 50,000, other innovations estimated at 30,000 and to registered land rights estimated at 20,000 of which at least 10,000 women (50%) and 8,000 youth (40%)***								

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Farmers reached with agricultural assets or services - Women (Number)		0.00	5,000.00	10,000.00	25,000.00	50,000.00	75,000.00	90,000.00	100,000.00
Action: This indicator has been Revised	***Rationale:*** ***The targets were revised to consider beneficiaries of access to water estimated at 50,000, other innovations estimated at 30,000 and to registered land rights estimated at 20,000 . This is a total of 200,000 beneficiaries of which at least 100,000 women (50%).***								
Farmers reached with agricultural assets or services - Youth (Number)		0.00	3,000.00	6,000.00	15,000.00	30,000.00	45,000.00	54,000.00	60,000.00
Action: This indicator has been Revised	***Rationale:*** ***The targets were revised to consider beneficiaries of access to water estimated at 50,000, other innovations estimated at 30,000 and to registered land rights estimated at 20,000. This is a total of 200,000 beneficiaries of which at least 60,000 youth (30%)***								
To support the development of resilient agricultural value chains									
Farmers using/adopting climate-smart technologies (number, disaggregated by women and youth) (Number)		0.00	10,000.00	20,000.00	30,000.00	50,000.00	70,000.00	90,000.00	100,000.00
Action: This indicator has been Revised	***Rationale:*** ***With the additional financing for climate-smart technologies and innovations, the number of farmers using/adopting climate-smart technologies will increase. The end target was doubled.***								
Women (Number)		0.00	5,000.00	10,000.00	15,000.00	25,000.00	35,000.00	45,000.00	50,000.00

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Action: This indicator has been Revised									
Youth (Number)		0.00	3,000.00	6,000.00	9,000.00	15,000.00	21,000.00	27,000.00	30,000.00
Action: This indicator has been Revised									
People with strengthened food and nutrition security (number, disaggregated by women and youth) (Number)		0.00	240,000.00	400,000.00	560,000.00	720,000.00			800,000.00
Action: This indicator is New	***Rationale:*** ***This new indicator was added in line with the new WBG Scorecard (Outcome Area 7-Sustainable Food Systems).***								
Women (Number)		0.00	120,000.00	200,000.00	280,000.00	360,000.00			400,000.00
Action: This indicator is New	***Rationale:*** ***This new indicator was added in line with the new WBG Scorecard (Outcome Area 7-Sustainable Food Systems). The indicator is gender disaggregated.***								
Youth (Number)		0.00	72,000.00	120,000.00	168,000.00	216,000.00			240,000.00
Action: This indicator is New	***Rationale:*** ***This new indicator was added in line with the new WBG Scorecard (Outcome Area 7-Sustainable Food Systems). The indicator is disaggregated by youth.***								
To promote improved water supply and sanitation ***(Action: This Objective is New)***									
People provided with access to improved water		0.00	0.00	0.00	5,000.00	30,000.00			50,000.00

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
sources (CRI, Number)									
Action: This indicator is New	***Rationale:*** ***New PDO indicator added to capture the beneficiaries of water supply services in rural area to inform the PDO outcome related to improved access to water and sanitation . The indicator is gender disaggregated to ensure that women be part of the beneficiaries.***								
People provided with access to improved water sources - Female (RMS requirement) (CRI, Number)		0.00	0.00	0.00	2,500.00	15,000.00			25,000.00
Action: This indicator is New									
People provided with access to improved sanitation services (CRI, Number)		0.00	0.00	0.00	500.00	1,500.00			2,500.00
Action: This indicator is New	***Rationale:*** ***The AF include in addition to improved access to potable water, access to water, sanitation and hygiene (WASH) for schools, specifically.***								
People provided with access to improved sanitation services - Female (RMS requirement) (CRI, Number)		0.00	0.00	0.00	250.00	750.00			1,250.00
Action: This indicator is New									

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Component 1: Improving the business environment for commercial agriculture development									
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	50.00	50.00
Action: This indicator has been Revised									
Women (Number)		0.00	0.00	10.00	15.00	20.00	25.00	25.00	25.00
Action: This indicator has been Revised									
Youth (Number)		0.00	0.00	3.00	6.00	12.00	15.00	15.00	15.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension.***								
Innovation platforms established and/or strengthened for value chain actors (Number)		0.00	0.00	5.00	10.00	10.00	10.00	10.00	10.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension.***								

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Value chain mapping and Market Digital Platform established (Number)		0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension.***								
Food-safety laboratories rehabilitated or constructed (Number)		0.00	0.00	2.00	3.00	4.00	4.00	4.00	4.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension.***								
Standards developed and implemented to address quality challenges of the target value chains (Number)		0.00	0.00	5.00	10.00	15.00	20.00	20.00	20.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension.***								
Certifications of agri-enterprises to support or maintain market access (Number)		0.00	0.00	2.00	5.00	8.00	10.00	10.00	10.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension.***								

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Land information system with gender-disaggregated data reporting function developed (Yes/No)		No	No	No	No	Yes			Yes
Action: This indicator is New	***Rationale:*** ***New indicator under sub-component 1.5.***								
Target population with land tenure rights (ownership, joint-ownership, collective ownership, leaseholder/usage) recorded as a result of the project (Number)		0.00	0.00	10,000.00	15,000.00				20,000.00
Action: This indicator is New	***Rationale:*** ***New indicator for sub-component 1.5.***								
Women (Number)		0.00	0.00	0.00	5,000.00	7,500.00			10,000.00
Action: This indicator is New									
Youth (Number)		0.00	0.00	0.00	4,000.00	6,000.00			8,000.00
Action: This indicator is New									
Component 2: Building a productive and climate-resilient agri-food system									

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Agribusiness firms fully equipped with modern irrigation equipment of which: (Hectare(Ha))		0.00	0.00	0.00	40.00	100.00	200.00	200.00	200.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension and revise target based on progress being made.***								
led by women (Hectare(Ha))		0.00	0.00	0.00	20.00	50.00	100.00	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension and revise targets based on progress being made.***								
led by youth (Hectare(Ha))		0.00	0.00	0.00	20.00	50.00	100.00	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension and revise targets based on progress being made.***								
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	30.00	30.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension and target revised given additional technologies to be transferred under the AF (agricultural machinery, greenhouse, drones etc).***								
Improved climate-smart varieties of certified seed produced, of which: (Metric ton)		0.00	0.00	0.00	100.00	400.00	800.00	1,000.00	1,000.00

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension and target revised given additional support in climate-smart varieties of seed multiplication under the AF.***								
Rice (Metric ton)		0.00	0.00	0.00	50.00	200.00	400.00	500.00	500.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension and revise target based on on-going progress.***								
Maize (Metric ton)		0.00	20.00	40.00	100.00	200.00	400.00	500.00	500.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension and revise target given on-going progress and additional funding. A great interest is observed in maize production by smallholders and private agribusiness involved on poultry.***								
E-extension platform developed and used (Yes/No)		No	No	No	Yes	Yes	Yes	Yes	Yes
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension.***								
Component 3: Mobilizing productive private investments along the value chains									
Productive Investment Sub-Projects (PIS) financed through the matching grant mechanism, of which: (Number)		0.00	0.00	370.00	370.00	610.00	610.00	610.00	610.00

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Individuals, of which: (Number)		0.00	0.00	300.00	300.00	500.00	500.00	500.00	500.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Women (at least 40%) (Number)		0.00	0.00	120.00	120.00	200.00	200.00	200.00	200.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Youth (at least 30%) (Number)		0.00	0.00	90.00	90.00	150.00	150.00	150.00	150.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Groups, of which: (Number)		0.00	0.00	60.00	60.00	100.00	100.00	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Women (at least 40%) (Number)		0.00	0.00	24.00	24.00	40.00	40.00	40.00	40.00

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Youth (at least 30%) (Number)		0.00	0.00	18.00	18.00	30.00	30.00	30.00	30.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
SMEs (Number)		0.00	0.00	10.00	10.00	10.00	10.00	10.00	10.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Private capital mobilized to match the project grant (Amount(USD))		0.00	0.00	2.40	2.40	3.90	3.90	3.90	3.90
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
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	500.00	500.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Productive Investment Sub-Projects financed		0.00	0.00	185.00	185.00	305.00	305.00	305.00	305.00

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
through the matching grant mechanism using climate-smart technologies (at least 50%) (Number)									
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Promoters beneficiaries of technical assistance and capacity building on entrepreneurship (Number)		0.00	0.00	370.00	370.00	610.00	610.00	610.00	610.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Individuals, of which: (Number)		0.00	0.00	300.00	300.00	500.00	500.00		500.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Women (at least 40%) (Number)		0.00	0.00	120.00	120.00	300.00	300.00	300.00	300.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Youth (at least 30%) (Number)		0.00	0.00	90.00	90.00	150.00	150.00	150.00	150.00

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Groups, of which: (Number)		0.00	0.00	60.00	60.00	100.00	100.00	100.00	100.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Women (at least 40%) (Number)		0.00	0.00	24.00	24.00	40.00	40.00	40.00	40.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Youth (at least 30%) (Number)		0.00	0.00	18.00	18.00	30.00	30.00	30.00	30.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
SMEs (Number)		0.00	0.00	10.00	10.00	10.00	10.00	10.00	10.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Women benefitting from tailored financing, skills and technology package (Number)		0.00	0.00	200.00	500.00	1,000.00	1,000.00	1,000.00	1,000.00
Action: This indicator has been Revised	***Rationale:***								

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
	Extend targets to 2028 following project closing date extension.								
Youth benefitting from tailored financing, skills and technology package (Number)		0.00	0.00	200.00	500.00	1,000.00	1,000.00	1,000.00	1,000.00
Action: This indicator has been Revised	***Rationale:*** ***Extend targets to 2028 following project closing date extension.***								
Component 4: Project coordination, monitoring and knowledge management *(Action: This Component has been Revised)*									
Beneficiaries satisfaction rate with services and assets provided by the project (Percentage)		0.00	0.00	0.00	60.00	60.00	80.00	80.00	80.00
Action: This indicator has been Revised	***Rationale:*** ***Extend the target to 2028 following the project closing date extension.***								
Component 6: Improving Access to Water *(Action: This Component is New)*									
Smart water meters provided to households (Number)		0.00	0.00	0.00	4,000.00	8,000.00			12,000.00
Action: This indicator is New	***Rationale:*** ***To support the non-revenue water management and to improve operational efficiency.***								
Solar energy efficient pumps provided/rehabilitated (Number)		0.00	0.00	0.00	5.00	10.00			12.00

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
Action: This indicator is New	***Rationale:*** ***To reduce the carbon footprint of the water production systems.***								
New/rehabilitated water production centers with high capacity for water supply (Number)		0.00	0.00	0.00	2.00	4.00			5.00
Action: This indicator is New	***Rationale:*** ***To increase production capacity for water supply.***								
Schools and healthcare facilities connected to water supply system with smart meters (Number)		0.00	0.00	20.00	40.00				40.00
Action: This indicator is New	***Rationale:*** ***To ensure school pupils have access to water for drinking and hand washing and hospital acquired infections are reduced.***								
Irrigated surface developed with the central borehole connection (Hectare(Ha))		0.00	0.00	0.00	100.00	250.00			250.00
Action: This indicator is New	***Rationale:*** ***To increase the irrigated crop production during dry season and secure crop production in rainy season to promote commercial agriculture and climate-resilience.***								

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)	This indicator measure the % increase in the volume of marketed output by project direct beneficiaries (percentage, disaggregated by women, 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)	This indicator measure the % increase in yield of targeted agricultural commodities by project direct beneficiaries (disaggregated by crop)	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	This indicator measure the % increase in yield of rice by project direct beneficiaries.	Annually	Monitoring and evaluation data	Survey after each cropping season to estimate yield and its increase compared to	CPCU

			collection system	the baseline situation	
Maize	This indicator measure the % increase in yield of maize by project direct beneficiaries	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)	This indicator measure the % increase in yield of targeted agricultural horticultural commodities (tomato, onion, green bean, baby corn, okra, pepper, etc. depending on market opportunity), by project direct beneficiaries.	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	This indicator measures the number of farmers who were provided with agricultural assets or services as a result of World Bank project support. "Agriculture" or "Agricultural" includes: crops, livestock, capture fisheries, aquaculture, agroforestry, timber, and non-timber forest products. Assets include	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

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

	women) targeted by the project.				
Farmers reached with agricultural assets or services - 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 new varieties, irrigation, best agricultural practices (soil management, integrated pest management etc), greenhouses, drones etc. to adapt or mitigate climate risk and build climate resilience.	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
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					
People with strengthened food and nutrition security (number, disaggregated by women and youth)	The number of people benefiting from project interventions across multiple sectors that strengthen food and nutrition security. These interventions may span the	Annually	Monitoring and evaluation of project beneficiaries based on CPCU M&E	Survey and registration of farmers beneficiaries of project climate-smart technologies disseminated to assess the improvement of their food and nutrition	CPCU in partnership with the Directorate of Agriculture

	universally accepted dimensions of food and nutrition security, including the availability of food, access to food, utilization of food and the stability of food systems. All the beneficiaries of climate-smart technologies and innovations (high-yielding and biofortified seed varieties, modern irrigation, mechanization, fertilizers, greenhouse, best cropping practices, etc.) promoted by the project will have their food and nutrition security strengthened. It is expected that at least 100,000 farmers will benefit from climate-smart technologies and given an average size of 8 members per household, a total of 800,000 people will benefit from strengthened food and nutrition security.		digital platform	security induced by the project.	
Women					
Youth					

People provided with access to improved water sources	This indicator measures the cumulative number of people who benefited from improved water supply services that have been constructed through operations supported by the World Bank.	Yearly	CPCU M&E system and National Water and Electricity Company (NAWEC) M&E reports	CPCU M&E digital platform registering beneficiaries with support from the extension agents provided with tablets.	CPCU in partnership with NAWEC
People provided with access to improved water sources - Female (RMS requirement)	This indicator measures the cumulative number of people who benefited from improved water supply services that have been constructed through operations supported by the World Bank.	Yearly	CPCU M&E system and NAWEC M&E reports	CPCU M&E digital platform registering beneficiaries with support from the extension agents provided with tablets.	CPCU in partnership with NAWEC
People provided with access to improved sanitation services	The indicator measures the cumulative number of people who benefited from improved sanitation facilities that have been constructed through operations supported by the World Bank.	Yearly	CPCU M&E system and NAWEC M&E reports	CPCU M&E digital platform registering beneficiaries with support from the extension agents provided with tablets.	CPCU in partnership with NAWEC
People provided with access to improved sanitation services - Female (RMS requirement)	The indicator measures the cumulative number of people who benefited from improved sanitation facilities that have been constructed through operations supported by	Yearly	CPCU M&E system and NAWEC M&E reports	CPCU M&E digital platform registering beneficiaries with support from the extension agents provided with tablets.	CPCU in partnership with NAWEC

	the World Bank.				

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	Extend the target to 2028 following the project closing date extension.	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
Women	Extend the target to 2028 following the project closing date extension.				
Youth					
Innovation platforms established and/or strengthened for value chain actors		Annual	CPCU monitoring and evaluation beneficiary database	CPCU monitoring and evaluation survey	Central Project Coordination Unit (CPCU)
Value chain mapping and Market Digital		Annual	CPCU	CPCU monitoring and	Central Project

Platform established			monitoring and evaluation database	evaluation reports	Coordination Unit (CPCU)
Food-safety laboratories rehabilitated or constructed	Extend the target to 2028 following the project closing date extension.	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		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		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)
Land information system with gender-disaggregated data reporting function developed	This indicator measures the establishment of a basic land information system	bi-annual	Land information system	Review of document and testing of system	CPCU & MLRG&RA

	and it will also measure whether a gender-disaggregated reporting function has been included. The system will be developed based on a land information system and ICT assessment as well as re-engineered business procedures.		documentation and test runs		
Target population with land tenure rights (ownership, joint-ownership, collective ownership, leaseholder/usage) recorded as a result of the project	This indicator will measure how many beneficiaries have recorded land rights as a result of the project. This will include all community members recorded under communal land tenure as well as individual or household level land tenure. Recorded women's vegetable gardens will count as well. While registration of the land is the ultimate target, this indicator will focus on the step of recording of land rights.	bi-annual	Pilot field reports	Use of mobile technology during pilots to record land rights	CPCU & MLRG&RA
Women	Gender-disaggregated breakdown of parent indicator	Same as parent indicator	Same as parent indicator	Same as parent indicator	Same as parent indicator

Youth	Youth-disaggregation of parent indicator	Same as parent indicator	Same as parent indicator	Same as parent indicator	Same as parent indicator
Agribusiness firms fully equipped with modern irrigation equipment of which:	Agribusiness firms fully equipped with modern irrigation equipment disaggregated by youth and women. A total of 40 women and youth-led agribusiness firms of 5 ha each and for a total of 200 ha will be equipped with modern irrigation technologies (drip, sprinkler or mini-central pivot) powered with solar energy.	Annual	CPCU monitoring and evaluation reports	CPCU monitoring and evaluation surveys	Central Project 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		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		Annual	CPCU monitoring	CPCU monitoring and evaluation reports	Central Project Coordination Unit

disseminated with CORAF support			and evaluation database		(CPCU)
Improved climate-smart varieties of certified seed produced, of which:	This indicator measures the volume of improved climate-smart varieties of certified seed produced produced including maize and rice by seed growers, seed cooperatives and other private seed agribusiness.	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	CPCU and Ministry of Agriculture
E-extension platform developed and used	An e-extension digital platform will be developed to provide at country-wide agricultural advisory services to smallholders and agribusinesses.	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 mechanism to support small private investors,	Semi-annual	CPCU monitoring and evaluation database	CPCU monitoring and evaluation reports	Central Project Coordination Unit (CPCU)

	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)				
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		Semin-annual	CPCU M&E database	CPCU M&E reports	CPCU
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%)		Semi-annual	CPCU M&E database	CPCU M&E reports	CPCU
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		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		Annually	CPCU monitoring and evaluation reports	CPCU monitoring and evaluation surveys	Central Project Coordination Project (CPCU) in collaboration with Department of Planning
Beneficiaries satisfaction rate with services and assets provided by the project	Beneficiaries satisfaction rate with services and assets provided by the project. It is expected at project closing at least 80 % of beneficiaries are satisfied.	Every two years starting year 3	CPCU M&E reports	Mobile survey using database of project beneficiaries	CPCU
Smart water meters provided to households	Cumulative number of smart water meters provided to households to support the non-revenue water management and to improve operational efficiency.	Annually	CPCU M&E System	M&E System registering beneficiaries of smart water meters in a database.	CPCU in partnership with MFWR/GERMP
Solar energy efficient pumps provided/rehabilitated	Cumulative number of energy efficient pumps provided or rehabilitated to reduce the carbon	Annually	CPCU M&E System	CPCU M&E system registering number of pumps provided/rehabilitated	CPCU in partnership with MFWR/GERMP

	footprint of the water production systems.				
New/rehabilitated water production centers with high capacity for water supply	Cumulative number of new or rehabilitated water production centers with high capacity for water supply to increase production capacity for water supply	Annually	CPCU M&E system	CPCU M&E system registering into a data base the new or rehabilitated water production centers	CPCU in partnership with MFWR/GERMP
Schools and healthcare facilities connected to water supply system with smart meters	Cumulative number of schools and healthcare facilities connected to water supply system with smart meters.	Annually	CPCU M&E system	CPCU M&E system registering schools and healthcare facilities connected to water supply system with smart meters.	CPCU in partnership with MFWR/GERMP
Irrigated surface developed with the central borehole connection	Cumulative number of hectares of irrigated schemes developed with the central borehole connection and using water-efficient technologies and solar system.	Annually	CPCU M&E system	CPCU M&E system registering number of hectare irrigated yearly	

Annex 1: Detailed Change in Project and Components Costing

Component Name	Original Cost (US$, millions)	AF (US$, millions)		Total Revised Cost (US$, millions)		
		IDA	Counterpart and Beneficiaries contribution	IDA	Counterpart and Beneficiaries contribution	Total
Component 1. Improving the business environment for commercial agriculture development	**19.70**	**24.00**	**0.00**	**42.00**	**1.70**	**43.70**
Subcomponent 1.1: Strengthening the capacity of key organizations and improving value chain coordination and partnership	2.50	0.00	0.00	2.50	0.00	2.50
Subcomponent 1.2: Developing critical marketing infrastructure	4.70	0.00	0.00	4.00	0.70	4.70
Subcomponent 1.3: Strengthening quality and SPS control systems	3.00	0.00	0.00	3.00	0.00	3.00
Subcomponent 1.4: Improving rural connectivity	***9.50***	***15.00***	***0.00***	***24.50***	***1.00***	***25.50***
Subcomponent 1.5: Securing access to land	***0.00***	***9.00***	***0.00***	***9.00***	***0.00***	***9.00***
Component 2: Building a productive and climate-resilient agri-food system	**10.10**	**17.00**	**5.00**	**26.00**	**6.10**	**32.10**
Subcomponent 2.1: Promoting modern irrigation in women and youth-led agribusiness firms	5.76	0.00	0.00	5.00	0.76	5.76
Subcomponent 2.2: Increasing access to technology, innovation, and	***4.34***	***17.00***	***5.00***[11]	***21.00***	***5.34***	***26.34***

[11] Fertilizers costs paid by beneficiaries based on a 50 percent subsidy rate.

advisory services						
Component 3: Mobilizing productive private investments along the value chains	13.92	0.00	0.00	10.00	3.92	13.92
Subcomponent 3.1: Building the operating capacities of partner FIs	0.50	0.00	0.00	0.50	0.00	0.50
Subcomponent 3.2: Co-funding productive investments to leverage private capital mobilization	12.92	0.00	0.00	9.00	3.92	12.92
Subcomponent 3.3: Technical assistance to smallholder and SME promoters of PISs	0.50	0.00	0.00	0.50	0.00	0.50
Component 4: Project coordination, monitoring and knowledge management	**4.17**	**4.00**	**0.00**	**7.00**	**1.17**	**8.17**
Component 5: Contingent Emergency Response	0.00	0.00	0.00	0.00	0.00	0.00
Component 6: Improving access to water	**0.00**	**23.00**	**0.00**	**23.00**	**0.00**	**23.00**
Subcomponent 6.1: Expansion of Water Supply and WASH to Selected Schools in Rural Areas	***0.00***	***14.00***	***0.00***	***14.00***	***0.00***	***14.00***
Subcomponent 6.2: Meter Replacement, Energy Efficiency Improvements and Non-Revenue Water Improvement	***0.00***	***4.50***	***0.00***	***4.50***	***0.00***	***4.50***
Subcomponent 6.3: Provision of Water for Irrigation	***0.00***	***4.50***	***0.00***	***4.50***	***0.00***	***4.50***
Project	**47.89**	**68.00**	**5.00**	**108.00**	**12.89**	**120.89**

Annex 2: Detailed Project Description

1. **The Gambia, as an agriculture-based economy is facing a challenging economic context.** Among others, this context results from the vulnerability of the agricultural sector to the adverse effects of climate change, the complexity of the land tenure and the limited access of small holder farmers to quality inputs aggravated by the global prices spike for food and fertilizer. This situation is having negative effects on the country food security and call for urgent actions (i) to improve smallholders access to fertilizers and other innovations to boost food production to promote transition from a subsistence to more a market-oriented agriculture and improve food security; (ii) to mitigate climate change effects by improving access to water to further expand irrigation to build a more climate-resilient agriculture while supplying quality water for drink for rural population to satisfy a crucial need; and (iii) to address land tenure insecurity and related conflicts to enable a more incentive agribusiness environment.

Improving access to fertilizers and innovations

2. **Small scale farmers face difficulties in accessing essential inputs due to many constraints.** The low adoption of productivity-enhancing technologies and inputs results from a lack of access to credit, the unavailability of such technologies and inputs on the market in remote areas, their lack of affordability, as well as farmers' aversion to risk and inadequate extension services. This results in lower productivity and hampers the sector's overall growth. The promotion of country-wide adoption of quality inputs including climate-smart seed varieties (high-yielding, early maturing, drought-resistant, salt-pest tolerant, bio-fortified), a combination of organic and mineral fertilizers along with the use of water-efficient irrigation technologies will be needed to boost agricultural productivity and production and improve food and nutrition security. More than ever, increased investments in the agriculture and agribusiness sector—public and private—will be essential for improving food and nutrition security and achieving a resilient, inclusive, sustainable, and efficient economic recovery.

Improving access to water, sanitation and hygiene

3. **Access to water is a significant challenge faced by Gambian farmers given the erratic rainfall patterns and dependence on rainfed agriculture.** Even when the Gambia is endowed with ample water resources, its economic value is not fully exploited. About 11.5 percent of The Gambia's surface area is covered by water and 20 percent is considered as wetland. The Gambia has considerable irrigation potential (nearly 620,000 hectares) of which less than 3 percent under irrigation. Virtually all the drinking water is derived from groundwater. The transboundary Gambia River flows through The Gambia and its basin fully covers the country, but the water is too saline to exploit. The River Basin is managed by the The Gambia River Basin Development Authority *(Organisation pour la Mise en Valeur du Fleuve Gambie,* OMVG) which is the Gambia River Basin Development Authority, which was established in 1978 and manages several river basins among the riparian countries: Senegal, The Gambia, Guinea-Bissau, and Guinea. The economic use of water resources remains limited despite their abundance. Surface water resources have been mapped by OMVG, but very limited studies have been done on groundwater. Many residents drill wells without a clear understanding of the hydrology of the area, such as the quality of the water and the sustainability of the source. No single authority is clearly responsible for monitoring boreholes and sanctioning illegal wells. The Department of Water Resources within MoFWRNAM provides limited services in areas where NAWEC coverage is not in place and is responsible for monitoring groundwater resources, though it is not adequately resourced.

4. **Water production does not meet demand.** Potable water supply and sanitation in The Gambia is provided by the NAWEC. NAWEC has been supported in the last few years to improve its operational efficiency and this can be seen mostly in urban water areas but little impact in rural areas. The current total production capacity of NAWEC water supply is 6613.5 m^3/hr. Approximately 91 percent of water distribution by NAWEC is in the GBA and the part of West Coast Region. The rural population (904,263 in the 2013 census) accounts for most farmers but receives only about 9 percent of water produced by NAWEC. The intervention will support increasing water supply to the rural areas to enhance agribusiness and to improve the health and well-being of smallholder farmers. Additionally, school children, especially girls, in rural areas will have time to attend classes, since they would not have to travel long distances to fetch water for their families.

5. **The rural areas are facing many challenges in terms of access to WASH.** These include (i) old infrastructure and limited reticulation; (ii) limited treatment as only chlorination is in most cases or none; (iii) inadequate storage capacity and leaking tanks; and (iv) inadequate water supply due to population growth and the inability of existing systems to meet current demand. Water supply and sanitation to schools and health centers is woefully inadequate and the project will support the connection of water to these institutions.

6. **To improve project outcomes for target communities and beneficiaries, there is a need to improve access to water supply and sanitation.** This will accelerate the development of inclusive and resilient agricultural value chains since access to water is essential for smallholder farmers and agribusiness initiatives. The improvement in access to WASH is essential for smallholder farmers and their families, especially women and children. Time spent in fetching water for domestic use by women and girls can be channeled into economic activities for women and the girls will have the time to attend school without being late. This will improve the socio-economic status, health and well-being of project beneficiaries.

7. **This AF includes US$23 million to scale up activities and project scope, and further improve GIRAV development outcomes on target communities.** These will be achieved by increasing water supply to (i) promote irrigation and develop inclusive and resilient agricultural value chains; and (ii) improve access to WASH for smallholder farmers and families to improve their health and well-being.

Securing access to land

8. **Inefficient land administration processes, insecure land tenure, and land disputes in rural areas negatively affect competitive agricultural value chains for smallholder farmers and agribusinesses**. A quarter of the population (24 percent) feels insecure about their land tenure[12], which directly impacts agriculture. Agriculture productivity depends on technology adoption, efficient resource allocation, credit use, and fertile soil. Security of land tenure motivates and incentivizes landholders to invest in improved varieties, fertilizer, mechanization, and improved management practices to increase crop yields.[13] The cost and time to register property have been identified as one of the three major constraints faced by the private sector in The Gambia,[14] negatively affecting the commercialization of agriculture. Smallholders and agribusinesses alike are negatively affected by land disputes, which represent 41 percent of all

[12] Property Rights Index (Prindex), 2018. Gambia. Securing Land and Property Rights.
[13] Eastman, C., 1990. Gambian usufruct tenure. Help or hindrance to agricultural production?
[14] World Bank (2009): The Gambia. An Assessment of the Investment Climate.

conflicts in rural areas, making it the most common form of conflict.[15] However, it is estimated that less than 10 percent of the Gambia's customary land boundaries have been surveyed and demarcated.[16] The Gambia's Agriculture and Natural Resources Policy (2017-2026) mentions land tenure as an overall constrain to agriculture development, noting that The Gambia's land tenure system is making productive land inaccessible to potential additional users. The discrimination of the existing system against women's land ownership is highlighted as well. Secure land tenure would encourage resource conservation and sustained agricultural productivity[17] and landholders with tenure security can expect to leave the land to their heirs, incentivizing them to conserve the resources.[18]

9. **Most of The Gambia's land mass is governed by customary tenure (80 percent) but capacities of land administration institutions are low and the legal framework for land is outdated.** The Government recognizes three forms of land tenure (freehold, leasehold, and customary), each of which is governed by different rules and institutions. The State Lands Act (1991) and the Lands (Regions) Act (1991) are the key land laws in the country, which were not updated since their passage and therefore do not address current land sector challenges. Technical support from the World Bank in 2023 confirmed that institutional capacity for land administration is very weak.[19] The Gambia's land records are centralized within the MLRG&RA and the Deeds Registry in the Attorney General's Chambers. The lack of a digital land information system makes it difficult to identify potential overlapping claims to the same parcel.

10. **Customary land has never been demarcated and registered systematically.** Existing land registration procedures are costly, complex, and uncoordinated. A sporadic and inefficient surveying and registration system has resulted in incomplete registries and multiple allocations of the same parcel. The lease process for customary lands is complex, involving more than 90 steps. The Gambia's geodetic network, which is required for efficient surveying, was established in 2002 but was not maintained and requires the re-establishment of geodetic control points. Since there are no systematic procedures to formally demarcate or register group rights or the boundaries of extended family lands, villages, and chiefdoms, it is difficult to verify the jurisdiction of customary authorities when there are competing claims over the same land. The Government is committed to address land sector challenges, as evidenced by the development of its first national land policy with support from the West Africa Coastal Areas Resilience Investment Project 2 (P175525).

11. **Women's land rights are limited while the Bank has supported women to secure their land rights in the past.** Under customary tenure, land is regarded as communally owned and the ownership of land by women is restricted. The customary system is patrilineal, and fathers bequeath land to their sons, and women's access to land mainly through their spouses or male relatives. A limited number of women is included in the administration process related to land, limiting women's ability to exercise their legal right to land.[20] Some experiences exist that demonstrate how women's land rights can be strengthened. The GCAV Project – P125024 allowed women horticultural producers to increase their land plot from less than

[15] Gambia Bureau of Statistics, 2017. Integrated Household Survey 2015/16. Volume II. Socio-economic Characteristics.
[16] World Bank, 2013. Improving Land Sector Governance in The Gambia: Implementation of Land Governance Assessment Framework (LGAF) http://siteresources.worldbank.org/INTLGA/Resources/Gambia_Full_Report.pdf
[17] Mechiche-Alami, A., & Abdi, A. M., 2020. Agricultural productivity in relation to climate and cropland management in West Africa.
[18] World Bank, 2013. Improving Land Sector Governance in The Gambia: Implementation of Land Governance Assessment Framework (LGAF). *http://siteresources.worldbank.org/INTLGA/Resources/Gambia_Full_Report.pdf*
[19] Findings from The Gambia Integrated Urban, Coastal Resilience, and Land Program (P172822)
[20] World Bank, 2013. Improving Land Sector Governance in The Gambia: Implementation of Land Governance Assessment Framework (LGAF).*http://siteresources.worldbank.org/INTLGA/Resources/Gambia_Full_Report.pdf*

0.25 hectare to five hectares by obtaining official land leases. GIRAV is building on these positive experiences for the new 40 WYLAF targeted by the project who already get their land leases from the *Alkalo* as primary condition to benefit from the irrigation infrastructure to secure these investments. All the 40 WYLAF were supported by the project to obtain their official land documents in a systematic, efficient, and participatory manner. This included obtaining a consent letter from the landowners, endorsed by the village heads (*Alkalo*), districts chiefs (*Seyfalu*) and Area Councils. This AF includes US$9 million to pilot these new systematic customary land rights registration processes based on the existing experiences while reinforcing the land administration institutional capacity, taking advantage of digital technologies for an efficient and transparent registration of land rights for land tenure security and minimized land conflicts.

Annex 3: Economic and Financial Analysis

1. **The Gambia Inclusive and Resilient Agricultural Value Chain Development Project (GIRAV)** aims at promoting (i) the development of inclusive, resilient, and competitive agricultural value chains, focusing on smallholder farmers and agribusinesses; and (ii) improved water supply and sanitation in project target areas.

2. **The Project Cost-Overruns**: Due to the surge in fertilizer prices following Russia's invasion of Ukraine, the project urgently financed a fertilizer program to prevent a decrease in agricultural productivity. This initiative aimed to ensure an adequate food supply and mitigate the potential impact of the crisis on food security. However, this initiative resulted in cost overruns, which the project team is currently working to mitigate. Additionally, limited access to WASH and inadequate land rights for women were identified during implementation, requiring AF. This additional funding will (i) bridge the gap created by the fertilizer program, (ii) improve WASH, and (iii) improve land administration to secure land tenure for women and youth horticultural producers in The Gambia.

3. **The Economic and Financial Analysis has been updated to reflect the AF and demonstrates that the project remains economically viable**. Public financing remains appropriate, as improving access to fertilizers in addition to the high-yielding seed varieties, planned in the parent project, will lead to increased agricultural productivity and production, resulting in more surplus for the market. Expanded water supply will contribute to public health, human development, and economic growth by improving access to basic water service for thousands of beneficiaries. This, in turn, will allow children to attend school and enable adults (especially women) to engage in additional productive activities instead of spending several hours each day searching for water. Additionally, expanded irrigation systems will increase agricultural productivity in project areas, while secure access to land is expected to boost agricultural investment and reduce land disputes.

4. **Accounting for the AF, the project generates an economic an internal rate of return (IRR) of 29.93 percent and a NPV of US$160.11 million including environmental benefits valued at the high estimate range (on average, 97 US$/tCO2e). This is based on a total budget of US$108 million of which US$40 from the initial IDA financing and US$68 from the additional IDA financing.** The Economic analysis results without GHG benefits show an EIRR of 29.86 percent and NPV of US$159.87 million. The sensitivity analysis indicates that results remain robust under various scenarios.

Methodology

5. The economic and financial analysis of this AF is based on a cost-benefit analysis. The analysis: (i)

identifies quantifiable benefits and costs generated/incurred by the project; (ii) 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), EIRR, and 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.

Expected Benefits

6. The project activities are anticipated to yield manifold benefits for smallholders and SMEs involved in the targeted value chains. The economic and financial analysis builds upon the financial models established in the parent project. An update has been provided on the production models influenced by the AF, specifically the fertilizer program and the irrigation system: (i) Rainfed rice; (ii) Maize; (iii) Modern agribusiness firms catering to women and youth; and (iv) SRI irrigated rice.

7. The enhanced water supply and sanitation is expected to yield numerous benefits, including time savings resulting from reduced effort in water collection, enabling women to participate in economic activities. Moreover, it is anticipated to lead to a decline in waterborne illnesses due to the consumption of safer water, generate consumer surplus and diminish non-revenue water losses. The analysis also encompasses the benefits stemming from improvements in feeder roads.

8. The land activities are expected to yield additional benefits that are challenging to quantify at this stage. Secure land tenure increases investment likelihood, as individuals feel assured of reaping full returns. Moreover, cost reduction in land administration services and enhanced service quality are anticipated to bolster tenure security, prompting increased investments. The mapping and digitization of land records are also projected to enhance perceptions of tenure security, fostering more investments and an improved business environment. Additionally, these efforts are expected to decrease land disputes and conflicts.

Results of the Financial Analysis

9. Overall, the models for agricultural activities assessed as part of this analysis show that project intervention are financially viable, generating significant amounts of additional household income and attractive returns on investment (see **Error! Reference source not found.**). The financial models[21] were developed over a 20-year period. Overall, all agricultural activities show positive NPVs and very attractive Internal Rates of Return (IRRs). Financially, the project could generate significant additional income for beneficiaries and attractive returns on investment, with an average FIRR of 39 percent.

Table A3- 1: Summary of the financial profitability indicators

Financial Analysis: Summary results	FIRR	NPV @ 6%	
	(%)	(GMD)	(US$)
SRI Irrigated rice (ha)	22	350,755	5,815
Rainfed rice (ha)	30	8,504	141
Maize (ha)	91	43,520	721

[21] The parameters of the models were developed based on the guidance from the GIRAV initial EFA, and technical discussions with the CPCU team.

Financial Analysis: Summary results	FIRR	NPV @ 6%	
	(%)	(GMD)	(US$)
Modern vegetable garden	24	9,012,652	149,414
Poultry – broiler	76	2,586,019	42,872
Rice seed production	39	1,877,478	31,125
Horticulture production	24	1,648,685	27,332
Land preparation service	24	2,171,121	35,993
Mobile rice milling service	26	1,427,824	23,671
Poultry – layer	51	2,370,525	39,299
Cashew Processing	21	79,682,866	1,321,002
Horticulture Enterprise	37	428,823,935	7,109,150

Greenhouse Gas Accounting

10. Environmental co-benefits have been updated to account for fertilizer provision and expansion of the irrigation system. The carbon balance/sequestration potential of the Project was estimated using the EX-ACT tool. The carbon balance is defined as the net balance of all GHGs expressed in CO2 equivalent (CO2eq) that were emitted or sequestered due to project implementation (WP) compared to a business-as-usual scenario (WOP). GHG accounting indicates that the project 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 4,994 tCO2-e sequestered over the full project implementation period.

Results of the Economic Analysis

11. The economic analysis relies on the financial 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. The economic costs of the project are then subtracted. All the models show that the project is financially and economically viable.

12. Economically, the project could generate at a 6 percent discount rate (i) an EIRR of 29.86 percent and NPV of US$159.871 million without GHG benefits; (ii) an EIRR of 29.89 percent and NPV of US$160.024 million including environmental benefits valued at the low estimate; and (iii) an EIRR 29.93 percent and a NPV of US$160.117 including environmental benefits valued at the high estimate range from a total budget of US$40 million of the initial financing plus an additional US$68 million for the AF.

13. 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.

Annex 4: Climate Change Considerations

1. The AF will contribute to the World Bank's Climate Change Action Plan (2021-2025), the National Climate Change Policy of The Gambia,[22] The Gambia's Long-Term Climate-Neutral Development Strategy

[22] Ministry of Environment, Climate Change, Water (2016): National Climate Change Policy of The Gambia.

2050,[23] and the Second Nationally Determined Contribution (NDC).[24]

2. **Like the original project, the AF is anchored on a climate-resilient approach.** The agricultural activities focused on increasing the adoption of climate-smart innovations, technologies, and best 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 GHG emissions; and best environmentally friendly technologies and practices. These activities will be supported under Subcomponent 2.1 with an estimated budget of US$7 million.

3. The Gambia's Climate Change Policy recognizes that secure land tenure and access rights are essential for enabling community-based adaptation, as well as harnessing any related mitigation outcomes. Further, the new land activities will contribute to The Gambia's second NDC of 2021, which seeks a 49.7 percent GHG reduction by 2030. In line with The Gambia's Long-Term Climate-Neutral Development Strategy 2050, the new land activities will contribute to reduce emissions and enhance carbon storage in the Agriculture, Land use, land-use change, and forestry sector. It is the project's intent to address impacts of climate change on the project's beneficiaries in line with these policies, specifically related to the NDC's planned adaptation actions on (i) climate-resilient land use mapping, planning and information systems; and (ii) developing integrated approaches to build rural climate resilience in The Gambia. The project will support climate change measures along these lines as follows:

(a) **Land registration pilots to incentivize climate action**: Evidence suggests that registering land rights incentivizes landholders to support mitigation measures by making long-term investments, including reforestation[25] and climate-smart agriculture.[26] Tenure security will also be key for enabling mitigation related climate finance programs such as REDD+ and reforestation funds. Knowing the rightful landowners and related land boundaries will play a crucial role for benefit sharing arrangements and therefore for enhancing the resilience of vulnerable communities against climate change.[27] This will be supported with US$3.5 million under Subcomponent 1.5 (c) through a systematic customary land registration pilot, which will also include climate-resilient spatial planning (see below).

(b) **Climate-resilient spatial planning to protect forests, mangroves, and ecologically sensitive areas and avoid unsustainable land use changes**: As part of the systematic customary land registration pilots, the project will support the development of climate-resilient spatial plans at the customary community level. In addition to mapping land boundaries, the pilot work will also demarcate forests, mangroves along the river Gambia, and any other ecologically sensitive ecosystems based on satellite imagery in the pilot areas. The spatial plans will also identify and demarcate high-risk disaster zones, thereby supporting community resilience and adaptation measures. For example, the spatial plans will control development via zoning approaches that would identify no-built or no-farm zones to avoid unsustainable land use changes. This will also support mitigation measures such as the protection of forest, mangroves, and other ecologically sensitive areas from illegal encroaching and logging, and

[23] Government of The Gambia (2022): The Gambia's Long-Term Climate-Neutral Development Strategy 2050.
[24] Ministry of Environment, Climate Change, and Natural Resources (2021): Second Nationally Determined Contribution of The Gambia.
[25] Ojanen, M., Zhou, W., Miller, D., Nieto, S., Mshale, B. & Petrokofshy (2017). What are the environmental impacts of property rights regimes in forests, fisheries and rangelands? Environmental Evidence.
[26] FAO (2014). Climate-smart agriculture & resource tenure in Sub-Saharan Africa: A Conceptual Framework.
[27] Forest Carbon Partnership Facility (FCPF) (2016). Carbon Fund – Methodological Framework.

support flood and drought management. The spatial plans will also inform local-level approaches for the resilient management of land, forest, and mangrove resources. This climate-adaptive planning will be based on a community-led approach to ensure ownership of the plans. This will be supported as part of the US$3.5 million pilot activities under Subcomponent 1.5 (c) referenced above.

(c) **Land data for climate mitigation and adaptation measures**: Land ownership and land use data protects property rights and their owners during disasters and enhances early warning systems, systematic evaluation of disaster damage and development of climate disaster compensation and insurance schemes.[28] This will require MLRG&RA to make the proposed land information system accessible to other institutions, including Ministry of Environment, Climate Change, and Natural Resources and National Disaster Management Agency, which would contribute to improved responsiveness to climate induced disasters. The required minor renovations of land offices would be done in a climate-sensitive manner by ensuring that renewable energy, such as solar power, will be supported. The ICT equipment will be procured to align with energy efficiency standards and shall use the best available technology or match or surpass country-appropriate technology benchmarks in performance in compliance with action 9.5 of the Common Principles For Climate Mitigation Finance Tracking (2023). The digitalization of the land administration system will be financed under Subcomponent 1.5 (b) with US$3.45 million.

(d) **Climate change considerations in capacity building programs and legal reforms**: To support the above referenced activities, significant capacity building efforts and legal reforms will need to be implemented. To ensure that these activities are carried out in a climate-resilient manner, all capacity building programs, and legal reforms will include climate-related aspects that are relevant to land administration, land registration, land information systems, and land use planning in line with the NDC. This will include capacity building on how other countries have streamlined adaptation and mitigation measures in land legislation in the region; on processes and principles for climate-resilient land use planning; and the use of land data by different government entities for designing adaptation and mitigation measures. This will be supported under Subcomponent 1.5 (a) with US$2.05 million.

(e) **Climate change considerations for water:** The investments in water focus on improving access to the poor and vulnerable in rural areas. The intervention will lead to improved access to water supply services preventing citizens from especially women travelling long distances to obtain water and making them less vulnerable to climate change-related risk of droughts. The water supply services will be dependent on solar powered boreholes which reduce GHG emissions as compared to water from the grid or from gensets in areas where the grid is not available. The boreholes will be equipped on-site with solar panels. In addition, the water metering intervention will contribute managing water services efficiently, reducing losses, metering and pricing water, a way of enabling water savings by end users through a better demand management. These activities will be supported under Component 6 with about US$23.00 million.

[28] World Bank (2020): Solid Ground: Increasing Community Resilience Through Improved Land Administration and Geospatial Information Systems.