

# GEF-8 WORLD BANK PCN STAGE/GEF DATA SHEET

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## General Project Information

### Project Title

Third Additional Financing to the Food Systems Resilience Program (FSRP)

### Region

Sierra Leone

### GEF Project ID

11576

### Country(ies)

Sierra Leone

### Type of Project

FSP

### GEF Agency(ies):

World Bank

### GEF Agency ID

### Executing Partner

Environment Protection Agency, Ministry of Agriculture

### Executing Partner Type

Government

### GEF Focal Area (s)

Climate Change

### Submission Date

3/20/2024

### Project Sector (CCM Only)

Climate Change Adaptation Sector

### Taxonomy

Community-based adaptation, Climate Change Adaptation, Climate Change, Focal Areas, Disaster risk management, Least Developed Countries, Partnership, Type of Engagement, Stakeholders, Participation, Communications, Strategic Communications, Public Campaigns, Awareness Raising, Beneficiaries, Local Communities, Civil Society, Community Based Organization, Gender results areas, Gender Equality, Knowledge Generation and Exchange, Gender Mainstreaming, Sex-disaggregated indicators, Capacity Development, Capacity, Knowledge and Research, Knowledge Generation, Training, Workshop, Knowledge Exchange, Influencing models, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Information Dissemination

### Type of Trust Fund

LDCF

### Project Duration (Months)

60

### GEF Project Grant: (a)

18,348,624.00

### GEF Project Non-Grant: (b)

0.00

### Agency Fee(s) Grant: (c)

1,651,376.00

### Agency Fee(s) Non-Grant (d)

0.00

### Total GEF Financing: (a+b+c+d)

20,000,000.00

### Total Co-financing

60,000,000.00

### PPG Amount: (e)

0.00

### PPG Agency Fee(s): (f)

0.00

PPG total amount: (e+f)

0.00

Total GEF Resources: (a+b+c+d+e+f)

20,000,000.00

Project Tags

CBIT: No NGI: No SGP: No Innovation: No

## Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? (iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B “project description”. (max. 250 words, approximately 1/2 page)

**Sierra Leone is one of the poorest countries in the world, with a Human Development Index of 0.452 and ranked 182 out of 189 countries in 2019, and with GDP per capita of only US\$509 in 2020.** While the national poverty rate has declined by 5.6 percentage points over the past decade, from 62.4 percent in 2011 to 56.8 percent in 2018, it remains unacceptably high. Moreover, poverty is also highly concentrated in the rural areas (with a rural poverty incidence of 78.7 percent) many of which are agricultural households. More than 70 percent of the rural poor are women, most of whom are engaged in agriculture.

**Prior to the Ebola Virus Disease epidemic and the collapse of iron ore prices in 2015, Sierra Leone’s economy was growing by an average of 7.8 percent annually during the period 2003-2014.** This growth was primarily driven by agriculture, mining, and services. After suffering a 20.6 percent contraction in 2015, the economy resumed growth, but at a slower pace, averaging 4.7 percent per annum during the period 2016–2019, supported by recovery in the agriculture and services sectors. Following the COVID-19 outbreak in 2020, and the subsequent restrictions and disruption to the global supply chains, the economy contracted by 4 percent. Since 2016, average annual inflation in Sierra Leone has exceeded 10 percent in each year, with a high of 18.2 percent in 2017. In 2021, inflation was 11.9 percent (World Bank 2022). Economic growth resumed in 2021 at an estimated rate of 3.1 percent.

**Food insecurity remains a challenge for Sierra Leone and appears to be worsening.** The population suffering from food insecurity increased from 45 percent in 2010, to 57.3 percent by 2020. About 4.7 million people (3.3 million in rural areas and 1.4 million in urban areas) are projected to experience food insecurity for the period June – August 2022, of whom 1 million are projected to be at crisis level, needing food assistance. Severe acute malnutrition increased from 0.6 percent in 2017 to 3.7 percent in 2020, whereas global acute malnutrition increased from 2.6 percent to 6.7 percent over the same period. There is some level of agricultural trade (formal and informal) between Sierra Leone and its neighbors (mostly Guinea), which helps to stabilize price and improve food security. However, there are still many challenges which discourage trade and there is a need to streamline processes.

**Key development challenges faced by Sierra Leone are high population growth rate, dependence on mining, low agricultural productivity, and vulnerability to climate change.** The country’s high population growth rate (2.1 percent in 2020) has slowed down per capita GDP growth to an average of only 2.2 percent annually. The economy also remains highly vulnerable to domestic and external shocks due to its dependence

on mining which is sensitive to shifts in global demand and prices. Yields of main crops are estimated to be about a third of their potential productivity levels and majority of agriculture is rain-fed and subject to erratic weather changes.

**Climate change threatens food security and the livelihoods of most of the population.** Changes in precipitation and temperature, increase in risks of droughts, floods, and increase in sea level effect the country's agriculture, water, energy, infrastructure and coastal areas. Reliance on rain-fed farming methods and poor infrastructure render the agriculture sector highly vulnerable to rising temperature and extreme weather shocks linked to climate change. Extreme weather events are expected to increase in frequency and intensity, further exposing Sierra Leone's agricultural sector and wider economy to disruption and instability. With regional climate modelling projections demonstrating increased temperatures (approx. +1.7 °C for RCP4.5 and 2.3°C for RCP8.5) and rainfall changes from -5% to 5% with high variability, this is likely to change agriculture practices and production. For instance, rice being the staple food crop in Sierra Leone and being grown mainly in smallholder farming under rain-fed conditions, agriculture and farmers' livelihoods are especially vulnerable to changes in precipitation. This is compounded by the persistent rural poverty and farmers without insurance or the resources to invest in irrigation and other agricultural technologies. These climate impacts are also likely to increase water requirements for crops, competition for water resources, as well as incidence of pest and disease outbreaks.

Please note that the figures are failing to attach - figures available in the publicly disclosable 'Project Document' uploaded in the roadmap. [*Figure 1. Spatial distribution of extreme temperatures observed during recent decades. Observed trends between 1981 and 2020 of annual maximum temperatures (left). Mean projected temperature and projected change for 2041-2070 (two maps on the right)*]. & [*Figure 2. Spatial distribution of extreme precipitation observed during recent decades*]

The extreme events are expected to increase in the future. For instance, RCMs projection for RCP4.5 and RPC8.5 has shown a significant positive trend of warm spell days and high rainfall events (Fig. 1 and 2). The increased occurrence of warm spells is going to increase crop water requirement and therefore play a key role in crop and livestock production by reducing water availability in water limited areas. With the expected increase of height rainfall event, which will potentially lead to flooding, rain fed agriculture is at risk of crop and livestock losses and could significantly affect food security

**Labor is a major channel through which climate change affects agriculture – i.e., through the agricultural workforce and thus economic output.** Heat stress directly affects labor supply (working hours) by changing the allocation of time to labor beyond certain thresholds. Climate change also reduces performance during working hours (labor productivity) when workers under severe heat stress slow down and take more breaks to rehydrate and cool down. Both labor supply and labor productivity are projected to decrease under future climate change in Sierra Leone. The implied labor productivity shock for agriculture is 14.5 percent under dry/hot conditions and 9.5 percent in wet/warm conditions. These effects are significantly higher than are those for industry and services.

**The Government of Sierra Leone recognizes the measures needed to tackle the above issues.** The government aims to implement a comprehensive strategy to meet the core challenges of climate change, low agricultural productivity, accelerated land degradation, and limited food trade flows between surplus and deficit

areas, would improve food security and the food system's resilience in the region. Sierra Leone will seek to intensify production of the crops of regional food security importance, such as rice and cassava, to effectively participate in interregional trade and contribute to the flow of food to improve food security in the region. Sierra Leone will also benefit from positive spillovers from regional R&D capacity and other cross border collaboration (such as regional pests and disease monitoring, meteorological forecasts, etc.) to provide hydrometeorological services and early warning information to producers. Hence its decision to participate in FSRP.

**With increasingly erratic and poorly distributed rainfall, and more widespread and frequent extreme droughts and floods, productivity in major cropping, livestock, and fishery systems must be boosted through greater availability and uptake of climate-resilient and climate-smart technologies and management practices, emphasizing water control and conservation.** Tradeoffs might arise between agricultural productivity growth and livelihood promotion, on one hand, and protection and conservation of biodiversity, landscapes, forests, and watersheds, on the other. Collaborative efforts are therefore essential, aiming to develop climate-smart adaptive measures and platforms that boost value chain performance and safeguard livelihoods in Sierra Leone's diverse agroclimatic zones in the face of ongoing climate change. Rising pest- and disease-related production and marketing losses, declining agro-biodiversity, and loss of local varieties and breeds must be reversed. Large-scale and small-scale irrigation potential must be more systematically exploited. The agricultural research and extension system must be resourced with adequate personnel, materials, and equipment. Farmer and trader organizations must be strengthened. Women's rights to productive resources and technologies must be increased and secured. Private sector investment in climate-smart market and value chain infrastructure must be incentivized.

**Agriculture is central for economic growth and poverty alleviation in Sierra Leone.** The sector contributed about 60 percent to the country's GDP in 2020, and 28 percent (9 percent without wood products) to total exports in 2018. The sector employed 55 percent of the population in 2019 and remains essential for pro-poor economic growth in Sierra Leone, as rural areas support around 70 percent of the total population. The country is endowed with abundant rainfall (2,500 – 5,000 mm per annum), and the land is suitable for the cultivation of a wide range of crops including rice, cassava, maize, millet, fruits, and vegetables. It is also suitable for rubber, cocoa, coffee, oil palm, and livestock rearing.

**Sierra Leone has significant untapped agricultural resources; however, productivity remains low.** Less than 15 percent of the country's 5.4 million hectares of arable land is cultivated (Stats SL 2019). There is agroclimatic variation from lowlands to highlands (1,945 meters) that allows for cultivation of a wide variety of crops, including rice, cassava, maize, millet, cashew, rubber, ginger, vegetables, fruits, sugarcane, cocoa, coffee, and palm oil. Yields of main crops are estimated to be about a third of their potential due to weak research and extension systems, low use of fertilizers, limited access to financial services, and poor value chain integration, among others. Due to low productivity and production, the country has been unable to meet the local demand for rice, its principal staple food. In recent years, close to 40 percent of national rice consumption is imported annually (worth ca. US\$200 million in 2021), and the gap is growing.

**Sierra Leone's diverse agroecology is suitable for production of a wide variety of horticultural products.** Over half of all smallholder farmers cultivate some horticulture crops.<sup>4</sup> Between 2011 and 2020, the area under vegetable cultivation increased from 50,000 to 125,000 hectares, likely to meet the demand from growing

urbanization. The area planted with fruits stayed constant over that time at around 60,000 hectares. Horticulture trade is minimal; in 2019, the only exports with a value of more than US\$1 million were mushrooms at US\$2.8 million, strawberries at US\$1.9 million, and tomatoes at US\$1.3 million. Meanwhile, onion was the only horticultural import valued at more than US\$1 million in 2019 with a value of US\$8.8 million (FAOSTAT 2022).

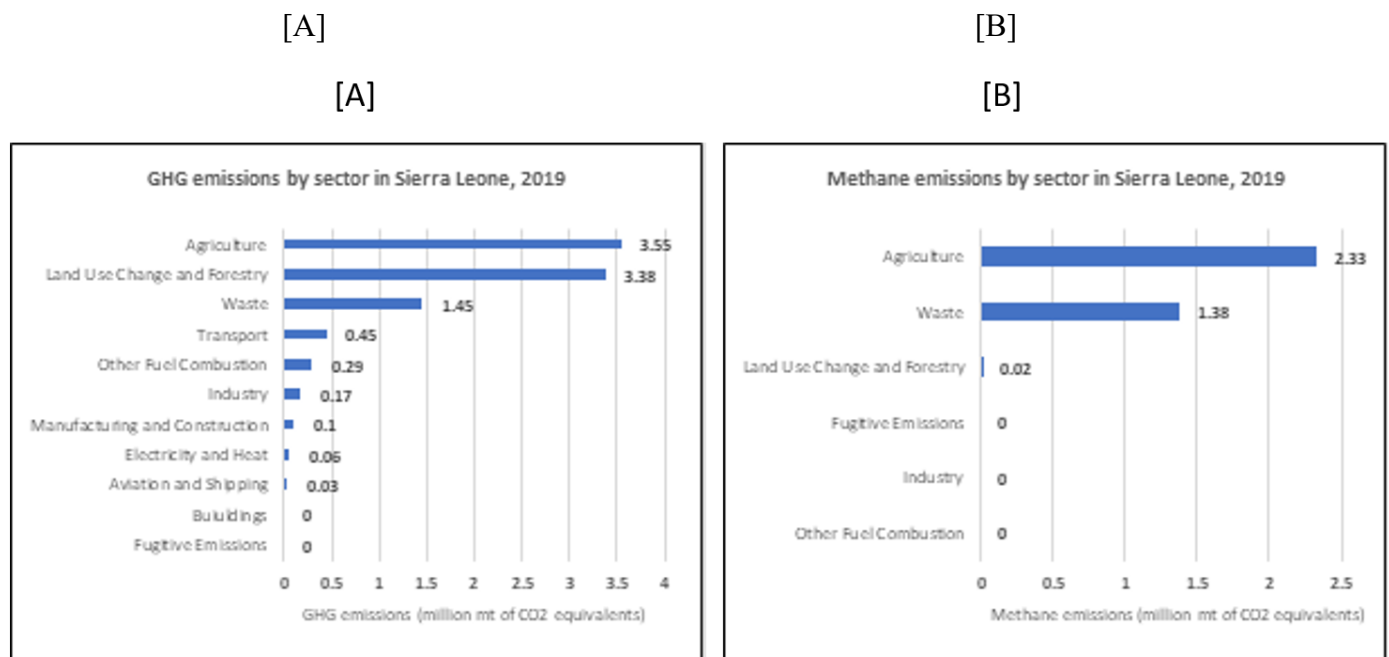
**Climate change risks are increasing in Sierra Leone.** These risks include rising temperatures, extreme weather events (such as intense single rainfall episodes, floods, and droughts), and unpredictable cropping calendars. These climatic changes will negatively affect crop production, such as rice which is highly sensitive to increased humidity and rainfall intensity and is vulnerable to pests that thrive in higher temperatures. These adverse impacts have heightened the need for timely, reliable, tailored, and impact-based information for undertaking adaptation and mitigation measures by the various stakeholders, including smallholder farmers. However, according to the 2021 Country Hydromet Diagnostic, SLMA has a limited number of functional observation infrastructure, limited forecasting capability, and an inadequate coordinating framework for addressing and communicating climate and weather-related emergencies, among its many other weaknesses. Out of a possible score of 10 points, SLMA obtained an average score of 1.7 points on the said diagnosis.

**World Bank modeling of the impacts of alternative climate risk scenarios sheds light on the potential magnitudes of these impacts on the productivity of the overall agricultural sector, and for production of specific crops under rainfed conditions.** Four climate risk scenarios are modeled – two at global level, two at country (local) level. The two global scenarios pertain to climate change mitigation: (i) an optimistic mitigation scenario with global warming of 1-1.9oC; and (ii) a pessimistic mitigation scenario in with global warming of 3-7oC. The two local climate risk scenarios assume: (i) a dry/hot future; and (ii) a wet/warm future. Also modeled at country level are the sectoral impacts of labor productivity shocks under each climate risk scenario. As expected, rainfed crop production registers smaller and less steep declines under the optimistic mitigation scenario than under the pessimistic one – i.e., a 5 percent decline by 2050 under the optimistic scenario vs. an 8.5 percent decline under the pessimistic scenario. After 2027, dry/hot conditions lead to significantly larger production shocks than do wet/warm conditions. By 2050, dry/hot conditions would lead to a production shock of 10 percent compared to 7.5 percent under warm/wet conditions. Both scenarios include periods of improvement between 2037 and 2042, followed by steep deterioration thereafter.

**Moreover, poor farming practices are contributing to increased climate vulnerability and GHG emissions.** This is particularly the case for shifting cultivation and “slash and burn” of forest lands to plant upland rice. These, and other non-CSA practices are contributing to GHG emissions and to the degradation of the natural resource base. Poor farming practices can make communities and biodiversity more vulnerable to climate change, leading to low soil organic matter, which can reduce the soil's ability to hold water and increase its vulnerability to erosion and water pollution. These conditions can make it harder for crops to grow, and can make land less productive and more vulnerable to drought. Overcoming these challenges requires integrated landscape planning and management approaches. Sierra Leone has developed a framework and guidance note for mainstreaming CSA and Nutrition-Smart Agriculture in the strategic programs of the MAF. This includes strengthening the weak research and extension systems to generate suitably adapted technologies and innovations necessary for mitigating the impact of climate change and enhancing resilience and food security, including nutrition.

While Sierra Leone accounted for less than 0.01 percent of global emissions in 2022 with its 0.12 mt of CO<sub>2</sub> equivalent/person/year accounting, within this small contribution, agriculture dominates. Agriculture has been one of the leading emitter of methane since 1990. Any significant contribution by Sierra Leone to climate change mitigation hinges on success in cutting or limiting GHG emissions from agriculture. **The AF is consistent with Sierra Leone’s national priorities for climate action.** It is consistent with the 2021 Updated Nationally Determined Contribution (NDC) and the National Adaption Plan (NAP). According to the NAP, extreme weather events such as strong winds, thunderstorms, landslides, heatwaves, and seasonal droughts threaten agricultural production and food security include. The NDC also identifies yield reduction and crop failures due to flooding and waterlogging, as well as increased disease incidence in staple crops as result of rising temperatures as key climate resilience risks in the agricultural sector. Priority actions in the NAP include mainstreaming climate change into agricultural development strategies, promoting climate resilient food security practices, and innovative and adaptive approaches such as irrigation and water harvesting to protect farmers from variable rainfall. Key NDC mitigation strategies for agriculture include measures to (a) establish early warning systems to improve local understanding of risks; (b) improve institutional and functional capacities for integrated water management; (c) improve research and knowledge management capacities to support Climate-Smart Agriculture (CSA) and resilient land management; (d) promote climate-resilient food security practices; and (e) create an enabling environment for the resilience of private-sector investment, among others. These NAP and NDC adaptation and mitigation measures are substantially supported by activities to be financed under the AF.

Figure 1: GHG and methane emissions by agriculture in Sierra Leone, 2019



Source: Friedlingstein et al. (2022)

**Public spending has remained very limited in agriculture.** From 2014 to 2019, Sierra Leone’s PEA averaged 3 percent of its total public expenditure. This figure is well below the target of 10 percent agreed to through the African Union (AU) Maputo Declaration on Agriculture and Food Security. Within agriculture expenditure, producers’ subsidies accounted for the largest share of support from 2014–17 at 35 percent. Overall agriculture-specific expenditure fell in 2018 and 2019 due to programs ending and the government’s new private sector-focused policy shift. Before 2018, expenditure in variable inputs subsidies such as seeds and fertilizer dominated



government subsidies to farmers, but in 2018 and 2019 there was increased relative spending on capital input subsidies such as on machinery and buildings. Over the period 2014–19, there was volatility in research and knowledge dissemination expenditure.

**Key priorities for Sierra Leone are to improve agricultural productivity and the livelihood systems they support through sustainable land use and water management and building resilience to climate change.** Climate related shocks are negatively affecting crop production and counteract productivity gains through the adoption of improved technologies. These adverse effects are a major threat to the livelihoods and food security of people in Sierra Leone. While agriculture is a victim of climate change, the farming practices in Sierra Leone are also contributing to climate change. Hence, protection of existing forests, scaling of existing tree cover in agricultural production landscapes, and restoring degraded landscapes provides an invaluable opportunity for Sierra Leone to enhance agricultural productivity, improve food security and build resilience to climate change. **The AF supports the GoSL’s Medium-Term National Development Plan (2019-2023) and National Agriculture Transformation Plan 2023.** It also supports the GoSL’s aim to implement the actions and roll out plan for sustainable food systems contained in the synthesis report of the Country Food Systems Dialogue prepared as part of the 2021 World Food Systems Summit.

**This grant will be processed as Additional Financing (AF) to the West Africa Food System Resilience Program (FRSP) Phase II of the FSRP MPA.** Phase 1 of the FSRP MPA was approved on November 18, 2021, for US\$570 million equivalent of IDA (a total of US\$641 million equivalent, including financing from the Global Risk Financing Facility (GRiF), the Global Agriculture and Food Security Program (GAFSP) and co-financing from the Kingdom of the Netherlands channeled through the Food Systems 2030 trust fund). Phase I includes Burkina Faso, Mali, Niger, and Togo, along with three regional organizations - the Economic Community of West African States (ECOWAS), the West and Central African Council for Agricultural Research (CORAF) and the Permanent Interstate Committee for drought control in the Sahel (CILSS). The Program Development Objective (PrDO) is to increase preparedness against food insecurity and improve the resilience of food systems in participating countries. All Phase I countries and organizations are effective and are making progress against their targets, and towards the overall achievement of the PrDO.

**The second phase of the FSRP program supporting Chad, Ghana and Sierra Leone (US\$315), was approved in July 2022.** Sierra Leone (US\$60M) became effective in early November 2022. In late November 2022, due to food insecurity crisis across Sierra Leone, the Contingency Emergency Response Component (CERC) was activated to finance an immediate response to the crisis. Immediately following, in December 15, 2022, the Board approved a Additional Financing of Crisis Response Window – Early Response Financing (CRW-ERF) for US\$50M. Due to the high levels of food in nutrition security across Sierra Leone, an Additional Financing of Global Agriculture and Food Security (GAFSP) financing was approved for US\$25M in July. Through the total of these three financings (US\$135M), the Sierra Leone program aims to reach at least 943,200 beneficiaries by September 2028. To date, the program is 22.7% disbursed and has reached 351,990 people. Results to date include: i) fed 114,390 school pupils with two school meals per day; ii) provided cash transfers to 72,000 beneficiaries in 8 districts (75% women); iii) provided inputs (seeds, fertilizers, pesticides) to 84,600 producers; and iv) supported livestock production of 37,500 producers through grants and in-kind support.

## **Rationale and Objectives of the Additional Financing**

**The LDCF (Least Developed Countries Fund) funds will scale-up activities towards the sustainability and resilience of agriculture, specifically Nature based Solutions.** The activities are focused on NbS with

producers and community groups (especially women and youth). NbS in agriculture encompasses a range of practices that can be implemented in agricultural fields or in areas adjacent to agricultural lands. These include improving pasture and feed management, reducing fertilizer use, conservation agriculture such as no-tillage, crop rotations and cover crops (Iseman and Miralles-Wilhelm, 2021), cultivation of specific perennial grains providing ecosystem services (Peter et al., 2017), prevention of soil erosion by straw mulch or coconut-fiber, (see Rodrigo-Comino et al., 2020 and Frankl et al., 2021). The project will invest in Nature Based Solutions (NbS) as they capitalize on natural processes and system functions to manage agriculture landscapes, while protecting and restoring natural ecosystems, can potentially help to reverse the negative trends in productivity growth, reduce the environmental impacts of the sector and enhance its resilience to climate change.

The development objective of FSRP is to increase preparedness against food insecurity and improve the resilience of food systems in participating countries. The PDO of the proposed grant is to implement sustainable food systems in Sierra Leone and to contribute to national adaptation and mitigation objectives articulated in its NDCs by supporting the restoration of degraded landscapes and modifying the production techniques in agriculture. Through this AF, the project will scale up the integration of sustainable landscape restoration, biodiversity conservation, and climate-sensitive interventions into livelihood transformation through enabling climate smart agriculture and climate resilient food security practices. Investments under the AF will focus on nature-based solutions to manage agricultural landscapes and build their resilience to climate change. The project aims to transform selected terrestrial landscapes through diversified and sustainable livelihood/agricultural initiatives to revamp the deforested ecosystem. This will target and promote the conservation and sustainable use of biological diversity of terrestrial landscape resources which are under threat or environmentally vulnerable. These will be achieved through: (a) capacity building, innovation and private sector engagement; for sustainable natural resource management at national and community levels, including strengthening of institutional capacity for integrated watershed management; (b) integrated ecosystem management in selected watersheds through sustainable management of key forest areas, buffer zones, and wetlands, and improved water management; and (c) community sustainable land use management, through support for alternative land and/or water use activities, and adoption of indigenous sustainable land management practices. In addition, the introduction of the Mayon stoves will potentially help reduce dependence on fuel-wood and reduce greenhouse gas emissions.

#### **Outcomes & key outputs from the GEF-LDCF funded activities are as follow:**

- Outcome 1: Increased adoption of regenerative agricultural practices to improve resilience of agriculture sector.
- Outcome 2: Increased adoption of integrated landscape management practices to better prepare for and adapt to shocks and stresses due to climate change.
- Outcome 3: Enhanced incomes for farmers and sustainable jobs are created targeting women and youth.
- Outcome 4: Increased capacity of extension and advisory service actors as well as other stakeholders in regenerative agriculture and other sustainable approaches.

#### **Outputs:**

- Sustainable watershed management coordination capacity established in 60% of participating Districts.
- Climate resilient communities, ecosystems, value-chain are achieved in 60% of participating Districts.

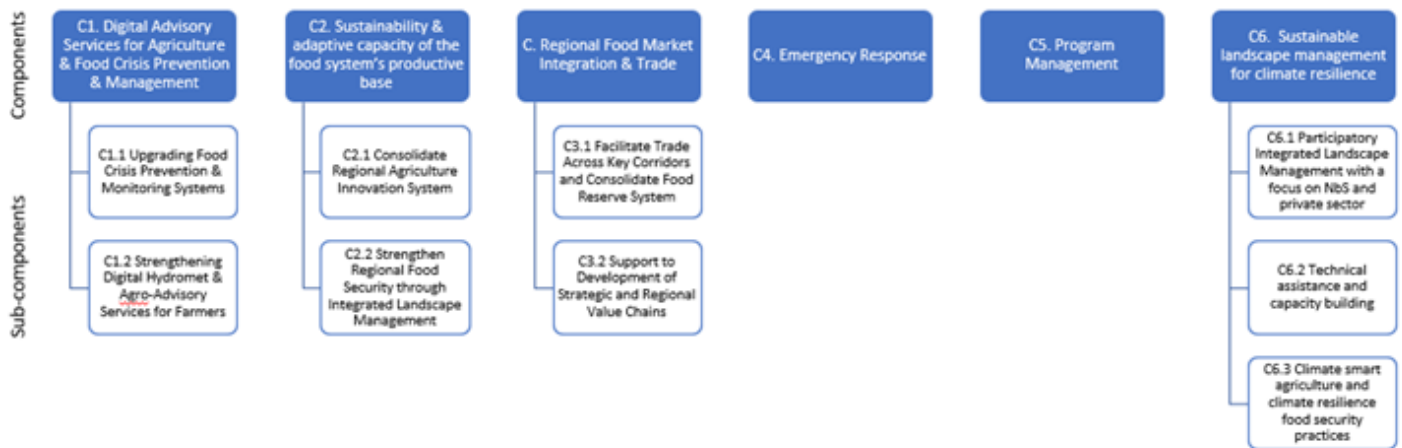
- The areas under inclusive and sustainable adaptation solutions in at least three participating Districts have increased by at least 60 %.

**The parent project's PIU will be tasked with coordination and management of the proposed AF resources.** All new activities build directly on relevant methods and structures put in place under the parent project and other relevant interventions and partnerships. Implementation arrangements, responsible agencies, partner institutions from the parent project to be retained, and new partners to be engaged are outlined in the CERC Manual, including relevant arrangements in the parent project's PIU housed within the Ministry of Agriculture and Forestry (MAF).

**The proposed LDCF financing adds a new component to the FSRP to incorporate NBS and climate smart agriculture interventions. The FSRP is designed to address challenges to food system resilience and food security.** The Program has the following three technical components: i) **Component 1**, "Digital Advisory Services for Agriculture and Food Crisis Prevention and Management", focused on upgrading regional food crisis prevention and management systems and enhancing food system stakeholder's access and use of agro hydro meteorological information services; ii) **Component 2**, "Sustainability and Adaptive Capacity of the Food System's Productive Base", to strengthen national and regional agricultural research systems and the implementation of Integrated Landscape Management (ILM) in selected communities; and (iii) **Component 3**, "Regional Food Market Integration and Trade", to elevate intra-regional food trade and increase value creation in selected value chains. In addition to the three technical components, the program includes (iv) a CERC as **Component 4**; and (v) **Component 5** for Project Management. The proposed LDCF financing adds a new **Component 6** with an emphasis on promoting nature-based solutions in integrated landscape management to enable climate resilient landscapes and food production.

**FSRP-SL addresses significant challenges to food system resilience and food security**, including: (i) low growth of food system productivity compared to population growth; (ii) falling per capita food availability; (iii) limited access to improved technologies, modern inputs, and advisory services; (iii) weak access to markets due to inadequate post-harvest, and market infrastructure; and (iv) limited processing capacity and value-added activities. FSRP-SL provides a strong foundation on which to address several production and marketing related aspects of the unfolding food and nutrition security crisis facing Sierra Leone while also contributing to longer-term resilience of crisis-affected households and communities.

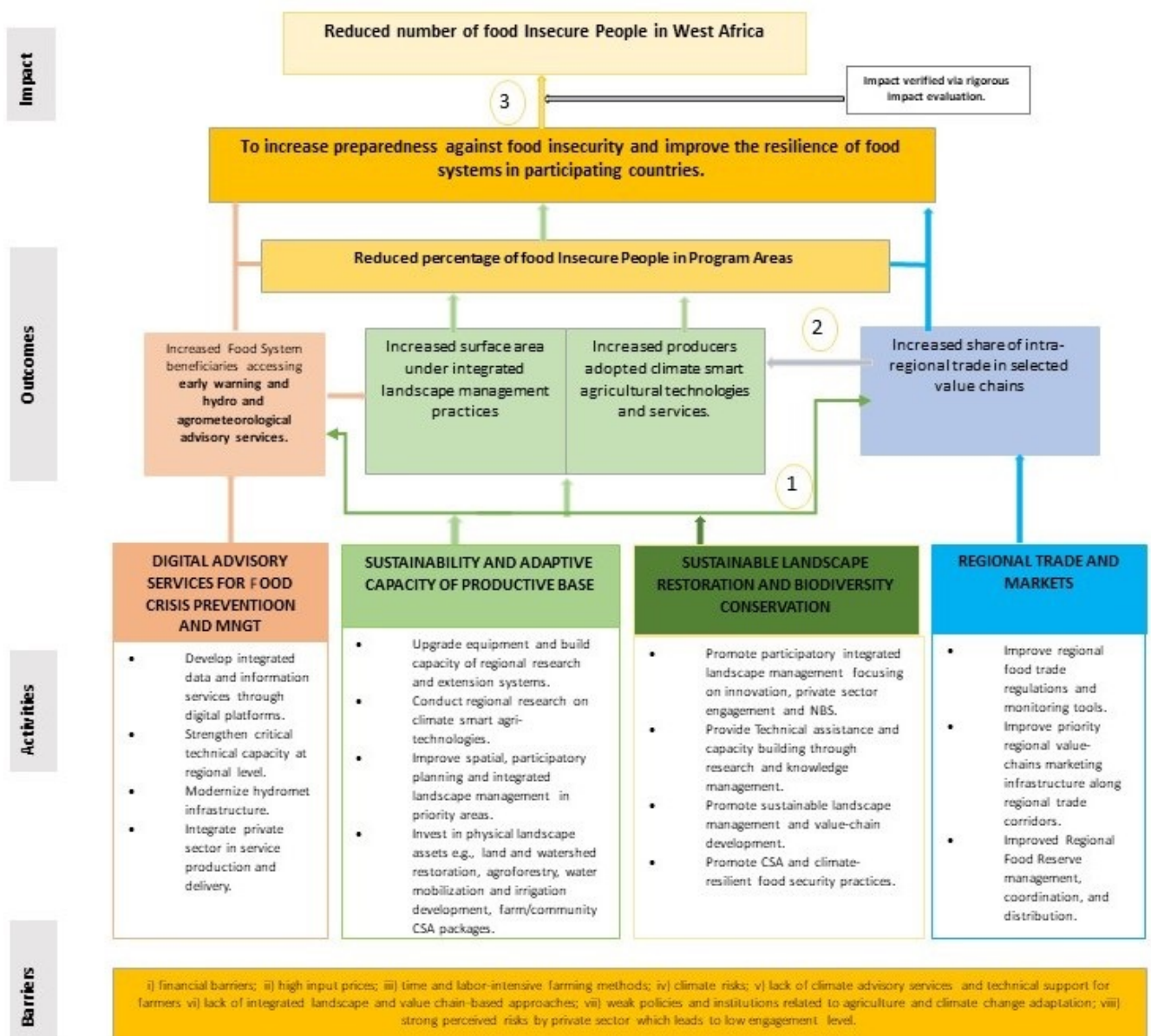
PDO: To increase preparedness against food insecurity and improve the resilience of food systems in participating countries.



**The ToC is shown below and relies on some critical assumptions.** First, that returns to landscape and CSA interventions, including NbS are profitable and economically attractive for farmers. It is essential that proposed solutions reduce agriculture's sensitivity to climate impacts, vulnerability to shocks, and production risks. As a result, agricultural production retains potential to be competitive and remains attractive to investors despite more challenging climatic conditions (principally variability and extreme heat). Second, that national political stability continues. The ToC will be at risk if certain recent events such as the attempted coups in Niger and Mali lead to broader destabilization. This risk could be mitigated by halting implementation if severe instability occurs and resuming operations at a later stage.

In Sierra Leone, several barriers limit adaptation action in agriculture, including: i) financial barriers, such as limited access to formal credit sources for farmers to invest in adaptive technologies, inputs, and practices; ii) land tenure Issues - inadequate land access and ownership rights, which can hinder farmers from making long-term investments in sustainable agricultural practices; iii) high input prices - the cost of agricultural inputs such as seeds, fertilizers, and equipment may be prohibitively high for many farmers, making it challenging to adopt improved agricultural methods; iv) time and labor-intensive farming methods, particularly in collective farming systems, can limit farmers' ability to adopt new practices or diversify crops; v) climate risks – the country is susceptible to various climate risks, including early and late-season droughts, high temperatures, excessive rainfall leading to flooding, water scarcity, and increased incidences of pests and diseases. These climate challenges can reduce agricultural productivity and increase vulnerability; vi) lack of climate advisory services and technical support for farmers to learn about and adopt climate-smart agricultural practices; vii) lack of integrated landscape and value chain based approaches - e.g., inadequate rural infrastructure such as roads, storage facilities, and irrigation systems can limit farmers' access to markets and impact post-harvest handling; viii) weak policies and institutions related to agriculture and climate change adaptation may hinder effective planning, resource allocation, and implementation of adaptation measures; ix) strong perceived risks by private sector which leads to low engagement level. Addressing these barriers requires comprehensive approaches that encompass financial support, land tenure reform, investment in climate-resilient agriculture, improved extension services, and strengthened policy frameworks to enable farmers to adapt to climate change and enhance agricultural sustainability in Sierra Leone.

The proposed project funded by the Least Developed Countries Fund (LDCF) will target critical barriers identified in the Theory of Change (ToC), with a specific focus on enhancing the resilience of Sierra Leone's agricultural sector to current and future vulnerabilities. This will be achieved by promoting the adoption of sustainable regenerative agricultural practices and improving farming techniques to enhance quality. Utilizing integrated landscape management approaches will enable better adaptation to projected climate shocks and stresses, as indicated by the majority of climate scenarios forecasting changes in temperature and precipitation patterns. Additional funding will be directed towards enhancing household resilience, with a particular emphasis on creating job opportunities for women and youth. Addressing the absence of climate advisory services and technical support will involve providing technical assistance and capacity-building activities through research and knowledge management, aimed at facilitating the adoption of nature-based solutions and climate-smart agricultural practices. Furthermore, by targeting key policy and institutional barriers and enhancing the knowledge base and financing options, the project aims to stimulate increased private sector investment in agriculture.



## Changes to Project Component and Costs

**The AF proposes to finance two components.** A new component will be introduced to the parent FSRP project, (Component 6: Integrating sustainable landscape restoration, biodiversity conservation and climate-sensitive interventions into livelihood transformation) and an existing component 5, (Project management and evaluation (M&E) will be scaled-up to support project implementation. Details of the components are as follows:

**Component 5: Project Management and Monitoring and Evaluation (US\$6.223 million, of which, US\$1.223 million financed by LDCF):** This component focuses on project management mechanisms, including M&E plans to implement FSRP. While 85 percent of financing for this component is through the IDA Grant, LDCF financing (15 percent) will support the full integration of LDCF-funded activities into the two main subcomponents under this component, while keeping track of the specific inputs, outputs, and impacts of the GEF activities:

- a. Project Management Subcomponent supports strengthening of the effectiveness and quality of project operations: (a) at the FSRP Office of the Federal Ministry of Agriculture and Rural Development (FMARD) and responsible for overall project coordination) will include a GEF Desk manned by a GEF Project Officer. The desk office will be tasked with coordinating the GEF program at the district and community levels. An M&E system will be implemented through the District Environmental Officers, tasked with the coordination of the GEF activities at the district and community levels.
- b. Monitoring and Evaluation Subcomponent will measure performance at various project milestones, and include three main elements: (a) Management Information System (MIS) integrating National and Districts levels with data generated by Farmers; (b) impact evaluations and beneficiary assessments to enhance project implementation performance; (c) monitoring of the project's environmental management plan (EMP), which includes mitigation measures related to Environmental livelihoods activities, and institutional capacity strengthening in Environmental Impact Assessment (EIA) and Integrated Pest Management (IPM); and (d) monitoring the Performance of the GEF activities.

**Component 6: Integrating sustainable landscape restoration, biodiversity conservation and climate-sensitive interventions into livelihood transformation. The GEF-LDCF fund would fund an additional component to promote the conservation and sustainable use of biological diversity of terrestrial landscape resources which are under threat or environmentally vulnerable.** The Grant will promote climate-smart agriculture and climate-resilient food security practices. It will support activities to Improve research and knowledge management capacities for Climate-Smart Agriculture and resilient land management. The grant will scale up existing interventions on Integrated Landscape Management (ILM) activities with producers and community groups (especially women and youth). Additional emphasis will be placed on investing in Nature Based Solutions (NbS) to manage agriculture landscapes, while protecting and restoring natural ecosystems and potentially reverse the negative trends in productivity growth, reduce the environmental impacts of the sector

and enhance its resilience to climate change. Focusing broadly on the protection of existing forests, scaling of existing tree cover in agricultural production landscapes, and restoring degraded landscapes to enhance agricultural productivity, improve food security and build resilience to climate change, activities under this component will include:

**Activity 1: Promoting participatory integrated landscape management with a focus on Innovation and private sector engagement; and Nature-based Solutions.** The AF will scale-up research, innovation and extension services related to NbS. In each target area, this sub-component will finance stakeholder mobilization and awareness raising for participatory NbS. It will support comprehensive assessment to identify technically robust, economically viable, and contextually relevant NbS. Based on the lessons learned from the assessment above, technical assistance will be provided to the extension services to produce and disseminate guidance material for NbS. Capacity building of extension services is critical to improve the effectiveness of advisory service delivery and facilitate adoption by farmers. Hence, the project will build a systematic approach to improving cross-sectoral coordination and management for climate resilience of vulnerable rural communities, modernizing technical and advisory services and institutional building of core services such as climate-smart agriculture, sustainable natural resources management, and climate-related disaster and crisis prevention. Farmers would also be provided with technical and financial assistance to develop implementation plans of NbS. These plans will outline what to implement, scale of implementation, what are the priority investments required, and how the trade-offs will be managed.

**Activity 2: Technical Assistance and Capacity Building.** The AF will support improving research and knowledge management capacities for nature-based solutions for integrated landscape management including climate-smart agriculture and resilient land management. The AF will enhance the capacity of different stakeholder groups, including relevant national and local government, NGOs, and community-based organizations for sustainable landscape management. Institutional capacity will also be strengthened through training, planning and usage of analytical tools. Capacity building for sustainable natural resource management at national and community levels, including strengthening of institutional capacity for integrated landscape and community capacity for resource development planning. Based on the lessons learned from the assessment above, technical assistance will be provided to the extension services units to produce and disseminate guidance material for NbS. Capacity building of extension services is critical to improve the effectiveness of advisory service delivery and facilitate adoption by farmers. Farmers will also be given technical and financial assistance to develop implementation plans of NbS. These plans will outline what to implement, scale of implementation, what are the priority investments required, and how the trade-offs will be managed. Knowledge management will be supported to facilitate the preparation and dissemination of supporting studies and lessons learned to inform future transport and coastal protection projects which will facilitate the further scaling-up following this project's lifetime. Ex-post evaluation studies will be disseminated through a publicly accessible, online forum, and ex-post evaluation workshops of the project with key stakeholders will be organized so as to capture lessons-learned and insights from stakeholders for future project works. Stakeholder evaluation reports will be integrated in revisions of ex-post evaluation studies.

**Activity 3: Investment in Sustainable Landscape management and value-chain development.** The AF will Promote climate-smart agriculture and climate-resilient food security practices. The AF will deploy matching grants and support subprojects for investments on-farm targeted landscapes. Farmers are ultimately economic agents who respond to economic incentives. Hence, the choice of sustained adoption of NbS is eventually a decision that will be driven by their profitability. Specifically, the grant will support sustainable landscape management practices to limit deforestation, improving degraded habitats by bringing ecological diversity into landscapes dominated by singular species, and better integrating nature into agricultural

landscapes. This might require policy changes to improve the enabling environment to encourage adoption of innovative technologies and practices by introducing mechanisms for paying or rewarding farmers for ecosystem services. An impact evaluation will be carried out to estimate the economic impacts of adoption of NbS and a payment for ecosystem services mechanism will be piloted as a proof of concept to generate evidence for scale-up through government programs.

## Indicative Project Overview

### Project Objective

To increase preparedness against food insecurity and improve the resilience of food systems in participating countries.

### Project Components

#### Component 1: Digital Advisory Services for Agriculture and Food Crisis Prevention and Management

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing (\$)	Co-financing (\$) 13,700,000.00

Outcome:

N/A

Output:

80% farmers satisfied with access to usable weather, climate and ag-advisory services (%)

Improved access to local climate information services with digital information platforms (Yes)

2 Agreements involving coproduction of agro-hydro meteorological services between public and private sectors

#### Component 2: Sustainability & Adaptive Capacity of the Food System's Productive Base:

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing (\$)	Co-financing (\$) 30,100,000.00

Outcome:

Increased adoption of regenerative agricultural practices with a resultant increase in soil organic carbon  
Strengthened economically sustainable seed system that is contributing to yield increase and the economy.  
Enhanced incomes for farmers and sustainable jobs are created targeting women and youth.

Output:

7 Technologies made available to farmers by the consortium of NCoS, CGIAR and other international research institutes (Number)

70 % sub-projects selected from the integrated landscape management plans with climate-resilient measures implemented (Percentage)



### Component 3: Regional Food Market Integration and Trade

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing (\$)	Co-financing (\$) 11,200,000.00

Outcome:

N/A

Output:

180 Private sector actors involved in regional agriculture trade that are supported by the Project (number)

90,000 women farmers reached with assets or services to improve commercialization in selected value chains (Number)

### Component 4: Contingency Emergency Response

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing (\$)	Co-financing (\$)

Outcome:

N/A

Output:

N/A

### Component 6: Integrating sustainable landscape restoration, biodiversity conservation and climate-sensitive interventions into livelihood transformation

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing (\$)	Co-financing (\$) 8,735,937.00

Outcome:

**Activity 1** Promoting participatory integrated landscape management.

Increased adoption of regenerative agricultural practices to improve resilience

Output:

Climate resilient communities, ecosystems, value-chain are achieved in 60% of participating Districts.

### Component 6: Integrating sustainable landscape restoration, biodiversity conservation and climate-sensitive interventions into livelihood transformation

Component Type	Trust Fund
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Technical Assistance	LDCF
GEF Project Financing (\$)	Co-financing (\$)
3,500,000.00	

Outcome:

**Activity 2: Technical Assistance and Capacity Building**

Increased adoption of integrated landscape management practices to better prepare for and adapt to shocks and stresses due to climate change

Increased capacity of extension and advisory service actors as well as other stakeholders in regenerative agriculture and other sustainable approaches

Output:

Sustainable watershed management coordination capacity established in 60% pf participating Districts.

**Component 6: Integrating sustainable landscape restoration, biodiversity conservation and climate-sensitive interventions into livelihood transformation**

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing (\$)	Co-financing (\$)
4,892,687.00	

Outcome:

**Activity 3 Investment in Sustainable Landscape management and value-chain.**

Enhanced incomes for farmers and sustainable jobs are created targeting women and youth

Output:

Areas under inclusive and sustainable adaptation solutions in at least three participating Districts have increased by at least 60%.

**M&E**

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing (\$)	Co-financing (\$)
350,000.00	

Outcome:

M&E system will be implemented to measure the project's performance and monitoring of the performance of project activities

Output:

80% Beneficiaries satisfied with the Project's interventions (Percentage)

90% grievances registered and addressed by the Program (Percentage)

## Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)
Component 1: Digital Advisory Services for Agriculture and Food Crisis Prevention and Management		13,700,000.00
Component 2: Sustainability & Adaptive Capacity of the Food System's Productive Base:		30,100,000.00
Component 3: Regional Food Market Integration and Trade		11,200,000.00
Component 4: Contingency Emergency Response		
Component 6: Integrating sustainable landscape restoration, biodiversity conservation and climate-sensitive interventions into livelihood transformation	8,735,937.00	
Component 6: Integrating sustainable landscape restoration, biodiversity conservation and climate-sensitive interventions into livelihood transformation	3,500,000.00	
Component 6: Integrating sustainable landscape restoration, biodiversity conservation and climate-sensitive interventions into livelihood transformation	4,892,687.00	
M&E	350,000.00	
<b>Subtotal</b>	<b>17,478,624.00</b>	<b>55,000,000.00</b>
Project Management Cost	870,000.00	5,000,000.00
<b>Total Project Cost (\$)</b>	<b>18,348,624.00</b>	<b>60,000,000.00</b>

Please provide justification

## Coordination and Cooperation with Ongoing Initiatives and Project

Does the GEF Agency expect to play an execution role on this project?

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

The FSRP-GEF Project will be a partially blended (IDA-GEF) project involving a partnership between the Ministry of Agriculture and Food Security (MAFS), the Ministry of Environment (MEnv), the Food System Resilience Project (FSRP), other government agencies involved in watershed management, Farmers Associations at the community level (FAs) and other community members. Therefore, the GEF-supported activities will be implemented in close

collaboration with relevant stakeholders that play a key role in the management of watershed resources at the community level, including farmers and government agencies, and would focus on creating a coordination mechanism for strengthening this partnership.

## INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENT

The Project will be implemented over 4 years and implementation arrangements would be guided by the following considerations: (i) the need to mainstream GEF activities on the ground with the IDA financed activities, and empower local communities; (ii) the need to fully integrate project management and M&E within FSRP; (iii) the need to take into account the role of the Ministry of Environment in overall coordination, quality assurance and oversight; (iv) the need to take into account other environmental projects under implementation; and (v) the need to strengthen project ownership through a workable partnership between the two main ministries involved in the implementation, MAFS and MEnv.

Based on the current institutional framework in the sector, and the lessons learned from implementation of the Food System Resilience Project (FSRP, the proposed institutional framework for implementation is as follows:

- a. **Ministry of Environment (MEnv).** The responsibility of MEnv regarding program implementation is to play a coordinating and supervisory role, while the actual implementation will be done through the FSRP II implementation arrangements already in place, but adequately strengthened to take into account the specific nature of GEF-funded activities as well as its fiduciary and reporting requirements. Therefore, FMEnv will play a role at two levels: (i) provide technical implementation support by seconding a high level, competitively selected among qualified officers in the Ministry of Environment, technical officer (FSRP GEF Desk Officer) to the FSRP-PIU; and (ii) strengthen the mainstreaming and implementation of the GEF component through the added participation of the Director, Planning, Research and Statistics of FMEnv, who is also the GEF Operational Focal Point for Liberia in the FSRP Steering Committee (FSC). This will also result in expanding FSC's role to include approval of the Annual Work Program and Budget, provide policy guidance for the implementation of the GEF-financed component (especially, the Capacity Building Component), and ensure effective inter-ministerial coordination through the proposed mechanism for integrated watershed management at the national and state levels.
- b. **Food System Resilience Project (FSRP) Project Implementation Unit in the Ministry of Agriculture and Food security.** As part of its overall project coordination activities, FSRP-PIU will also house and coordinate GEF-supported activities through the FSRP GEF Desk Officer (who will be assisted by an M&E Officer, GIS/Operations Analyst and Accounts Supervisor) and will report to the National Project Manager of FSRP Project. In addition, the FSRP GEF Desk Officer will manage and coordinate all project activities at the national level as well as provide guidance to and ensure coordination with Environmental Officers in SFDOs.
- c. **Local FSRP-GEF Development Committee (LFDC).** Similar to FSRP Project, decision making on subproject proposals emanating from communities will be delegated to LFDCs, whose membership includes members of Farmers Associations, representatives of civil society, and Local Government Authorities (LGAs). The recommendations of LFDCs will be reviewed at the Ministry of Agriculture level: (i) by FSRP-GEF Focal Desk Officer, for consistency with FSRP-GEF objectives and activities; and (ii) by Environmental Officers. Where a GEF intervention site extends into a non-FSRP LGA and is considered imperative to extend GEF-supported activities to communities in such an area, the LGA will be sensitized to carry out GEF activities in the affected communities. Field Officers will be assigned to facilitate the process of formation of Farmers Association within the communities in the affected areas. The LGA, as it is not a FSRP participating LGA, will only benefit from GEF intervention through the affected communities. In addition, a local

FSRP Focal Officer, who will be a serving officer (Environmental and Social Officer in the LGA), will be appointed to take charge of GEF matters in the LGA.

- d. **Farmers Associations (FAs).** Through the Capacity Building and the Integrated Ecosystem Management at Watershed Level components, the proposed Project will support participating farmers to adopt livelihood enhancing sustainable land use and agricultural management practices, which cumulatively would enhance the sustainability of ecosystems at watershed level. Therefore, farmers will play an important role in project implementation through Farmers Associations, other community groups and NGOs. A facilitated demand-driven process, using a positive list and integrated within that of FSRP Project, will be established to select subprojects for GEF financing and focused on the rehabilitation and protection of ecologically degraded sensitive areas. It is the FAs that will develop socially inclusive Local Development Plans (LDPs) in a participatory manner. With the help of Field Officers, the LDPs will ensure that the needs of the women and marginalized groups of people are considered and that gender issues are fully mainstreamed in the Project. In addition, the LDPs will explicitly state the measures to sustainably manage environmental resources and resolve conflict among different users.

## Core Indicators

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

### META INFORMATION – LDCF

LDCF <b>true</b>	SCCF-B (Window B) on technology transfer <b>false</b>	SCCF-A (Window-A) on climate Change adaptation <b>false</b>
Is this project LDCF SCCF challenge program? <b>false</b>		
This Project involves at least one small island developing State(SIDS). <b>false</b>		
This Project involves at least one fragile and conflict affected state. <b>true</b>		
This Project will provide direct adaptation benefits to the private sector. <b>false</b>		
This Project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs). <b>false</b>		
This project will collaborate with activities begin supported by other adaptation funds. If yes, please select below		
Green Climate Fund <b>false</b>	Adaptation Fund <b>false</b>	Pilot Program for Climate Resilience (PPCR) <b>false</b>
This Project has an urban focus. <b>false</b>		
This project will directly engage local communities in project design and implementation <b>true</b>		
This project will support South-South knowledge exchange <b>false</b>		

This Project covers the following sector(s)[the total should be 100%]: \*

Agriculture	35.00%
Nature-based management	40.00%
Climate information services	25.00%
Coastal zone management	0.00%
Water resources management	0.00%
Disaster risk management	0.00%
Other infrastructure	0.00%
Tourism	0.00%
Health	0.00%
Other (Please specify comments)	0.00%
Total	100.00%

This Project targets the following Climate change Exacerbated/introduced challenges:\*

Sea level rise <b>false</b>	Change in mean temperature <b>true</b>	Increased climatic variability <b>true</b>	Natural hazards <b>true</b>
Land degradation <b>true</b>	Coastal and/or Coral reef degradation <b>false</b>	Groundwater quality/quantity <b>false</b>	

## CORE INDICATORS – LDCF

	Total	Male	Female	% for Women
<b>CORE INDICATOR 1</b> Total number of direct beneficiaries	329,200	198,120.00	131,080.00	39.82%
<b>CORE INDICATOR 2</b> (a) Area of land managed for climate resilience (ha) (b) Coastal and marine area managed for climate resilience (ha)	3,000.00 0.00			
<b>CORE INDICATOR 3</b> Number of policies/plans/ frameworks/institutions for to strengthen climate adaptation	0.00			
<b>CORE INDICATOR 4</b> Number of people trained or with awareness raised	36,000	21,000.00	15,000.00	41.67%
<b>CORE INDICATOR 5</b> Number of private sector enterprises engaged in climate change adaptation and resilience action	0.00			

## Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	World Bank modeling of the impacts of alternative climate risk scenarios sheds light on the potential magnitudes of these impacts on the productivity of the overall agricultural sector, and for production of specific crops under rainfed conditions. Four climate risk scenarios are modeled – two at global level, two at country (local) level. The two global scenarios pertain to climate change mitigation: (i) an optimistic mitigation scenario with global warming of 1-1.9oC; and (ii) a pessimistic mitigation scenario in with global warming of 3-7oC. The two local climate risk scenarios assume: (i) a dry/hot future; and (ii) a wet/warm future. Also modeled at country level are the sectoral impacts of labor productivity shocks under each climate risk scenario. As expected, rainfed crop production registers smaller and less steep declines under the optimistic mitigation scenario than under the pessimistic one – i.e., a 5 percent decline by 2050 under the optimistic scenario vs. an 8.5 percent decline under the pessimistic scenario. After 2027, dry/hot conditions lead to significantly larger production shocks than do wet/warm conditions. By 2050, dry/hot conditions would lead to a production shock of 10 percent compared to 7.5 percent under warm/wet conditions. Both scenarios include periods of improvement between 2037 and 2042, followed by steep deterioration thereafter. climate risks – the country is susceptible to various climate risks, including early and late-season droughts, high temperatures, excessive rainfall leading to flooding, water scarcity, and increased incidences of pests and diseases. These climate challenges can reduce agricultural productivity and increase vulnerability. the project is working specifically to address barriers identified in the Theory of Change to reducing climate risks, enhancing the resilience of Sierra Leone's agricultural sector to current and future vulnerabilities.
Environmental and Social	Substantial	The environmental risk rating of FRSP phase 2 is classified as substantial. This classification considers the potential risks and impacts of proposed interventions, the nature of the program, and the environmental sensitivity of potential program areas. Proposed program activities, mainly those related to livelihood activities, value chain development for high value agriculture and the infrastructure investments in small-scale irrigation, intensification of rice cultivation, installation of agro-climatic infrastructure, establishment of fodder banks and production of silage, re-afforestation; and promotion of community woodlots. Potential environmental risks include soil degradation, surface and ground water contamination, waste generation (including domestic and hazardous), destruction of vegetation and habitats, pesticide poisoning, noise and dust production, vibration, animal attacks and other occupational and community health and safety issues etc. Some impacts will be limited and localized. However, the risks of surface water

		<p>contamination which could arise from misuse of agrochemicals and leakages of petroleum and hazardous materials from construction related activities could be carried through downstream fringe communities. These risks will be mitigated through proper screening of subprojects once the sites are identified and preparation and implementation of relevant environmental and social risks and impacts management instruments, as per the guidance under the ESMFs. Social risk for FSPR2 is rated Substantial. Key social risks include: economic and/or physical displacement which may arise from activities involving the construction/rehabilitation works and expansion of agricultural farms; disturbances to culturally/historically important sites (such as graveyards and shrines); social exclusion and lack of access to vulnerable groups (i.e. women, persons with disabilities, pastoralists, etc.) of project benefits and elite capture; displacement of small farmers and traditional herding communities; herder-farmer conflict; child and forced labor; community health and safety (including the spread of communicable diseases such as COVID-19 and STDs/STIs; SEA/SH risks due to labor influx and other project workers in project areas. In addition, improved value chain may be accompanied with unhealthy competition leading to the crowding out of small farmers most of whom are women as big players may involve in price fixing to gain a larger share of the market. This will be addressed through the provision of incentives to ensure their improved production techniques and retention. The risk for the project to generate and exacerbate GBV is moderate (Ghana and Sierra Leone) to substantial (in Chad) based on the proposed activities and factoring in country context. In addition, the capacity of each of the three country PIUs and three regional PIUs is considered weak as they have limited experience and facility with implementing projects under the World Bank's Environmental and Social Framework.</p>
Political and Governance	Moderate	<p>Political and Governance risk is rated Moderate, due to the political turmoil and periodic episodes of insecurity in some of the target countries. These risks are real, but their incidence is relatively limited considering the regional scope of the Project and the focus on research hosted by a non-Government entity, which limits their potential to impede achievement of the overall PDO.</p>
INNOVATION		
Institutional and Policy	Moderate	<p>Sector Strategies and Policies risk is rated Moderate, due to agriculture continuing to be a priority in focus countries, but still reflecting underinvestment or inefficient use of resources in the agriculture sectors in the focus countries. The project, is targeting weak policies and institutions related to agriculture and climate change adaptation which may hinder effective planning, resource allocation, and implementation of adaptation measures. The project is addressing these barriers through investing in strengthening multi-stakeholder mechanisms for coordinating selected value chains (including the participation of national</p>



		farmer and private sector organizations in formulating policies and programs and in their implementation) and more broadly improving regional agriculture trade.
Technological		N/A
Financial and Business Model		N/A
EXECUTION		
Capacity	Low	Institutional Capacity for Implementation and Sustainability risk is rated Low, due to the strong relationships built with regional organizations and partners under the former the parent project and the proposed emphasis of the AF on developing pathways to scale.
Fiduciary	Moderate	Macroeconomic risk is rated Moderate, due to policy weaknesses in several target countries that are constraining growth, creating fiscal pressures, and inflating debt levels. These macroeconomic risks are unlikely to impact the Project to any great extent, since the Project will be financed entirely through an IDA grant, with no counterpart funding, and it will support research, piloting, capacity building and scaling activities that do not depend directly on circumstances in the larger surrounding economy.
Stakeholder	Moderate	Stakeholder risks is rated as moderate due to lack of stakeholder capacities in country. the project will enhance the capacity of different stakeholder groups, including relevant national and local government, NGOs, and community-based organizations for sustainable landscape management. A detailed stakeholder engagement plan will be developed during project preparation. FSRP is investing in strengthening multi-stakeholder mechanisms for coordinating selected value chains (including the participation of national farmer and private sector organizations in formulating policies and programs and in their implementation) and more broadly improving regional agriculture trade. The Stakeholder Engagement Plan and Environmental and Social Management Framework will provide a framework for inclusion of all stakeholders (private sections, CSOs, etc.) and will focus on inclusion of vulnerable groups (youth, people with disability, elderly, etc.)
Other		N/A
Overall Risk Rating	Moderate	

#### A. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

**The proposed project is fully aligned with the WBG Country Partnership Framework for Sierra Leone, FY21-FY26.** It will directly contribute to the achievement of the objectives of Focus Area 3: Economic Diversification and Competitiveness with Resilience, and indirectly contribute to Focus Area 1: Sustainable Growth and Accountable Governance, by scaling up adoption of CSA techniques to promote low carbon agriculture and increase the resilience of the country's food system to shocks.

**The project is also closely aligned with Sierra Leone's National Agricultural Transformation Plan (2023).** The project will support the Government of Sierra Leone to implement the actions and roll out plan for sustainable food systems contained in the synthesis report of the Country Food Systems Dialogue prepared as part of the 2021 World Food Systems Summit. It will also contribute to the Sierra Leone's national mitigation objectives as articulated in its Nationally Determined Contributions by supporting the restoration of degraded landscapes and modifying the production techniques to reduce GHG emissions in agriculture to contribute to the achievement of the country's adaptation objectives.

**The project will also contribute to the WBG'S Climate Change Action Plan 2021–2025.** The project is aligned with the objective of advancing low-carbon and climate-resilient development planning through direct investments in local climate resilience.

Agriculture and Food security are among priority sectors as defined in the NAPA and updated Nationally Determined Contribution (NDC) 2022-2026<sup>[1]</sup>, because climate change is already having a toll on agricultural food systems in the country, including exporters and importers as well as those at subsistence level. Goals for agriculture in NDC include effective animal husbandry and agricultural productivity, sustainable land use practices for improved agricultural productivity, integrated and sustainable crop and livestock production, Promote climate - smart agriculture and climate -resilient food security practices, Improve research and knowledge management capacities to support Climate -Smart Agriculture and resilient land management, etc.

**The project is well aligned with the GEF-8 programming strategies for LDCF/SCCF.** The proposed grant will accelerate the transition towards a sustainable agri-food system by supporting activities that contribute to meeting the climate change mitigation and adaption objectives articulated in its NDCs through supporting the restoration of degraded landscapes and modifying production techniques to reduce GHG emissions in agriculture. The activities will be implemented through the **Food Systems Resilience Program (FSRP)** which aims to improve agricultural productivity and livelihoods by enabling sustainable land use and water management and building resilience to climate change, including nature-based solutions in agriculture. The project will contribute to GEF-8 Theme 1: Agriculture, Food Security and Health, Theme 2: Water, and Theme 3: Nature Based Solutions. It will be scale-up activities through the **Sustainability and Adaptive Capacity of the Food System's Productive Base** component of the **FSRP** to invest in Nature Based Solutions (NbS) for the most vulnerable as their livelihoods are often tightly linked to natural resources. The project activities also align with the three strategic priorities of LDCF, namely, scaling up finance for adaptation, strengthening

innovation and private sector engagement, and fostering partnership for inclusion and whole of society approach, through the focus on locally led and participatory management of landscapes in component 6 of the activity.

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[1] Republic of Sierra Leone, 2021, Updated Nationally Determined Contributions, <https://unfccc.int/sites/default/files/NDC/2022-06/210804%202125%20SL%20NDC%20%281%29.pdf>

## B. POLICY REQUIREMENTS

### Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

### Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

### Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities: Yes

Civil Society Organizations: Yes

Private Sector: Yes

### Provide a brief summary and list of names and dates of consultations

Currently the project consultations have been limited concentrated to the public sector (Government, Ministries, Departments and agencies); during project preparation the team will be engaging with private sector, local communities, and civil society organizations. For the parent project, FSRP, strengthening multi-stakeholder coordination and promoting a private sector enabling environment, including public-private dialogue and support policy reforms in the agriculture and food sectors is one of the activities under Component 3. FSRP is investing in strengthening multi-stakeholder mechanisms for coordinating selected value chains (including the participation of national farmer and private sector organizations in formulating policies and programs and in their implementation) and more broadly improving regional agriculture trade. The AF stakeholder consultation will help private sector, to become aware of the climate-agri-food nexus and participate in its promotion. Evidence shows positive links between citizen engagement and improved project implementation, and social inclusion and empowerment. The subcomponent will also facilitate public-private sector policy dialogue and private sector engagement.

FSRP also explicitly supports the engagement and participation of stakeholders and beneficiaries through consultative processes, engagement in local-level planning and monitoring, and feedback mechanisms to elaborate and adjust the integrated landscape management approach, in alignment with the GEF-8 strategic priority of building resilience and addressing vulnerability at the systems level through a whole of society approach. Feedback mechanisms have been developed to ensure transparency, accountability, and learning, and continuous dialogue will occur with local beneficiaries and other stakeholders. For example, during implementation the program will give particular attention to consulting with local groups (such as Civil Society Organizations) and traditional/local leaders, including women, to incorporate traditional and local knowledge in water and land management planning. The program will also support inclusion in access to economic opportunities, especially for those who are most vulnerable. The specific elements of the framework for citizen engagement include: (i) support for the engagement of local rural communities in landscape planning and management, including monitoring; (ii) support for community engagement in determining local investments; and (iii) a program-level feedback and grievance mechanism (GM), designed to process concerns and questions from beneficiaries and other stakeholders at various levels (regional to local), with to resolving concerns within specific timeframes. The protocol, mechanisms, and elements of the citizen engagement framework will be detailed in the Project Implementation Manual (PIM).

Several examples of the stakeholder engagement interventions conducted under FSRP include the following:

Date	Venue	Participating Institutions	Main topics discussed
March 15-18, 2021	Virtual stakeholder meetings	PCU Ministry of Agriculture and Forestry Ministry of Local Government and Rural Development Ministry of Lands, Country Planning and the Environment National Federation of Farmers in Sierra Leone Sierra Leone Women Farmers Federation Road Maintenance	1 Seeking stakeholder interest or expectations for FSRP2. Obtaining stakeholder insights on preferred methods of communication for stakeholder engagements. 2 3 . Compiling comprehensive records of each stakeholder engagement activity.

		Fund Administration Sierra Leone Roads Authority EPA-SL City and District Councils National Water Resources Management Agency	
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Date	Venue	Participating Institutions	Main topics discussed
		Ministry of Social Welfare, Gender and Children's Affairs SCADeP Environmental Protection Agency	Gender issues, including Gender Based Violence issues and GRM.
April 10, 2023	Stakeholder Engagement Workshop	Executives and members of Sierra	<ol style="list-style-type: none"> <li>1. Level of awareness about West Africa Food System Resilience Program.</li> <li>2. Level of expectations of members about FSRP2</li> <li>3. Level of interest in FSRP2</li> </ol>

		<p>Leone Women Farmers Federation and Sierra Leone National Farmers' Federation (NAFFSL)</p>	<p>4. Preferred method of communication in case the Ministry of Agriculture and Forestry intends to engage them in the future about the program</p>
May 13, 2023	Bo City	<p>PIU, District Agricultural officers (DFOs)</p>	<p>Important issues on various environmental and social issues especially around fertilizers, herbicides, deforestation, wetlands, gender issues, child labour, and general health and safety issues</p> <p>General project issues discussed including the components and related environmental and social issues</p>
July 11 2023	<p>Bo City</p> <p>Representatives from Bo, Kenema, Bonthe, Kailahun, Moyamba, Pujehun</p>	<p>PIU team; District Forest Officers (DFO), EPA, MDAs. Rainbow Society Ministry of Environment Ministry of Agriculture Ministry of Environment Ministry of Health ONS SLARI District Agricultural Officers</p>	<p>Project overview including components.</p> <p>Awareness and engagement on GRM, GBV and setting up the GRM committees.</p> <p>Definitions and context were discussed</p> <p>The importance of GRM and the FSRP2 GRM system in place</p> <p>The guiding principles of GRM and steps were all discussed.</p> <p>Important roles of stakeholders</p> <p>Launch the GRM and form the GRM committees</p>

		Ministry of Education Forestry	
July 12 2023	Makeni City for Northwestern Region (Kambia, Falaba, Karene, Kono, Koinadugu, Tonkolil District, ONS	Rainbo Society District Agriculture Officers Kambia, Women in Agriculture, District Coordinator District Agriculture officers Environmental Social Officers Ministry of Lands District medical officers Das Extension Officers Chief Administrators DHMTs Gender Specialist	<p>General project overviews including the various components.</p> <p>Discussions on GRM and GBV</p> <p>Definitions and context were discussed</p> <p>The importance of GRM and the FSRP2 GRM system in place</p> <p>The guiding principles of GRM and steps were all discussed</p> <p>Roles and responsibilities of stakeholders</p> <p>Environmental and social issues</p> <p>Launch GRM and set up GRM Committees</p>

and Officers,  
 MBSSC,  
 Ministry of Education  
 Ministry of Environment  
 Women in Agriculture network  
 District Secretaries  
 Sierra Leone Legal Aid Board  
 Legal Health SLAMA-Sierra Leone Roads  
 Ministry of Agriculture Livestock and veterinary Services Division  
 Director of Services Division  
 Rokupr Agricultural Center-SLARI  
 National Federation of Farmers



**THE WORLD BANK**  
 IBRD IDA WORLD BANK GROUP

**GOVERNMENT OF SIERRA LEONE**  
**FSRP2 GRIEVANCE REDRESS SYSTEM**

**West Africa Food System Resilience Program (FSRP2)**

**STEPS AND PROCESSES**

**GRIEVANCE REDRESS PROCEDURE: Steps to Submit FSRP 2 - Related Complaint**

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Submit your complaint call: 899 Email: <a href="mailto:grminfo@fsrp-sl.org">grminfo@fsrp-sl.org</a> Or Visit: The PMU At The Ministry of Agriculture and Food Security, Ground Floor, West Wing, Youyi Building, Freetown	FSRP2 will receive, categorize, register/record and acknowledge receipt of your grievance / complaint within at most 4 weeks	FSRP 2 will assess / screen, provide immediate redress, and Assign Responsibility for Managing Grievance to Stakeholder within at most 4 weeks	FSRP will investigate, and Determine How to resolve your complaint/grievance within at most 4 weeks	FSRP 2 will communicate course of action to resolve grievance and implement them within at most 4 weeks



Nov & Dec 2023	PIU Office, Freetown	SLeSCA, SLARI, SMP, MAFS, Seed Tech, African Seeds	Seed Actors to plan for the seed value chain training to agree on modules and assign tasks
Nov 2023, Jan-Feb 2024	PIU and Rainbo Initiative Headquarter	Rainbo Initiative	To plan activities to be implemented in a sequential order: GBV/SEA/SH community engagement, sensitization and formation of GBV/SEA/SH Committees

**Gender.** FRSP fundamental objective and funding directly target 70,000 smallholder farmers with the intention reaching the target being 45% women and 40% youth. In addition to gender and youth empowerment being mainstreamed across all interventions, the project will implement specific activities that target women and youth groups for mainly components two and three of the project. The project will ensure social inclusion by identifying vulnerable groups likely to be excluded or marginalized in the consultation process and design the tools that ensure that they are fully included in this process with real listening and real consideration of their views (for example, to better engage women ensure that they are consulted in separate groups facilitated by a woman).

Component 2, ‘Sustainability and Adaptive Capacity of the Food System’s Productive Base’ targets the resilience of agro-sylvo-pastoral production systems allowing small and medium producers, especially women and youth, to sustainably meet their nutritional needs and raise incomes from the sale of surpluses in local and regional markets. Sub-component 2.1, ‘Consolidating Regional Agriculture Innovation Systems’ aims to strengthen the regional research and extension systems to deliver and scale up, in a sustainable manner, improved technologies and innovation, including digital agriculture, climate-smart, nutrition-sensitive, and gender- and youth sensitive technologies.

To address and close gender gaps in access to facilities and opportunities, a comprehensive approach has been implemented within the FSRP (Food Security and Resilience Program). The strategies employed can be organized and summarized as follows:

- **Screening and Categorization of Activities:** All program activities are screened to ensure inclusion of women, men, and youths. Challenges such as information gaps are addressed to capture attendance categories effectively.
- **Enhanced Attendance List:** The attendance list format is modified to capture demographic details including age categories to ensure inclusion of all individuals, with ongoing sensitization efforts to encourage participation.
- **Community Sensitization on Social Inclusion:** During community engagements and sensitization sessions (e.g., GRM and GBV/SEA/SH), the importance of social inclusion for sustainable development is emphasized.

- Ensuring Social Inclusion in Beneficiary Selection: Emphasis is placed on social inclusion in beneficiary selection processes to ensure equitable access to program interventions.
- Advocacy for Women's Involvement in Decision-Making: Advocacy efforts are made to ensure women's involvement in decision-making positions related to project implementation, including addressing gender disparities in meeting attendance.
- Involvement in Committees: Women are actively involved in community-level committees such as GRM (Group Risk Management) and GBV/SEA/SH (Gender-Based Violence/Sexual Exploitation and Abuse/Sexual Harassment).
- Direct Engagement with Women: Personal engagement with women is conducted to encourage their active participation in program activities.
- Gender Gap and Social Inclusion Training: Training sessions are conducted for program staff, implementing partners, service providers, and local authorities to enhance understanding and practices related to gender equality and social inclusion.
- Community Engagement and Task Forces: Continuous community engagement is maintained, and Gender and Youth task forces/committees are formed to foster inclusivity.
- Advocacy through Code of Conduct: Advocacy efforts include incorporating social inclusion clauses into codes of conduct signed by implementing partners and service providers.
- Advocacy for STEM Education for Girls: Advocacy is carried out to encourage girls' participation in STEM education to bridge gender gaps, particularly in agriculture-related fields.
- Lobbying for Female Employment in Agriculture: Efforts are made to lobby for the full-time employment of female volunteers within the Ministry of Agriculture to address gender disparities in the workforce.
- Facilitating Scholarships: Facilitation of MSc and PhD scholarships in agricultural sciences education is prioritized for women and youth, with interviews conducted to identify eligible candidates.
- Lobbying for Gender Desk Officers: Collaborative efforts with implementing partners to establish Gender Desk Officers for dedicated support on gender-related issues.
- Capacity Building for Seed Actors: Capacity-building initiatives target seed actors to increase participation of women and youths in seed and agro-dealer roles.
- Formal Agreements with Relevant Ministries and Initiatives: Formal agreements (TOR and MOA) are established with ministries and initiatives focused on gender and youth empowerment, such as the Ministry of Gender and Children's Affairs and the STEM GIRLS INITIATIVE.

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

## Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

## Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

### Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
High or Substantial			

## C. OTHER REQUIREMENTS

### Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

## ANNEX A: FINANCING TABLES

### GEF Financing Table

#### Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
World Bank	LDCF	Sierra Leone	Climate Change	LDCF Country allocation	Grant	18,348,624.00	1,651,376.00	20,000,000.00
<b>Total GEF Resources (\$)</b>						<b>18,348,624.00</b>	<b>1,651,376.00</b>	<b>20,000,000.00</b>

### Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

false

PPG Amount (\$)

PPG Agency Fee (\$)

GEF Agency	Trust Fund	Country/ Regional / Global	Focal Area	Programming of Funds	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
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<b>Total PPG Amount (\$)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
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Please provide justification

### Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)
<b>Total GEF Resources</b>					<b>0.00</b>

### Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
CCA-1-1	LDCF	14,348,624.00	50,000,000.00
CCA-1-2	LDCF	4,000,000.00	10,000,000.00
<b>Total Project Cost</b>		<b>18,348,624.00</b>	<b>60,000,000.00</b>

### Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
GEF Agency	World Bank	Grant	Investment mobilized	60,000,000.00
<b>Total Co-financing</b>				<b>60,000,000.00</b>

Describe how any "Investment Mobilized" was identified

The project is an additional financing to an IDA project and will be fully blended with IDA financing.

### ANNEX B: ENDORSEMENTS

#### GEF Agency(ies) Certification

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Angela Armstrong	3/20/2024	Adetunji A. Oredipe		aoredipe@worldbank.org

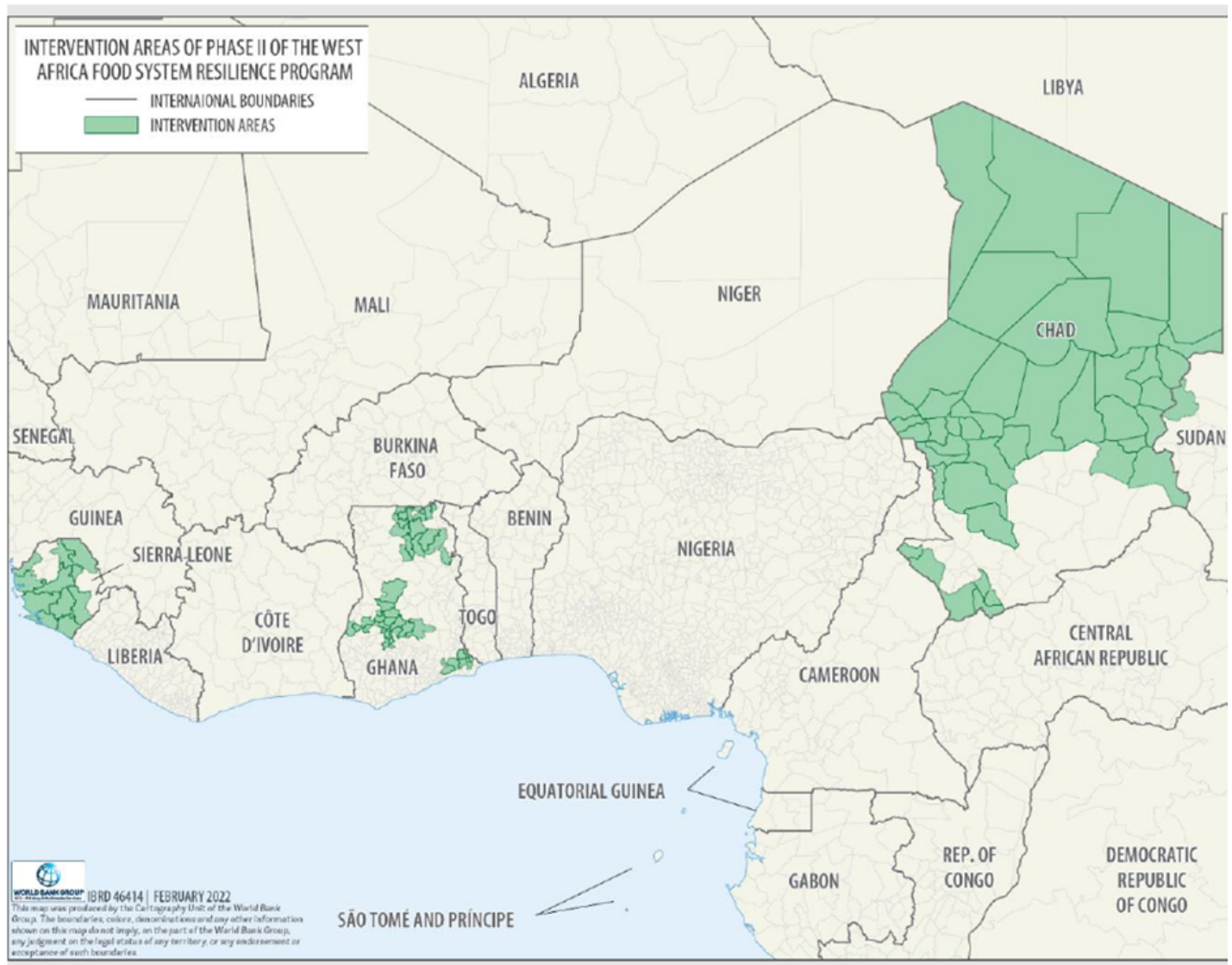
Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Sheku Mark Kanneh	Assistant Director, National Climate Change Secretariat	Environment Protection Agency Sierra Leone	

## ANNEX C: PROJECT LOCATION

Please provide geo-referenced information and map where the project interventions will take place

### ANNEX 8: MAP OF PHASE 2 INTERVENTION AREAS



## ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title

Appraisal Environmental and Social Review Summary (ESRS) - West Africa Food System Resilience Program (FSRP) - Phase 2 - P178132

#### ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	Principal Objective 2	No Contribution 0	No Contribution 0

#### ANNEX F: TAXONOMY WORKSHEET

Community-based adaptation, Climate Change Adaptation, Climate Change, Focal Areas, Disaster risk management, Least Developed Countries, Partnership, Type of Engagement, Stakeholders, Participation, Communications, Strategic Communications, Public Campaigns, Awareness Raising, Beneficiaries, Local Communities, Civil Society, Community Based Organization, Gender results areas, Gender Equality, Knowledge Generation and Exchange, Gender Mainstreaming, Sex-disaggregated indicators, Capacity Development, Capacity, Knowledge and Research, Knowledge Generation, Training, Workshop, Knowledge Exchange, Influencing models, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Information Dissemination