



LA BANQUE AGRICOLE



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ESF Consultants
Environmental Management Consultants

Green Climate Finance Facility for fostering Climate-Smart Agriculture in Senegal

Accredited Entity: La Banque Agricole (LBA)

Environmental And Social Management Framework

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List of Abbreviations & Acronyms

AFOLU	Agriculture, Forestry and Other Land Use
AMA	Accreditation Master Agreement
ANACIM	Agence Nationale de l'Aviation Civile et de la Météorologie (National Agency of Civil Aviation and Meteorology)
BCEAO	Banque Centrale des Etats de l'Afrique de l'Ouest (Central Bank of West African States)
CBD	Convention on Biodiversity Diversity
CNAAS	Compagnie Nationale d'Assurance Agricole du Sénégal (National Agricultural Insurance Company of Senegal)
CoC	Code of Conduct
COMNACC	Comité National sur les Changements Climatiques (National Committee on Climate Change)
COMRECC	Comités Régionaux sur les Changements Climatiques (Regional Committees on Climate Change)
CoP	Conference of the Parties
COVID	Coronavirus Disease
CSA	Climate Smart Agriculture
CSE	Centre de Suivi Ecologique
CSOs	Civil Society Organizations
DEEC	Direction de l'Environnement et des Etablissements Classés
DGPRES	Direction de Gestion et de Planification des Ressources en Eau (Directorate of Water Resources Planning and Management)
EA	Environmental Assessment
ECOWAS	Economic Community of West African States
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
EP	Equator Principles
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESP	Environmental and Social Policy
ESRA	Environmental and social risk assessment
ESS	Environmental and Social Safeguards
FAA	Funded Activity Agreement
FAO	Food and Agriculture Organization

FOs	Farmer Organizations
FPIC	Free, Prior, and Informed Consent
GBV	Gender Based Violence
GCF	Green Climate Fund
GCFF	Green Climate Finance Facility
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GIIP	Good International Industry Practice
GIS	Geographic Information Systems
GRM	Grievance Redress Mechanism
IFC	International Finance Corporation
IPCC	Intergovernmental Panel on Climate Change
IPP	Indigenous Peoples Plan
IPPF	Indigenous Peoples Policy Framework
IPPU	Industrial Processes and Product Use
IPs	Indigenous Peoples
IRM	Independent Redress Mechanism
ISRA	Institut Sénégalais de Recherche Agricole (Senegalese Institute for Agronomic Research)
LBA	La Banque Agricole
LFIs	Local Financial Institutions
LOASP	Loi d'Orientation Agro-Sylvo-Pastorale (Agro-Silvo-Pastoral Orientation Law)
LoC	Line of Credit
LOs	Lending Officers
LUCF	Land-Use Change and Forestry
LULUCF	Land Use, Land-Use Change and Forestry
MEDD	Ministère de l'Environnement et du Développement Durable (Ministry of the Environment and Sustainable Development)
MoV	Means of Verification
MPI	Multidimensional Poverty Index
MSMEs	Micro, small, and medium enterprises
NDCs	Nationally determined contributions
NSC	National Steering Committee

NTFPs	Non-timber forest products
OP	Operational Policy
PAPs	Project Affected Peoples
PMU	Programme Management Unit
PNDE	Plan National de Développement de l'Elevage (National Livestock Development Plan)
PPE	Personal Protective Equipment
PRACAS	Programme d'Accélération de la Cadence de l'Agriculture (Program for Accelerated Pace of Agriculture)
PS	Performance Standard
PSE	Plan Sénégal Emergent
RETs	Renewable Energy Technologies
SDGs	Sustainable Development Goals
SEA	Sexual Exploitation and Abuse
SEAH	Sexual Exploitation, Abuse and Harassment
SEP	Stakeholder Engagement Plan
SNEEG	Stratégie nationale pour l'Equité et l'Egalité de Genre
SRI	System of Rice Intensification
TNC	Third National Communication
ToT	Training of Trainers
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
USD	United States Dollar
WAEMU	West African Economic and Monetary Union
WB	World Bank
WRI CAIT	World Resources Institute Climate Analysis Indicators Tool

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Executive summary

LBA is the second accredited entity in Senegal by the Green Climate Fund (GCF) for direct access and is oriented towards the development of financing models, products, and services for projects that promote sustainable resilience of agricultural value chains and productive sectors. LBA recognizes the need to promote transition towards a carbon free climate resilient economy. LBA obtained accreditation with the Green Climate Fund (GCF) aiming to assist the Government and People of Senegal in mobilizing international resources to supplement national efforts geared towards climate change adaptation and mitigation via the banking sector. It is within this context that LBA submitted a project concept note validated by the GCF in January 2022 titled *Green Climate Finance Facility for fostering Climate-smart agriculture in Senegal*.

The agricultural sector stands as one of the most vulnerable to climate change in Senegal. Climate change poses significant risks, livelihood loss for farmers, deteriorating bank balance sheets, and hindering the country's growth potential and overall development outlook. Senegal must enhance climate risk management and environmental preservation to ensure the long-term productivity of its agricultural sector. The proposed programme will enable LBA to develop innovative financing mechanisms to encourage the adoption of adaptation technologies tailored to local contexts. These technologies should effectively address current and future climate risks, ensuring resilient increases in crop yields and demonstrating high revenue generation potential. The Programme's ultimate objective is to enhance Senegal's agriculture resilience, increase productivity, and mitigate greenhouse gas emissions and other negative environmental impacts.

The Senegal National Environment Policy, along with other relevant national laws and the Green Climate Fund (GCF) Revised Environmental and Social Policy, mandate LBA to prepare an Environmental and Social Management Framework (ESMF) report. This framework will establish mechanisms for determining and assessing potential environmental and social impacts of sub-projects financed under the proposed Programme. This ESMF will enhance mitigation, monitoring, and institutional measures during design, implementation, and operation phases to mitigate adverse environmental and social impacts. This is essential at this stage when sub projects have yet to be fully identified. The exact location, size, and scope of sub-projects are still to be designed warranting the preparation of the ESMF to guide Programme implementation. The ESMF aligns with LBA's ESMS, IFC's PS, GCF's Revised Environmental and Social Policy, and Senegal Environment Code.

The ESMF has been accomplished through a combination of desktop reviews and consultations with relevant stakeholders. Stakeholder engagement has been based on perceived programme impacts, considering ecological, social, and cumulative factors. LBA is committed to ongoing stakeholder engagement throughout the Programme's implementation to decommissioning stages. The programme falls under Environmental Category B, projects whose activities have potential limited adverse environmental and/or social risks and impacts that, individually or cumulatively, are few, generally site-specific, largely reversible, and readily addressed through mitigation measures. The proposed programme risks are associated with construction of infrastructure, installation of biogas systems and equipment, and chemical use or production. Mitigation measures include waste management, CSA practices, land and natural resource management, and proper chemicals handling.

This programme is anticipated to have consequential positive impacts particularly climate change adaptation capacity, water resource management, building farmer and ecosystem resilience, reduction in greenhouse gas emissions and enhanced livelihoods and quality of life. Negative impacts may include biodiversity loss, construction-related impacts, soil and water contamination, public health hazards, water supply depletion, soil erosion, and environmental impairment. ESMF implementation will leverage existing administrative and management structures at LBA, with the Programme Management Unit (PMU) responsible for monitoring environmental and social screening processes. The PMU will receive resource allocation and training to enhance screening capacities at various levels. The screening mechanism enables identification and mitigation of impacts before project submission for review and approval. Identified impacts will inform Environmental and Social Impact Assessment (ESIA) scope for specific sub-projects.

The ESMF incorporates a Grievance Redress Mechanism (GRM) for sub projects and provides guidelines responding to Programme-related complaints from affected individuals, organizations, or communities, ensuring just and appropriate grievance resolution. The annexes also have eligibility screening forms for programme participants and other stakeholders such as FOs and Cooperatives, a Sexual Abuse and Harassment (SEAH) policy brief and Indigenous Peoples Policy Framework.

It is envisaged that this framework will enhance sustainable project development and magnify positive environmental benefits and other project co-benefits from sub-projects while minimizing anticipated negative impacts. A proactive anticipate and prevent approach will be augmented to reinforce mitigation measures before they occur as opposed to react and cure measures which address negative impacts after they happen.

1. Introduction

1.1 Overview

La Banque Agricole (LBA) through its position and its mission in the financing of the agricultural economy in Senegal contributes significantly to the creation of growth and by extension to the economic development of the country. In this context, the entire strategy of the bank as the second accredited entity in Senegal to the Green Climate Fund (GCF) for direct access is oriented towards the development of financing models, products, and services capable of promoting sustainable resilience of agricultural value chains and productive sectors. The present Environmental and Social Management Framework (ESMF) has been developed as part of LBA's project *"Green Climate Finance Facility for Fostering Climate-smart agriculture in Senegal"*.

Unlike an Environmental and Social Impact Assessment (ESIA), which analyses the impacts of concrete planned activities, the ESMF sets out the principles, rules, guidelines, and procedures to assess all potential environmental and social risks and impacts of the Programme. It recommends mitigation and avoidance mechanisms, including institutional capacities, monitoring arrangements and approximate costs. It is designed to be flexible and applicable to Programme activities throughout the implementation period, even though the Programme activities may be subject to change.

This ESMF reviews all available Programme documentation and presents an overview of the reference framework. The potential Programme activities are identified, and their potential risks and impacts analyzed. Based on this analysis, adequate mitigation guidelines as well as performance indicators and monitoring arrangements are proposed.

1.2 Background

In Senegal, the agricultural economy is highly dependent on climatic conditions, while there is a downward trend in rainfall and an increase in temperature. While it is true that agriculture contributes considerably to supplying the Gross Domestic Product (GDP) and that a good part of the total population of the country is active in agriculture, the question of sustainable financing of the sector remains a major obstacle to the development of agricultural value chains and the resilience of its population.

This situation is exacerbated by the very limited availability of concessional resources for financing institutions and the low level of public funds allocated to agricultural development. Access to affordable agricultural credit has the potential to improve considerably food security for populations to enhance their livelihood, increase farm

productivity and household income, especially in rural areas, while simultaneously encouraging the adoption of sustainable agricultural practices. Senegal is highly vulnerable to, the effects of climate change but poorly prepared thus, increased investment in priority sectors (AFOLU and Energy) that are significant GHG emitters is of utmost importance. Given COVID-19's global impacts on fiscal budgets, the situation is further aggravated, as the Senegalese Government was overstretched financially, increasingly accumulating debt to combat the pandemic.

1.3 Programme Description

The main objective of this Programme is to increase farm productivity, enhance resilience to reduce vulnerability to drought, pests, shortened seasons and erratic weather patterns, and reduce GHG emissions from deforestation and poor agricultural practices such as slash-and-burn, by supporting the financial sector to create green credit lines that are aligned to Senegal's NDC commitments. The Programme's objectives include: (i) reduce high financing costs and short-term loan tenure; (ii) increased access to rural agricultural financial products; (iii) incentivize MSMEs, Cooperatives and, Farmers' Organizations adopt climate-smart agricultural practices through a concessional credit line; and (iv) build the resilience of crop, and pasture resource management practices to present and future climate risks.

The Programme embraces four components that focus on strategic areas for the improvement of the adoption of climate-smart agriculture among farmers.

Component 1: Innovative Finance Facility to provide concessional loans to foster climate-smart agricultural practices. The aim is to facilitate MSMEs, women and youth organizations, Cooperatives and, FOs access concessional loans of varying tenures in adopting climate-smart agricultural techniques in the crop, and livestock industries. These practices span across three main clusters: crop production, livestock production, and energy for resilient agricultural processes (primarily biogas), and include:

- Crop production – Various strategies and techniques related to crop production, agricultural leasing, and post-harvest strategies as presented in the table below:

Theme	Indicative list of eligible activities	Adaptation*	Mitigation
Energy	Investment for the production, storage and/or use of renewable energy - bioenergy equipment (biomass, waste, biogas and biofuels).		X
Water management	Investment for the establishment, extension and/or maintenance of hydro-agricultural facilities and/or water conservation systems - irrigated perimeters, canals, dams, dikes, basins, hill reservoirs, rainwater catchment system, wastewater reuse system, reservoirs, cisterns, water towers. - System for rice intensification (SRI) – intermittent irrigation, organic soil enrichment	X	

	Investment for the installation and/or replacement of irrigation systems - boreholes, wells, efficient water pumping system, wastewater reuse and recycling system, irrigation control systems, water meter, connectors, piping, multi-valves, Californian systems, sprinkling, micro-sprinkling, drip irrigation, low pressure systems, various irrigation equipment, etc.	X	
Agricultural Equipment	Investment in the purchase, maintenance or repair of non-motorized (non-emissive) agricultural equipment - Crop protection: greenhouses, micro/macro-tunnels, protective nets, anti-grain-eating bird devices. - Tillage for conservation agriculture: rake, harrows, rotary harrow, knife roller, strip-till, ripper, scarifiers, subsoiler, - Zai Pits and Half-Moon Techniques - Sowing and planting: direct seeders, multi-species seeders. - Spreading: manure/slurry spreader, straw spreader, etc. - Maintenance and weeding: mower, brush cutter, smooth rollers (control of cover crops), weeding tools. - Harvesting: lifter, mower, raker, tedder rake. - Transport: bicycle, cart, trailer, tipper. - Animals for draught or transport: ox, donkey, horse. - Other small manual and towed equipment. - Hydroponics solutions - Precision agriculture	X	
Breeding	Investment in sustainable and resilient production, processing, storage and marketing of fodder - Equipment for the production of fodder, motor mower, fodder choppers, rakes, balers, fodder bank infrastructures and equipment (silos, tarpaulins, sheds).	X	
	Investments for the establishment, maintenance or repair of infrastructure and/or equipment to promote the resilience of sedentary or semi-sedentary livestock farming - milk storage and processing, ventilation equipment, waterers.	X	
	Investments for the installation, maintenance or repair of biodigester equipment for the manufacture, use and/or sale of gases and organic fertilizers - biodigester infrastructure and equipment, manure collection and transport equipment, effluent and other raw material treatment systems, gas burners, gas light bulbs, piping, geomembrane.		X
	Investments for the installation of sustainable management equipment for silvopastoralism activities and rotary grazing - mobile fences, hedges, electric fences, drinking troughs.	X	X
Processing and storage	Investments for the establishment of infrastructure and/or the purchase of equipment for the storage of local agricultural products and NTFPs (not imported) - sheds, storage warehouses, silos, cold rooms (including solar), air conditioning equipment, storage equipment (pallets, insulation, bags, etc.).	X	
	Investments for the installation of equipment for the processing of agricultural products and NTFPs - shellers, threshers, mills, grinders, presses, ovens, roasting equipment, mixers, pots, drying equipment (dryers), cooking equipment, sorting equipment, packaging equipment - Production of organic fertilizer - Production & development of certified climate-resilient seed materials and varieties.	X	
Forestry	Any investment for the implementation and management of reforestation and/or forest plantations (including NTFPs) - Nursery and plantation equipment, tree protection equipment, wood pruning, cutting and extraction equipment, etc. - Agroforestry practices in home gardens	X	
Climate information services	Investment for the development of CIS solutions such as: - Access to real-time climate information - Agronomic optimization techniques such as season duration and planting time management services. - Climate-informed irrigation calendar	X	

Other	Miscellaneous working capital requirements (limitation on specific commitments on the entire Credit Line:		
	- Working capital requirements (WCR) for the production, packaging, storage, marketing and/or use of certified climate resilient seed - WCR for the import, production, storage, packaging, marketing and/or use of organic soil improvers and fertilisers, manure, compost, biofertilisers, biostimulants, bio-pesticides, etc. - WCR for the maintenance and/or repair of agricultural equipment to improve climate resilience as listed in the previous items - WCR for the operation, maintenance and/or repair of bio-digesters - WCR for the implementation and/or maintenance of reforestation and forest plantations	X	X

- Livestock production – Implementing agroforestry practices and cultivating forage crops to enhance the supply of high-quality feed, thereby reducing enteric methane emissions; utilizing low-emission feeds derived from crop by-products and co-products of the agri-food industry; establishing fodder banks.
- Energy – Biodigesters to convert waste into energy, providing a sustainable alternative to traditional energy sources. Investing in biodigesters under this Programme will facilitate the replacement of agrochemical fertilizers with bio-slurry (a by-product of biodigesters), which optimizes resource use, enhances crop yields, and reduces both fertilizer consumption and greenhouse gas (GHG) emissions. This approach also benefits farmers' health by minimizing their exposure to harmful agrochemicals and smoke from fuel wood used in cooking.

The portfolio is tentatively structured as follows:

Category of Beneficiary	Number of Beneficiaries	Type of Loan	Annual Average	Average Loan Size (<i>Min and Max loan size in square bracket</i>)	Purpose
Smallholder Farmers	142,490 over the life of the project	One-year loans	7,124 Smallholder Farmers per year	EUR 850 [500 - 1,200] per borrower	Working capital and asset financing for CSA practices and technology needs
Medium-scale Farmers	9,775 over the life of the project	Two-year loans	978 Medium-scale Farmers every two years	EUR 4350 [1,201 - 7,500] per farmer	Scaling up CSA practices and technology adoption
Small and Medium-sized Enterprises	227 over the life of the project	Five-year loans	57 MSMEs in agri-processing every five years	EUR 26,250 [1,701 - 45,000] per entity	Expansion of agri-processing capacity and adoption of

(MSMEs) in Agri-processing					climate-smart technologies
Service Providers and Asset Financiers	51 over the life of the project	Five-year loans	13 Service providers and Asset financiers every five years	EUR 52,500 [45,000 - 60,000] per provider	Supporting agricultural services and asset financing aligned with CSA practices
Large Corporates (e.g., Large Contract Farmers)	18 over the life of the project	Ten-year loans	9 Large corporate every ten years	EUR 230,000 [60,001 - 400,000] per entity	Major investments in large-scale CSA initiatives and technology integration

Component 2: Capacity Building and Technical Assistance for LBA, FOs, women and youth organizations, cooperatives and MSMEs. This component seeks to improve technical skills, which are key to removing barriers to financing Climate Smart Agricultural activities. It will enable LBA to provide climate-smart loans to smallholders including women and youth and ultimately will reduce the climate risk of their loan portfolios. This component will be available to both participating entities under component 1 and entities undertaking CSA lending and adoption as per an agreed MoU. The intended beneficiaries of this component are LBA, various co-operatives, FOs, and smallholder farmers.

Component 3: Enabling environment for CSA practice adoption enhanced. To ensure long term alignment that would ensure continuity of resultant practices after the disbursement period, the programme will undertake to establish an enabling environment that creates a conducive environment for the wide adoption of CSA practices. The project will invest in the creation of an enabling policy and regulatory environment for widespread adoption among farmers and agri-entrepreneurs, the identification of opportunities for private sector engagement in climate change mitigation and adaptation measures, and provision of improved climate information services to allow farmers to plan their cropping season. This component will facilitate the harmonization of standards, public-private partnerships, and green financing. This will be undertaken through:

Component 4: Dissemination of CSA information, knowledge sharing and documentation. This component will ensure wide dissemination of the programme among key stakeholders and programme beneficiaries and ensure learning including sharing of lessons learnt and best practices. It entails developing and implementing a communication strategy to engage women and youth groups (MSMEs, FOs), and

cooperatives; development of programme website and promotional materials e.g., webinars and brochures; identification of success stories based on the credit line advances; learning workshops; and targeted presentations to key stakeholders.

1.4 Objective of the ESMF

The overall objective of this ESMF is to establish a mechanism to identify and assess future potential environmental and social impacts (both negative and positive) of all programme activities to be financed under the green Line of Credit. This will also inform mitigation, monitoring, and institutional measures to be taken during implementation and operation of the programme activities to offset to acceptable levels the adverse environmental and social impacts.

This ESMF will provide an environmental and social screening process for future financed investments where the exact locations are not known prior to appraisal, and for which appropriate mitigation measures might be required. Thus, the ESMF has been prepared to assist La Banque Agricole in designing and implementing strategies that will assist in mitigating anticipated long term livelihood disenfranchisement, and environmental and social damage risks as is the case with LBA's orientation in terms of sustainable governance of its financing through its Environmental and Social Policy. The identification of all these risks would assist in defining the scope of the site, specific Environmental and Social Impact Assessment (ESIAs) where needed. It is also a clear objective that the frameworks developed under this assignment and implemented in the programme will be used as practical tools during Programme implementation.

The ESMF further highlights relevant policies, guidelines, codes of practice, and procedures to be taken into consideration for the integration of environmental and social aspects into the project design. These will ensure beneficiaries of the fund complies with the GCF safeguard policies and the relevant provisions under the related government policies, and associated rules, regulations, and procedures. This is also in alignment with LBA's guidelines for the identification, evaluation and management of environmental and social risks.

1.5 Specific objectives

The ESMF is designed to ensure an appropriate level of environmental and social management, which could range from the application of simple mitigation measures (through environmental screening) to the preparation of a specific ESIA Report. The specific objectives of ESMF are.

- Desktop review of key programme information and relevant publicly available information
- Definition of the policy, legal and administrative framework of applicable standards, frameworks, and guidelines relevant to the programme
- To determine the need for and level of environmental and social impact assessment for the projects financed through the Programme.
- To assess the risks of the proposed programme to trigger any relevant E&S due diligence, propose mitigation measures.
- Outlining the environmental and social issues that could potentially materialize through implementation of the proposed programme and metrics to evaluate them.
- Developing methodologies and procedures to assess potential environmental and social impacts and risks related to the projects financed.
- To develop criteria that will be employed in implementing activities/sub projects within the programme that will have higher environmental and social risk levels.
- Developing arrangements for monitoring and supervision of projects within the programme with the intention of minimizing potential risks for complaints.
- Highlighting provisions for training of existing staff of implementing institutions to strengthen their environmental management capacity.
- To allow for appropriate roles and responsibilities and reporting procedures for managing and monitoring identified environmental and social issues for sub-projects.

1.6 Approach and Methodology

This ESMF has been prepared in line with the relevant GCF and LBA ESS policies on environmental and social management. Senegal's national regulations as well as other applicable standards. A multi-disciplinary team of experienced social and environmental professionals was assembled to prepare the ESMF based on comprehensive literature review and stakeholders' consultations.

1.6.1 Literature review

This involved review of programme appraisal documents; environmental and social screening report, concept note etc. The aim was to obtain background information on

Programme justification and objectives; Programme description and activities - nature and extent of the projects to be financed under the LoC; all locations that the projects may impact, coverage and prioritization; and institutional arrangements.

Senegal environmental policy and laws, and legal requirements and administrative arrangements relevant to the LoC were reviewed and have been incorporated into the ESMF. Reviewed documents include national and international laws, international environmental and social standards, Green Climate Fund (GCF) ESS safeguards, LBA's environmental and social policy and associated procedures and any other relevant documents.

1.6.2 Stakeholders Consultations

The key stakeholders were identified based on their roles, relevance, and potential to be involved in the project's activities. The focus of the exchanges was environmental and social impacts of current financed projects; climate vulnerabilities; impacts and adaptation need for the agriculture sector; perspectives towards the proposed project; eligible agricultural related adaptation technologies; current lending conditionality and considerations for environmental and social issues; and strategies laid down to utilize the green Line of Credit.

2. Policy, Legal and Administrative Framework

2.1 Introduction

A policy framework is required to provide broad guidelines on areas of focus in undertaking environmental management activities. A legal and regulatory framework is essential for providing mandates, allocating specific responsibility and accountability to key actors and stakeholders, and prescribing specific operating environmental procedures and standards. The programme is set within the context of a range of national environmental and social management policies, guidelines, and plans; to ensure compliance with laws and regulations; and to monitor, review and adapt policies, plans and regulations in the light of experience. These are the important factors that will provide an enabling environment so that the safeguards that will be put in place by the LBA to offset the environmental and social impacts of the sub projects can really work. This section presents relevant environmental and social policies and laws that are relevant to the environmental and social management of the Programme's subprojects.

2.2 Relevant laws and regulations

2.2.1 Law n° 2023-15 (Environment Code)

The new Environment Code came into being with Law no. 2023-15 of August 02, 2023. This law adapts, completes, and reinforces the provisions of the former Environment Code dating 2001. It establishes the fundamental rules and principles for the ecologically rational management of the Environment. The provisions of this law apply *"to natural environments, sites, and landscapes; air, soil, and water; animal and plant species; classified installations: diversity and biological balance; and the living environment"*.

First and foremost, the new Environment Code makes public information a priority. Indeed, the Code now guarantees access to information by the State (article 7 et seq.) through the possibility for any person who so requests to obtain information relating to the Environment when it is available, and the dissemination by the public authority of any serious and imminent threat to health and the Environment.

One of the major innovations of Law no. 2023-15 of 02 August 2023 on the Environment Code is the creation of financial instruments (articles 16 et seq.). For the protection of the environment, it provides that duties, fees and parafiscal taxes are borne by the operators of classified facilities or any person carrying out a regulated activity with an environmental impact. An exemption is provided for companies that invest in combating pollution and nuisance.

The new Environment Code has also made the environmental compliance procedure (articles 20 et seq.), which is required prior to the planning, development, and implementation of projects with an impact on the environment. The concept of category 1 and 2 classified installations has been maintained. Category 1 includes projects subject to an environmental impact assessment with a major environmental risk, and category 2 concerns projects subject to an initial environmental analysis.

The environmental assessment now consists of a strategic environmental assessment, an environmental and social impact study (for 1st class facilities), an initial environmental analysis (for 2nd class facilities) and an environmental audit. It may also potentially include a risk assessment, depending on the type of classified facility. As with the 2001 Code, it is also specified that public participation is an integral part of the environmental assessment process. Regulations are to be issued to specify the conditions under which these studies are to be carried out and their content.

2.2.2 Agro-sylvo-pastoral orientation law

The agro-sylvo-pastoral development policy is marked by the gradual withdrawal of the State and is consistent with the principles of refocusing its missions on sovereign functions, continuing the decentralization policy, improving the framework and conditions of life in rural areas, as well as the creation of an environment conducive to private investments in rural areas. Poverty reduction is the main priority of state policy, particularly in rural areas. The strategic axes of the agro-sylvo-pastoral development policy are based on the following principles: economic efficiency, social equity, environmental sustainability, market economy, decentralization, empowerment of local authorities, professional agricultural organizations and civil society, creation of a common market within WAEMU and ECOWAS, solidarity, partnership, and subsidiarity.

The law is made up of 82 articles, divided into 19 chapters, dealing respectively with provisions regulating the strategic axes of the agro-sylvo-pastoral development policy, namely: 1) Formal recognition of agricultural professions and professional agricultural organizations; 2) Social protection for people working in agriculture; 3) Definition of a legal status for farms; 4) Land reform; 5) Diversification of agricultural production, integration of agricultural sectors and regulation of markets; 6) Forestry and forest management; 7) Livestock development policy; 8) Water management; 9) Development of infrastructure and public services in rural areas; 10) Promotion of social equity in rural areas; 11) Protection against natural disasters and risks associated with agro-sylvo-pastoral activities; 12) Development of agricultural information, education and training for agricultural professions; 13) Capacity-building for professional agricultural organizations,

civil society organizations, local authorities and government services; 14) Development of agro-sylvo-pastoral research and consultancy; 15) Financing of agro-sylvo-pastoral development.

2.2.3 Law No. 81-13 (Water Code)

The law establishes as an essential principle the public ownership of water, which makes this resource a common good for all. Consequently, any exploitation of water resources is subject to prior authorization and control. The law creates the legislative framework for the quantitative and qualitative use and protection of water resources and their allocation. The law comprises 110 articles divided into 7 titles, namely: Water use regime (I); Water quality protection (II); Various uses and priority of use (III); Constraints on private property (IV); Infractions and penalties (VI); Transitional provisions (VI).

2.2.4 Law No. 97-17 (Labor Code)

The purpose of the law is to reform the Labor Code to adapt it to Senegal's economic and social realities, ensuring sustainable human development with equity and social justice. Its aim is to modernize labor relations and promote social dialogue between the social partners. It represents a profound overhaul of positive law in both form and substance.

It covers elements such as working conditions, employment contract, professional unions, apprenticeship and professional training, salary, and occupational health and safety.

2.2.5 Senegal's banking laws and regulations

The principal laws and regulations governing the banking sector are the following:

- Framework law on banking regulation (BCEAO) (*Loi cadre portant réglementation bancaire (BCEAO)*), such as
 - Circular n° 01-2017/CB/C on the governance of credit institutions and financial companies in WAEMU, establishing the minimum rules in terms of governance to be observed by all operating institutions.
 - Circular n° 03-2017/CB/C establishing internal controls of credit institutions and financial companies in WAEMU.
 - Circular n° 04-2017/CB/C on risk management within credit institutions and financial companies in WAEMU.
- Law 2008-26 of 28 July 2008 on banking regulation (*Loi 2008-26 du 28 juillet 2008 portant réglementation bancaire*); and

- Collective Agreement on Banks and Financial Institutions in Senegal (*Convention collective des banques et établissements financiers au Sénégal*).

2.3 National plans and strategies

2.3.1 Senegal's Updated NDC (2020)

Majority of Senegal's greenhouse gas (GHG) emissions come from the agriculture sector, largely driven by enteric fermentation from livestock and savanna burning. Moreover, agriculture and water resources are cited as the two most vulnerable sectors in Senegal's NDC. Key goals related to mitigation and adaptation under Senegal's Nationally Determined Contribution (NDC) include reducing CO₂e emissions by up to 29.5 percent, increasing the share of renewable energy in the electricity mix to 40.7 percent by 2035, mobilizing \$8.7 billion and \$4.3 billion to fund mitigation and adaptation efforts, respectively, and reducing deforestation by 25 percent from 40,000 hectare/year to 30,000 hectare/year. Proposed actions that align with NDC objectives include:

- Biodigester use (transition towards renewable energy)
- SRI cultivation (effective water use)
- Drip irrigation (integrated water resource management)
- Agroforestry (reduce enteric methane emissions and improve soil health)
- Climate information services (strengthen networks for collating climate data)

2.3.2 Plan Senegal Emergent (PSE),

The plan aims at enabling Senegal to emerge in terms of economic development by 2035. It places the agriculture sector at the heart of economic development. It highlights climate change as a major challenge and stresses the importance of finding effective and sustainable solutions to enable people to adapt and build their resilience against climate shocks and other hazards.

Senegal adjusted the Priority Action Plan (PAP) of phase II of the Plan Senegal Emergent (PSE). The Adjusted and Accelerated Priority Action Plan (PAP2A) was thus developed. With PAP2A the will of the Senegalese authorities is to promote abundant, high-quality, and climate-resilient intensive agriculture; an inclusive health sector, an efficient education system, the emergence of a strong national private sector, enhanced social protection, and industrial & digital transformation.

2.3.3 Program for Accelerated Pace of Agriculture (PRACAS II)

Its objectives are to enhance food security and nutrition and increase rural incomes through support to food production. Priority investments under PRACAS II seek to create employment, expand agricultural exports, and help the agricultural sector adapt to climate change. Activities to be undertaken include the use of certified seeds, drip irrigation, agricultural extension and training, and increased adoption of CSA practices.

2.3.4 National Livestock Development Plan (PNDE)

Its objective is to make livestock a high performing sector. This programme focuses on animal health and climate-smart livestock practices that mitigate GHG emissions while also maintaining sustainable livestock production.

2.3.5 National Strategy for Gender Equity and Equality 2016 -2026

The National Strategy for Gender Equity and Equality aim is to eliminate disparities between women and men by putting into perspective, in all public policies, the modalities and means of achieving equity and gender equality in the political, economic, and social fields. This implies empowering the actors: ministries, national agencies, the National Assembly and CSOs so that they develop and implement, each as far as they are concerned, their gender institutionalization program. The aim is to translate into reality and according to the human rights approach, the principle of equality between the genders as enshrined in the Constitution.

2.4 International agreements, conventions, and treaties

Senegal is a signatory to several conventions on sustainable development and is a member of various bilateral and multilateral organizations. Among those the following are relevant international treaties and conventions to the ESMF and the proposed programme.

2.4.1 Sustainable Development Goals

The Sustainable Development Goals (SDGs) are a collection of seventeen interlinked objectives designed to serve as a "*shared blueprint for peace and prosperity for people and the planet, now and into the future.*" The following SDGs are relevant to the project:

- **No poverty (SDG 1):** Poverty reduction is the main priority of state policy, particularly in rural areas. Poverty rates are still high, 50.8% of the population are considered multidimensionality poor and the MPI value is 0.263¹. The Programme

¹ [UNDP, Global Multidimensional Poverty Index 2023](#)

will result in improved incomes for approximately 142,490 farmers and better livelihood of smallholder farmers and rural communities: improved nutritional benefits from CSA practices.

- **Zero hunger (SDG 2):** Between 2016-18, about 1.8 million Senegalese suffered from hunger². The project is expected to increase agriculture production and the diversification of activities. This will reduce hunger among the population.
- **Good health and well-being (SDG 3):** One of the adaptation actions in Senegal's NDCs is to ensure the health, well-being, and protection of populations against risks and disasters related to extreme events and climate change. Biodigester use and composting are expected to improve community health because of reduced emissions from fuel wood. By investing in biodigesters, the programme will contribute to the replacement of agrochemical fertilizers by bio-slurry (biodigesters' effluent), which will optimize resources, improve yield, reduce fertilizer use and GHG emissions, while also improving farmers' health by reducing exposure to agrochemicals and to smoke from cooking with fuel wood.
- **Gender equality (SDG 5):** The project targets 40% of loans to be granted to women-led MSMEs, 30% to youth-led MSMEs in which women participate, and 30% to male-led MSMEs. Further actions will be deployed to strengthen the technical, financial, and managerial capacities of women to enable them to identify and develop business plans. A Gender Action Plan has been prepared to further ensure gender mainstreaming.
- **Affordable and clean energy (SDG 7):** Households will be able to access low-emission energy through biogas digesters, which in turn reduces the dependence of fossil fuels as a source of energy.
- **Decent work and economic growth (SDG 8):** In recent years, private sector agriculture operations and agribusinesses have received relatively low investment due to perceived risks in the sector, consequently leading to the sector's growth underperforming in comparison to other sectors. The programme aims to increase access to agricultural credit via a variety of incentives, that spurring growth and creating green jobs in the process.

² The State of Food Security and Nutrition in the World 2019

- **Climate action (SDG 13):** The project aims to sequester approx. 3.76 million tCO₂e and proposes several adaptation and mitigation measures that complement Senegal's updated NDC.

2.4.2 The Paris Agreement on Climate Change

To tackle climate change and its negative impacts, world leaders at the UN Climate Change Conference (COP21) in Paris reached a breakthrough on 12 December 2015: the historic Paris Agreement. The Agreement sets long-term goals to guide all nations to:

- substantially reduce global greenhouse gas emissions to hold global temperature increase to well below 2°C above pre-industrial levels and pursue efforts to limit it to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change.
- periodically assess the collective progress towards achieving the purpose of this agreement and its long-term goals.
- provide financing to developing countries to mitigate climate change, strengthen resilience and enhance abilities to adapt to climate impacts.

2.4.3 The Convention on Biological Diversity

Senegal signed the CBD in 1992 and ratified it in 1994, thereby committing to the conservation and sustainable use of biological diversity. The CBD establishes a global legally binding framework for the conservation of biodiversity, the sustainable use of its components and the fair and equitable sharing of benefits arising out of utilization of genetic resources. The provisions of this convention should be considered in the conservation of various species of plants, animals, and the variety of ecosystems in Senegal. Article 14 requires parties to carry out ESIA on all projects and development in protected areas. By preparing this ESMF, LBA is conforming to this requirement. Senegal has further ratified the Cartagena Protocol on Biosafety (in 2003) and Nagoya Protocol on Access to genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (2016).

2.4.4 The Ramsar Convention on Wetlands of International Importance

The Convention on Wetlands also known as the "Ramsar Convention" is an intergovernmental treaty that embodies the commitments of its member countries to maintain the ecological character of their Wetlands of International importance and to plan for their sustainable use, of all the wetlands in their territories. The convention

recognizes wetlands importance of wetlands to communities, cultures, governments, and businesses and encourages wetland conservation and wise use of wetlands. Senegal ratified the Ramsar Convention in 1977.

2.4.5 African Convention on the Conservation of Nature and Natural Resources

The Contracting States have agreed on measures to enhance environmental protection, to foster the conservation and sustainable use of natural resources; and to harmonize and coordinate policies in these fields with a view to achieving ecologically rational, economically sound, and socially acceptable development policies and programs for the Convention area. Senegal ratified this convention in 1972.

2.4.6 Charter of Waters of the Senegal River (2002)

The purpose of the Water Charter is to: establish the principles and modalities for the distribution of the waters of the Senegal River between the different sectors of use. The different uses of the waters of the river include agriculture, livestock breeding, inland fishing, fish farming, forestry, fauna and flora, hydroelectric energy, water supply for urban and rural populations, health, industry, and navigation. It considers domestic uses; defines the terms of examination and approval of new projects using water or affecting water quality; determines the rules relating to the preservation and protection of the environment, particularly regarding fauna, flora, floodplain, and wetland ecosystems; and defines the framework and modalities for participation of water users in making decisions for the management of water resources on the Senegal River. It applies to the entire hydrographic basin of the Senegal River, including tributaries, and distributaries. The member states are Mali, Mauritania, and Senegal.

2.4.7 Convention establishing a Permanent Inter-State Drought Control Committee for the Sahel (CILSS)

Ratified by Senegal in 1974, CILSS aims to invest in food security and in the fight against the effects of drought and desertification, for a new ecologically balanced in the Sahel. CILSS brings together thirteen (13) States, including eight coastal states (Benin, Ivory Coast, Gambia, Guinea, Guinea-Bissau, Mauritania, Senegal, Togo); four landlocked states (Burkina Faso, Mali, Niger, Chad); and one island state (Cape Verde). CILSS promotes actions for the exchange of agricultural and agrifood products; control of water to improve the living conditions of Sahelian populations is strengthened; and integrated national and regional markets for the trade of agricultural and agrifood products.

2.4.8 The FAO International Code of Conduct on the Distribution and Use of Pesticides

It establishes voluntary standards for public and private institutions involved in the distribution and use of pesticides. The revised version of the Code, adopted in 2002, has become the globally accepted benchmark for pesticide management and has enabled many countries to establish and strengthen their pesticide management systems. The Code sets out a vision of shared responsibility between the public and private sectors, especially the pesticide industry and government, to ensure that pesticides are used responsibly, delivering benefits through adequate pest management without significant adverse effects on human health or the environment. This ESMF prepared takes into consideration these provisions to ensure safety in the implementation of the sub project to be financed under the programme.

2.5 LBA's Environmental and Social Management System

La Banque Agricole has an Environmental & Social Management System (ESMS) that includes E&S policies and procedures. The bank's ESMS defines the steps and levels of E&S assessment that are required in the credit project cycle to identify, evaluate, manage, and monitor the associated E&S risks to each transaction. Screening against the exclusion list, categorization of the project and identification of the E&S risks are done by the business managers. The E&S scorecard follows the client's loan application to the credit committee. E&S aspects are included in the different levels of control.

The Head of Department of Studies and Strategy (HDSS), also Environment and Climate Focal Point, is responsible for the general supervision of E&S risk management, monitoring the implementation of the ESMS and climate financing procedures. HDSS belongs to the Management Control, Studies, and Strategy Directorate (DCGES). The HDSS is supported by the Environmental Monitoring Manager who helps the agents of the Sales and Marketing Department (DCOM) in the identification, analysis and evaluation of E&S risks and impacts related to clients' activities, including the assessment of E&S documents. HDSS ensures that credit decisions are supported by appropriate environmental and social review, and that environmental and social clauses are included in the loan agreement. The E&S and climate team includes a gender focal point. Green Climate Fund Safeguard policies.

2.6 The Green Climate Fund (GCF) Safeguard Policies

2.6.1 GCF Revised Environmental and Social Policy³

The Board of GCF adopted the Revised Environmental and Social Policy (ESP) in 2021, which sets out the risk-based approach for identifying, assessing, and managing environmental and social risks and impacts of activities, projects, and programmes supported by GCF resources. The Revised ESP describes the environmental and social principles and requirements that support the application of the environmental and social safeguards (ESS) of GCF. The ESP is an essential element of this system, elaborating the commitment of GCF to integrate environmental and social issues into its decision-making and outcomes, and establishes the principles, requirements, and responsibilities to deliver on these commitments. The policy reflects GCF's commitment to achieve environmental and social benefits in all the activities it undertakes and supports and the importance of clearly conveying this objective to stakeholders and communities. It articulates how GCF integrates environmental and social considerations into its decision-making and operations to effectively manage environmental and social risks and impacts and improve outcomes. Through this policy, GCF will require that all GCF-supported activities will commit to:

- Enhance equitable access to development benefits; and
- Give due consideration to vulnerable populations, groups, and individuals (including women, children, and people with disabilities), local communities, indigenous peoples, and other marginalized groups of people and individuals that are affected or potentially affected by GCF-financed activities.

2.6.2 GCF Indigenous People's Policy

The policy supports GCF in incorporating considerations related to indigenous peoples into its decision-making while working towards the goals of climate change mitigation and adaptation. The policy allows GCF to examine, control, eliminate and reduce the adverse impacts of its activities on indigenous peoples in a consistent way and to improve outcomes over time. For the proposed programme, *the GCF Independent Redress Mechanism and the Secretariat's indigenous peoples' focal point will be available for assistance at all stages, including before a claim has been made* (paragraph 70 of the GCF Indigenous Peoples Policy).

2.6.3 Updated Gender Policy and Gender Action Plan 2020–2023

³ <https://www.greenclimate.fund/sites/default/files/document/revised-environmental-and-social-policy.pdf>

The GCF Gender Policy and Action Plan details the commitment of GCF to efficiently contribute to gender equality and ultimately bring about sustainable climate change results, outcomes and impacts, and action plan complement the requirements of the GCF interim ESS standards, particularly by enhancing equitable access to development benefits, gender responsiveness, and inclusiveness. The policy and action plan are applied in conjunction with the ESMS.

2.6.4 Sexual Exploitation, Sexual Abuse, and Sexual Harassment

The Revised environmental and social policy reaffirms the Fund's commitment to addressing Sexual Exploitation, Sexual Abuse, and Sexual Harassment in addition to environmental and social considerations in its funded activities. This has been further codified in the [SEAH Risk Assessment Guidelines](#).

2.7 World Bank Group Environmental, Health and Safety Guidelines

The World Bank Group Environmental, Health and Safety Guidelines (hereafter WB EHS Guidelines) are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP), as defined in IFC PS3.

The WB EHS Guidelines are used as a technical source of information during financial institution project appraisal activities, as well as by project proponents in applying GIIP in their activities. The most applicable guidelines to the Programme are the General EHS Guidelines of 2007, but there are also sector-specific guidelines.

Project owners need to ensure that the requirements of the applicable WB EHS are integrated into project design and their management systems, and appropriately monitored throughout the Project lifecycle. Therefore, participating financial institutions need to apply the WB EHS Guidelines as well, and the Programme must integrate it in capacity building training.

2.8 IFC Performance Standards and Guidelines

Part of IFC's Sustainability Framework, the Performance Standards are directed towards companies, providing guidance on how to identify risks and impacts, and are designed to help avoid, mitigate, and manage risks and impacts as a way of doing business in a sustainable way.

Table 2.1: The IFC Performance Standards (2012)

Performance standards	Description
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PS1: Assessment and Management of Environmental and Social Risks and Impacts	• Identify and evaluate the environmental and social risks and impacts of the project. • Adopt a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize, and, where residual impacts remain, compensate/offset for risks, and impacts to workers, Affected Communities, and the environment. • Promote improved environmental and social performance of clients through the effective use of management systems. • Ensure that grievances from Affected Communities and external communications from other stakeholders are responded to and managed appropriately. • Promote and provide means for adequate engagement with Affected Communities throughout the project cycle on issues that could potentially affect them and to ensure that relevant environmental and social information is disclosed and disseminated.
PS2: Labour and Working Conditions	• Promote fair treatment, non-discrimination, and equal opportunity of workers. • Establish, maintain, and improve the worker-management relationship. • Promote compliance with national employment and labor laws. • Protect workers, including vulnerable categories of workers such as children, migrant workers, workers engaged by third parties, and workers in the client's supply chain. • Promote safe and healthy working conditions, and the health of workers. • Avoid the use of forced labor.
PS3: Resource Efficiency and Pollution Reduction	• Avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities. • Promote more sustainable use of resources, including energy and water. □ Reduce project related GHG emissions.
PS4: Community Health, Safety and Security	• Anticipate and avoid adverse impacts on the health and safety of the Affected Community during the project life from both routine and non-routine circumstances. • Ensure that the safeguarding of personnel and property is carried out in accordance with relevant human rights principles and in a manner that avoids or minimizes risks to the Affected Communities.
PS5: Land Acquisition and Involuntary Resettlement	• Avoid, and when not possible, minimize displacement by exploring alternative project designs. • Avoid forced eviction. • Anticipate and avoid, or where avoidance is not possible, minimize adverse social and economic impacts from land acquisition or restrictions on land use by (i) providing compensation for loss of assets at replacement cost and (ii) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected. • Improve, or restore, the livelihoods and standards of living of displaced persons.

	• Improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure at resettlement sites.
PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	• Protect and conserve biodiversity. • Maintain the benefits from ecosystem services. • Promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities.
PS7: Indigenous Peoples	• Ensure that the development process fosters full respect for the human rights, dignity, aspirations, culture, and natural resource-based livelihoods of Indigenous Peoples. • Anticipate and avoid adverse impacts of projects on communities of Indigenous Peoples, or when avoidance is not possible, to minimize and/or compensate for such impacts. • Promote sustainable development benefits and opportunities for Indigenous Peoples in a culturally appropriate manner. • Establish and maintain an on-going relationship based on Informed Consultation and Participation (ICP) with the Indigenous Peoples affected by a project throughout the project's life cycle. • Ensure the Free, Prior, and Informed Consent (FPIC) of the Affected Communities of Indigenous Peoples when the circumstances described in this Performance Standard are present. • Respect and preserve the culture, knowledge, and practices of Indigenous Peoples.
PS8: Cultural Heritage	• Protect cultural heritage from the adverse impacts of project activities and support its preservation. • Promote the equitable sharing of benefits from the use of cultural heritage.

2.9 International Labour Organisation (ILO) Conventions

International labour standards are legal instruments drawn up by the ILO's constituents (governments, employers, and workers) which set out basic principles and rights at work. The standards are either Conventions (also called Protocols), which are legally binding international treaties that may be ratified by member states, or Recommendations, which serve as non-binding guidelines.

The ILO Governing Body has identified eight fundamental Conventions as follows:

- Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87)
- Right to organize and Collective Bargaining Convention, 1949 (No. 98)
- Forced Labour Convention, 1930 (No. 29) (and its 2014 Protocol)
- Abolition of Forced Labour Convention, 1957 (No. 105)

- Minimum Age Convention, 1973 (No. 138)
- Worst Forms of Child Labour Convention, 1999 (No. 182)
- Equal Remuneration Convention, 1951 (No. 100)
- Discrimination (Employment and Occupation) Convention, 1958 (No. 111).

Project owners need to ensure that the requirements of the ILO Conventions are followed throughout the project lifecycle, integrated into their management systems, and appropriately monitored and reported on to stakeholders.

2.10 Equator Principles

The Equator Principles (EPs) are intended to serve as a common baseline and risk management framework for financial institutions to identify, assess and manage environmental and social risks when financing Projects.

Table 2.2: The Equator Principles IV (2020) Principle

Principles	Description
Principle 1 – Review and categorization	The Equator Principles Financial Institution (EPFI) must categorize the project based on the magnitude of its potential risks and impacts. Such screening is based on the environmental and social criteria of the IFC.
Principle 2 – Environmental and social assessment	The EPFI must require the client to assess the environmental and social impacts and to propose relevant management and mitigation measures for reducing the impacts to an acceptable level.
Principle 3 – Applicable environmental and social standards	Social and environmental performance must be evaluated according to the IFC Performance Standards and the WB EHS Guidelines, as well as the host country laws.
Principle 4 – Environmental and Social Management System and Equator Principles Action Plan	The client must develop and/or maintain an Environmental and Social Management System and an Environmental and Social Management Plan for all Category A and applicable Category B projects. Where gaps are identified, the client and EPFI will agree an action plan outlining gaps and commitments to meet applicable standards.
Principle 5 – Stakeholder engagement	For all Category A and B projects, the client is required to demonstrate effective stakeholder engagement with affected communities, workers, and other stakeholders. The client must conduct an informed consultation and participation process beforehand, facilitate the communities' informed participation, and make the assessment documents and action plan publicly available in a culturally appropriate manner. For Indigenous Peoples, Free, Prior and Informed Consent (FPIC) as per IFC PS7 should be undertaken.

	Further, a qualified independent consultant (i.e. see Principle 7) must evaluate the Indigenous Peoples consultation process and outcomes.
Principle 6 – Grievance mechanism	As part of the Environmental and Social Management System, the client must establish a grievance mechanism and inform the affected communities about it.
Principle 7 – Independent review	An Independent Environmental and Social Consultant (IESC) must carry out a review of the assessment, action plan and stakeholder engagement process to assess Equator Principles compliance.
Principle 8 – Covenants	The client must covenant, in the financing documentation, to comply with the host country requirements, to implement the action plan, to provide periodic reports on the project's social and environmental performance, and to decommission and dismantle the facilities where applicable.
Principle 9 – Independent monitoring and reporting	For all Category A and applicable Category B projects, projects will be required to have independent monitoring and reporting.
Principle 10 – Reporting and transparency	For all Category A and applicable Category B projects, the client will: • Ensure that, at a minimum, a summary of the ESIA is accessible and available online and that it includes a summary of Human Rights and climate change risks and impacts when relevant. • Report publicly, on an annual basis, GHG emission levels (combined Scope 1 and Scope 2 Emissions, and, if appropriate, the GHG efficiency ratio) during the operational phase for Projects emitting over 100,000 tons of CO₂ equivalent annually. The EPFI will encourage the client to share commercially non-sensitive Project-specific biodiversity data with the Global Biodiversity Information Facility (GBIF) and relevant national and global data repositories, using formats and conditions to enable such data to be accessed and re-used in future decisions and research applications. EPFIs must report annually on their Equator Principles implementation processes and experience.

2.11 Institutional Frameworks

- 1 **Compagnie Nationale d'Assurance Agricole du Sénégal (CNAAS):** CNAAS is a public-private partnership whose largest shareholder is the Senegalese government, which also subsidizes premiums up to 50%. The state has a 52 percent stake in the company; the remaining 48 percent is owned by insurance companies, farmers' associations, and individuals. its mission is to provide cover for disasters and agricultural risks. The state has granted a tax exemption of insurance contracts to allow the poorest citizens to have access to insurance. CNAAS works closely with

LBA, which introduced insurance as part of their financing strategy to smallholder farmers and small businesses along the agricultural value chain.

- 2 **Agence Nationale de l'Aviation Civile et de la Météorologie (ANACIM)** is the focal point for the intergovernmental Panel on Climate Change. ANACIM is responsible for the coordination, supervision and control of all aviation, airport, and meteorological activities in Senegal. This includes producing and disseminating weather and climate information services.
- 3 **Institut Sénégalais de Recherche Agricole (ISRA):** ISRA conducts research in four areas of production (plants, animals, forestry, fisheries) and on socioeconomics. The institute operates in the six eco-geographic zones of Senegal thanks to a dense infrastructural system made up of regional centers, national laboratories, research and production units, and pre-popularization and Multilocal Experimentation Support Points.
- 4 **Centre de Suivi Ecologique (CSE):** The CSE's mission is to *"contribute to the knowledge and sustainable management of natural resources and the environment, through the production and dissemination of decision support products and services, particularly for the State and communities. local authorities, the private sector, civil society, research and development institutions, producer organizations and development partners"*. As such, CSE's interventions cover various areas such as support for land use planning and urban management, scientific and technical support for sustainable land management, support for decentralized resource management, environmental and social assessments, and support in the fight against climate change. It is attached to the Ministère de l'Environnement et de la Protection de la Nature and is the National Implementing Agency for the Adaptation Fund. It is important to note that CSE is the first entity in Senegal accredited to GCF for direct access and also to the Adaptation Fund (AF).
- 5 **Direction de l'Environnement et des Etablissements Classés (DEEC)** is the focal point for UNFCCC and the Global Environment Facility. Under the supervision of the Ministry of the Environment and Sustainable Development and Ecological Transition (MEDDTE), DEEC is responsible for implementing government policy on the environment, particularly the protection of nature and people against pollution and nuisances. Its mission is:
 - Prevention and control of pollution and nuisances.

- Monitoring the actions of the various services and organizations involved in the environmental sector.
 - The development of legal texts regarding the Environment.
 - Monitoring conventions relating to its missions.
 - The integration of the environmental dimension into development policies, programs, and projects through environmental assessment.
 - Coastal management.
- 6 **Comité National sur les Changements Climatiques (COMNACC)** is made up of representatives of state, local and associative structures, is a body for coordination, consultation, training, awareness, management, and monitoring of the various activities identified within the framework of the implementation of the United Nations Framework Convention on Climate Change and its additional legal instruments. It was established by Decree No. 2011-1689.
- 7 **Comités Régionaux sur les Changements Climatiques (COMRECC)** were also established as part of the same ministerial decree that created the COMNACC. Their aim is to promote synergies between the local and national levels, with COMNACC active in managing and facilitating decentralized governance on climate change issues.
- 8 **Direction de la Gestion et de la Planification des Ressources en Eau (DGPRE)** is responsible
- Conducting general studies relating to water resources, inventory, evaluation, planning and management of water resources.
 - Developing and managing the master plan and the water resources management plan.
 - Setting up and managing measurement and observation networks on the various aquifers and watercourses.
 - Making available to departmental structures and other users, the data banks and information necessary for the mobilization and management of water resources.
 - Ensuring the promotion of integrated water resources management.

- Studying applications for authorization to construct and use water catchment and discharge structures.
- Ensuring the planning of water needs for all uses as well as their mobilization, in conjunction with the services of the ministries concerned.
- Providing the secretariat of the Technical Committee for Water.
- Preparing the meetings of the High-Water Council and ensuring the monitoring of the application of decisions.
- Ensuring the application of legislative and regulatory texts, particularly the provisions of the Water Code relating to water policing.
- Identifying new areas of regulation and to propose regular updating of legal texts relating to water resources.
- Monitoring, on behalf of the Minister, the performance contracts of the Office of Lakes and Courses of Water (OLAC).
- Following, in relation to the other structures of the ministry, questions relating to international organizations and falling within its area of competence.

9 **Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO):** The regulator responsible for supervising banks in Senegal (being a member of the WAEMU). Article 7 of Circular N° 04-2017/cb/c adopting the principle of proportionality provides that *"prudential and reporting requirements should reflect the size, structure, nature, and complexity of the activities and the risk profile of each supervised institution."* Articles 7 and 8 require banks to have a risk management framework that:

- has a comprehensive, bank-wide view of exposures by each type of risk.
- identifies, measures, evaluates, monitors, reports, and controls or mitigates all the bank's risks.
- Reflects changes in the bank's risk appetite and risk profile as well as market conditions and the macroeconomic environment.

2.12 Mapping of applicable performance standards (PS)

As per LBA's ESMP, all sub-projects supported by LBA for GCF financed activities shall generally be designed and implemented to safeguard the following 8 Environmental and

Social Performance Standards (PS), which are in line with the international best practices for assessment of environmental and social risks e.g. International Finance Corporation (IFC) and Green Climate Fund (GCF). These performance standards establish the criteria that the Borrower or the Beneficiary and the Project shall comply with through the entire project life cycle, so as to ensure that adverse E&S impacts are avoided/ appropriately mitigated and compensated. These E&S Performance Standards are as follows:

IFC PS1/GCF ESS 1: Assessment and management of environmental and social risks and impacts

LBA or its financial intermediaries shall:

- (i) Identify funding proposal's environmental and social risks and impacts; This being done through Annexes 2,3,4,5 and 6, which seek to identify the sub-project's environmental and social risks
- (ii) Adopt mitigation hierarchy: anticipate, avoid; minimize; compensate or offset; This is being addressed through Annexure 5 and/or 6.
- (iii) Improve performance through an environmental and social management system (ESMS); and
- (iv) Engage affected communities or other stakeholders throughout funding proposal cycle. This includes via the Grievance mechanisms outlined (see Section 9.4).

IFC PS2/GCF ESS 2: Labour and working conditions

LBA's ESMP promotes and ensures Compliance to applicable Senegal's labour legislations, encompassing presence of child and forced labour. Through the policy, LBA will encourage the project proponent to continually improve the occupational health and safety conditions at all sub-project site. Risks are identified through Annex 2, 4, 5 and 6. Mitigation is done through Annex 5 and/or 6 wherein the Environment and Social risks are screened and projects are rated accordingly.

LBA and sub-project proponents shall ensure that OHS risks associated with management of its workers are adequately identified and appropriate mitigation measures are put in place. As observed, such risks can be mitigated through compliance with national and respective state labour laws. LBA has a policy related to human resource management including staff regulations, training and development, occupational health, internal committee for redressal of complaints of sexual harassment, etc. The existing human resource management procedures will also be applicable for the sub-project borrowers as it meets the requirements of ESS 2.

IFC PS 3 / GCF ESS 3: Resource efficiency and pollution prevention

LBA along with its financial intermediaries and other stakeholders will promote the projects which will result in minimal / no impact on environment and human health and avoid or result in reduced waste generation from the activity. The project will be screened effectively to verify these objectives and it will be ensured through regular monitoring / follow-up visits, to mitigate the sub-projects risk and reduce these impacts throughout the project cycle. The projects will be screened through Annexes 2, 3, 4, 5 and 6 which identifies the project's environmental and social risks. If the sub-projects have pollution potential, then it will be screened as per the Annex 5 and/or 6 and thereby mitigation suggestions will be given to the respective units in order to comply with the PS3/ESS 3 and after the compliance is done, then the sub-projects will be approved for lending.

IFC PS 4 /GCF ESS 4: Community health, safety and security

LBA along with its financial intermediaries through the implementation of this policy ensures that the project activities will have minimal to no impact on health, safety and security of the communities. This is screened through Annexes 5 and/or 6 which take into consideration all the occupational health and safety of the Programme. This ensures avoidance against risks of Gender Based Violence (GBV) and Sexual Exploitation, Abuse & Health (SEAH). As per the screening, the mitigation measures are communicated and the borrowers are asked to comply to the OHS standards in order to avail the loan. The AE will encourage the borrowers to avoid or manage such risks effectively during the Programme implementation.

IFC PS 5 /GCF ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

LBA or its financial intermediaries will not support any operations that would result in: (i) compulsory land acquisition and physical and/or economic displacement of people (loss of structures, livelihoods and access to common resources).

GCF ESS 5 will generally not be invoked as this criterion is screened at the initial level through Exclusion list (Annex 4) and ESIA and/or ESMP (Annex 5 and/or 6). If ESS 5/PS 5 is invoked then the project is not considered for lending.

IFC PS 6 /GCF ESS 6: Biodiversity conservation and sustainable management of living natural resources

LBA through the implementation of the policy ensures that the project activities shall not affect biodiversity and should complement sustainable management of living natural

resources and will encourage the borrowers to avoid or manage such risks effectively. The projects are screened based on Annex 2, 5 and/or 6. ESS 6 risks are mitigated through non-lending to projects coming up in areas which are rich in natural resources like forests, wildlife sanctuary, ecologically sensitive areas thereby helping in biodiversity conservation and sustainable management of living natural resources. The possibility of ESS 6 being invoked is minimal and that is mitigated through Annexes mentioned above.

IFC PS7 /GCF ESS 7: Indigenous people

During the time of loan application, the borrower is requested to fill in the Eligibility Screening Checklist (Annex 2) wherein questions related to location of sub-projects are asked i.e. Whether the sub-project is coming up in areas of significant settlement of tribal/indigenous people. After the checklist is submitted to the respective branch office of LBA or Baobab Microfinance, the branch officers check the due diligence of the concerned answers through *inter alia* site visits. Apart from the checklist, the unit is screened based on the exclusion list (Annex 4). If it found that there are adverse impacts to indigenous people at the sub-project location, the sub-project will not be approved and is not considered for lending. Further screening will take place at ESIA/ESMP stage and if found then such projects won't be funded.

The programme is not anticipated to have impacts on indigenous people, their lands, culture, livelihood or way of life. However, an Indigenous People Policy Framework (IPPF) has been developed (Refer Annex 11) as required within the GCF's framework.

IFC PS 8 /GCF ESS 8: Cultural Heritage

LBA will not assist projects which have adverse impact on the Cultural Heritage or historical monuments of the country. This will be screened through Exclusion list (Annex 4) and Eligibility Screening Checklist (Annex 2). Sub-projects to be developed in places where cultural heritage exists won't be funded as per exclusion list.

PS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement; PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources, PS7: Indigenous Peoples and PS8: Cultural Heritage will not be applicable for this programme as the activities will not address or adversely impact any of these mentioned issues.

2.13 Gap assessment of national policies and GCF/IFC PSs

The Programme's proposed activities to be financed fall within the national legal framework, and as such will be the applicable framework. The programme doesn't foresee

a scenario where the applicable national framework will be inadequate to guide the Programme's activities.

Any differences with IFC PS/ GCF's ESS will be indicated and highlighted in all GCFF Annual Performance Reports. In case of non-existence of a national framework, GCF's ESS will be adopted accordingly in guiding the Programme's activities.

3 Analysis of alternatives

3.1 Analysis of the “With project” option

- **Cost:** low (concessional loans): LBA will be able to scale up its lending appetite for CSA practices in agricultural practices at relatively affordable costs
- **Scalability:** high
 - The programme targets an estimated 142,490 small-holder farmers and 9,775 medium-scale farmers. The programme will target 227 MSMEs in the value chain such as FOs, and agricultural cooperatives, and 51 service providers (CSA technology providers etc.) and Asset financiers.
 - Establish an enabling environment that creates a conducive environment for the wide adoption of CSA practices post Programme implementation.
- **Easy up-take/ Implementation:** high
- **Impact on agriculture production:** high and positive
 - Stimulating agricultural lending to FOs, women and youth organizations, Cooperatives and MSMEs.
 - Harness untapped opportunities by transforming the existing harmful agricultural practices into modern and environmentally friendly practices.
 - Sustainably increasing agricultural productivity and incomes
 - Digital mobile lending of climate-smart loan products and services
 - Creation of institutional and legal frameworks conducive to supporting and assisting climate-smart agricultural practices and agribusiness, particularly concerning regulations, taxes, business registration, licenses and the multiplicity of government institutions involved in the sector.
 - CSA data collection and information management partnerships established & strengthened.
 - Contribution to the upcoming implementation of the Investment Plan for Climate-Smart Agriculture in Senegal which the process of its development is underway.
- **Co-benefits:**

- Financial inclusion of smallholder farmers
- Establishing service delivery channels that will ease access to financial services through digital lending, particularly in the rural areas.
- Increasing women and youth access to finance.
- The activities will include training on financial management and literacy for women and youth.
- Increasing food and water security due to climate change impacts and reduced adaptive capacity.
- **Impact for climate adaptation and mitigation:**
 - Adapting and building resilience to climate change
 - Reducing greenhouse gas emissions, where possible
 - Integration of climate risks assessments in LBA lending operations through the development of an online portal and training support for LBA staff to use, maintain and upgrade the portal.
 - Development of a climate-smart lending system that fosters the adoption of CSA agricultural practices.
 - Promoting climate-smart green finance mechanisms
 - Adoption of CSA practices by farmers can considerably reduce credit providers' climate-related default exposure due to increased farmer incomes and reduced losses in the event of unexpected climate events.

3.2 Analysis of the “no project” option

- **Cost:** Medium (Standard loans)
- **Scalability:** Low-Medium
- **Easy Up-take/ Implementation:** Low-Medium
- **Impact on agriculture production:** low and negative
 - Status quo of low yields and negative agricultural practices will persist.
- **Co-benefits:** None
- **Impact for climate adaptation and mitigation:** None.

The proposed Programme is deemed to be best suited to achieve its objectives by use of the required resources. This becomes clear by comparing the programme activities against the “no programme” alternative. “No Programme” case is without the interventions undertaken by the programme; the following status quo aspects will persist:

- Insufficient access to financial and non-financial services that support farmers, organized around MSMEs, Cooperatives and Farmers Organizations, in adopting and implementing climate-smart agricultural practices.
- Low representation of women and youths in cooperatives, farmer organizations and MSMEs.
- Insufficient capacities among LBA FOs, women and youth organizations, cooperatives and MSMEs regarding climate-smart loans to smallholders.
- Increasing food and water insecurity due to climate change impacts and reduced adaptive capacity-both human and ecosystem.
- Still low contribution of technological innovation to the development of agriculture in Senegal
- The no Programme case is not suited to relieve the current challenges faced by the agricultural sector.

3.3 Conclusion on options analysis

The programme plays an important role in providing attractive credit lines, incentives and developing capacities for smallholder farmers in Senegal. It seeks to build on the complementary actions carried out by projects and programmes already ongoing in the agricultural sector. The no programme alternative is unlikely to achieve the same objectives.

4 Environmental, social, and climatic baseline

4.1 Overview

Senegal, located in the extreme west of the African continent, covers a total area of 196,722 km² and has an estimated population of 17,316,449⁴. It has a Human Development Index (HDI) of 0.511 as of 2021⁵, ranking it among the least developed countries (170 out of 191 countries and territories), indicating a low human development level in 2021. Poverty rates are still high as 50.8% of the population are considered multidimensionally poor (MPI value of 0.263⁶).

Biological environment

The environment in Senegal is characterized by a Sudano-Sahelian climate, vulnerability to rainfall variations and strong pressure on natural resources from a growing population. Average annual rainfall follows a decreasing gradient from the South to the north of the country. It ranges from 1,200 mm in the South to 300 mm in the North, with variations from one year to the next. Senegal is categorized into five climatic zones:

- The Sahelian zone, north of the Saint-Louis region, is the domain of the tree or shrub-steppe.
- The Sahelo-Sudanese zone, including the regions of Dakar, Thies, Diourbel, Louga, and Matam has a dry, wooded savanna.
- The Sudanian zone, with the regions of Fatick, Kaolack, and the entire north and center of the Tambacounda region has savannah-type vegetation.
- The Sudano-Guinean zone, with the regions of Ziguinchor and Kolda to the north and the region of Tambacounda to the south, is an area of forests and large, dense savannahs.
- The Guinean zone, with the southern regions of Ziguinchor and Kolda, is the most humid zone, with fairly dense forests.

4.2 Agriculture

⁴ [World Bank Population-Senegal](#)

⁵ [UNDP – Human Development Report for Senegal](#)

⁶ [UNDP, Global Multidimensional Poverty Index 2023](#)

The Senegalese agriculture sector employs 70% of Senegal's population⁷, contributing to 17% of GDP, of which 30% is estimated to be from the livestock sector. Agriculture covers about 46% of Senegal, of which 17% is arable. The sector is largely dominated by very small family farms, occupying roughly 95% of the country's agricultural land⁸. Senegalese agriculture is mainly seasonal and rain-fed with nearly 9 out of 10 households practicing rain-fed cropping. The main cultivated crops include cereals (rice, millet, maize, and sorghum), groundnut, cotton, and horticultural crops⁹. The sector faces several constraints, e.g., access to inputs, access to credit, lack of production and storage infrastructures. 60% of those working in the agricultural sector are women.

Senegal has six agro-ecological zones, categorized based on biophysical and socioeconomic criteria:

- Niayes zone composed of Dakar, Louga and part of Saint-Louis region is densely populated and faces challenges such as soil and water salinity, and coastal erosion. 80% of the horticulture produced in the country is grown here.
- Senegal River Valley composed mainly of Saint Louis and Matam regions is characterized by alluvial plains and sandy uplands. Agriculture is mainly irrigation-based. Irrigated rice and vegetables are grown in this zone.
- Sylvo-pastoral zone – Located to the south of the Senegal River Valley, it is the country's main livestock region. Rainfall is very low. Forage resources are scarce and severely degraded.
- Groundnut basin – Composed in its northern part by the regions of Thies, Diourbel and (partially) Louga and in its southern part by the regions of Fatick, Kaolack and Kaffrine, this basin has suffered from severe droughts in recent decades. Ecosystems have been degraded and soil fertility has severely declined.
- Eastern Senegal zone – It includes the regions of Tambacounda and Kedougou. It is a cotton and cereal producing zone.
- Casamance - Country's zone that benefits from abundant rainfall. There is diversified traditional agriculture: rainfed rice, fruit production, cereals, cotton (in Upper Casamance).

⁷ Senegal's IMF Country Report No. 20/225

⁸ [Leippert, F., Darmaun, M., Bernoux, M. and Mpheshea, M. 2020. The potential of agroecology to build climate-resilient livelihoods and food systems. Rome. FAO and Biovision.](#)

⁹ République du Sénégal (2016) Enquête nationale de Sécurité alimentaire au Sénégal 2016

The agricultural sector remains vulnerable to weather shocks, which are likely to intensify with climate change. Only 7% of cultivated land is irrigated, which makes Senegalese agriculture highly dependent on rainfall¹⁰. Agriculture and water resources are cited as the two most vulnerable sectors in Senegal's NDCs. In a report published on the state of the environment by *Centre de Suivi Écologique*, and USAID's climate change risk profile for Senegal, the following trends are highlighted:

- Mean annual temperature has increased by 1.6°C since 1950 with a stronger observed increase in the north of Senegal, averaging 3°C. Temperatures will continue to increase by 1.1°C to 1.8°C by 2035, and up to 3°C by the 2060s. Warming is faster in the interior of the country than compared to the coastal areas.
- Higher frequency is noted in flood events, particularly in the lower-lying areas of Dakar and northwestern Senegal.
- Rising sea level of up to 1 meter by 2100¹¹
- A 30% reduction in rainfall between 1950 and 2000, with a strong variability from one year to another and from region to region. While precipitation trends have improved since 2000, it does not necessarily signal an end to the dry cycle. Overall increases in heavy rainfall events are expected. However, the projections indicate a general decrease in rainfall.

4.3 Water resources

Water security is the bedrock of Senegal's development and key to its socio-economic development goals. While the national socio-economic development plan (*Plan Senegal Emergent - PSE*) aims to mobilize "*abundant, good quality water for all, everywhere, and for all uses in a healthy, sustainable living environment*" by 2035, it does not consider constraints linked to water resources availability or management. Current water withdrawals are projected to increase by 30 to 60% by 2035, further exacerbating water stress and straining the country's ability to meet the water demand of a quickly urbanizing population and achieve its socio-economic development goals.

The cost of the water resources management status quo already impacts more than 10 % of Senegal's GDP, due to water-related extreme events and pollution. Flooding costs associated with damage of infrastructure and habitat and premature deaths have been

¹⁰ <https://ccafs.cgiar.org/fr/regions/afrique-de-louest/senegal>

¹¹ [Climate Risk Profile: Senegal](#)

estimated over US\$ 1 billion, or 6.3% of GDP, while the cost of a year of drought is in the order of US\$ 500 million, or 3% of agricultural GDP¹².

Senegal is currently water stressed, with renewable water availability per capita below the 1700 m³/capita/day threshold as defined by Food and Agriculture Organization (FAO), under which a country experiences periodic water stress¹³. Surface water represents most renewable resources (about 90%) and is the main water source for agriculture but is already insufficient to meet needs in dry years. Agriculture is the main water user in the nation (82% of withdrawals). The mining sector accounts for 20% of total exports in value, contributes 2% of GDP and consumes 13 million m³/year, mostly from groundwater¹⁴.

Senegalese agriculture is mainly seasonal and rain-fed with nearly 9 out of 10 households practicing rain-fed cropping¹⁵. This is likely to greatly impact productivity. The reliance on surface water irrigation presents a major hindrance to the realization of the full agricultural potential of farmers and exposes them to the negative impacts of climate change. Additionally, the dependence on groundwater pumping infrastructure poses a challenge, as it is often either unavailable or very expensive due to the high pumping costs.

Eight major hotspots of socio-economic importance and water security risks have been identified (see Figure 4.1):

- The Greater Dakar area concentrates 32% of the population, 55% of the country's economic activity and represents a hotspot for water security. The water supply in this area is essentially based on water transfers from Lac de Guiers, the Littoral Nord and on the overexploitation of local aquifers. This leads to a constant increase in the cost of water and investment losses due to the abandonment of boreholes following the saline intrusion.
- The Horst de Diass provides a third of the water supply for Greater Dakar. The Maastrichtian and Paleocene aquifers are heavily overexploited there, leading to very low water and saline intrusion in depleted aquifers.
- The Niayes and Littoral Nord area is at the heart of national horticultural production and the mining industry. Its microclimate is favorable to horticulture, which accounts for 60% of national production, and represents most exports.

¹² Croitoru, Lelia; Miranda, Juan José; Sarraf, Maria. 2019. The Cost of Coastal Zone Degradation in West Africa: Benin, Côte d'Ivoire, Senegal and Togo. World Bank, Washington, DC. © World Bank.

¹³ [WB's Challenges and Recommendations for Water Security in Senegal at National Level and in the Dakar-Mbour-Thiès Triangle](#)

¹⁴ Ibid

¹⁵ République du Sénégal (2016) Enquête nationale de Sécurité alimentaire au Sénégal 2016 (ENSAS, 2016)

These intense economic activities and urbanization cause aquifers to be very vulnerable to agricultural, industrial, and domestic pollution, threatening the future of horticulture practices which use shallow wells.

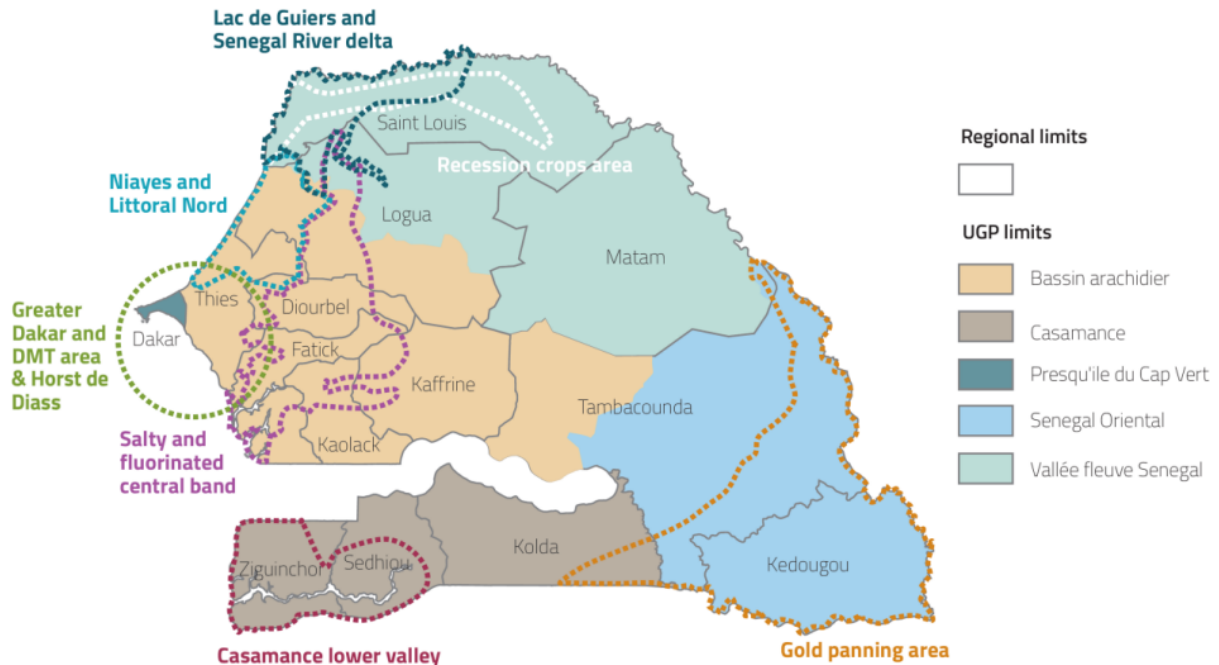


Figure 4.1: Map of the major water stress hotspots

- The salted and fluorinated central band suffers from poor water quality and depends on rain-fed agriculture to produce ground nuts, the country's main export crop. Groundwater there is excessively salty and fluorinated, which affects access to drinking water for around one million people, causing serious epidemiological problems.
- Lac de Guiers and the Senegal River delta are strategic water resources for water supply, agriculture, and the environment, and already face significant risks. They supply the big cities on the Keur Momar Sarr-Dakar axis and many villages. The city of Saint-Louis gets its water from the Bango freshwater reserve fed by distributaries from the Senegal River delta. The area is home to major agro-industrial facilities, numerous village irrigation schemes, a protected area and several RAMSAR sites, where wetland health is threatened.
- The Lower Casamance Valley is central to Senegal's future socio-economic development, but currently faces serious water quality problems. Its aquifers (Maastrichtian, Oligo-Miocene and Continental Terminal) are saline, and in some

areas, fluorine levels exceed the drinking water standards. The region is home to large cities with high tourist potential such as Ziguinchor, Bignona, Oussouye and Cap Skirring.

- The gold panning area hosts significant industrial and artisanal extraction of gold, iron, and marble. Water resources are often polluted by mining, posing risks to people, livestock, and wildlife.
- The flood recession crops area is a multipurpose area bordering the banks of the Senegal River from Saint-Louis to Bakel, where fishing, agriculture, and livestock farming take place. Flood recession crops increase the agro-ecological potential of the floodplain of the Senegal River, which has regressed following the construction of the Manantali dam. Poor water quality also affects the performance of floodplains because the soil is less loamy and the obstruction of streams and marshes by siltation affects their flood conditions. Hydroelectric production is prioritized during dry years in accordance with the charter of the *Organisation de Mise en Valeur du Fleuve Sénégal* (OMVS), which could lead to the reduction or even the disappearance of artificial floods due to a significant drop in debits.

4.4 Senegal's GHG Profile

Senegal's greenhouse gas (GHG) emissions increased by 17.31 million tons of CO₂ equivalent (MtCO₂e) from 1990 to 2021. The average annual change in total emissions during this period was 2.32%. Sector-specific average annual changes were as follows: agriculture (1.52%), energy (4.69%), land-use change and forestry (LUCF) (-0.65%), waste (2.95%), and industrial processes (10.85%). According to the World Resources Institute's Climate Analysis Indicators Tool (WRI CAIT)¹⁶, the majority of Senegal's GHG emissions in 2021 originated from the agriculture sector (35.47%) and the energy sector (26.78%). These were followed by emissions from industrial processes (13.32%), waste (12.25%), and LUCF (12.16%).

Agricultural emissions saw a 36% increase from 1990 to 2021, driven by factors such as enteric fermentation, manure left on pasture, and the burning of savannah. Senegal's Third National Communication (TNC) notes that during this time, the area of cultivated land expanded, coinciding with a decrease in savannah, where much of the land clearing occurred to facilitate rain-fed agriculture.

¹⁶ https://www.climatewatchdata.org/countries/SEN?end_year=2022&source=PIK&start_year=1850

Energy-related emissions rose by 7.34 MtCO₂e between 1990 and 2021. According to the TNC, 55.5% of households used fuel wood for cooking, and 11% used charcoal. In 2013, households consumed 1,735,219 tons of fuel wood and 482,248 tons of charcoal, equivalent to harvesting 3,778,326 cubic meters of forest wood resources.

During the same timeframe, Senegal's GDP tripled, with an average annual growth rate of 3.7%¹⁷, compared to a 2.9% increase in GHG emissions. Senegal's rise in per capita CO₂ emissions roughly mirrors its rise in GDP per capita along the same time span, increasing from 0.31 metric tons per capita in 1990 to 0.66 metric tons per capita in 2019. Hence, Senegal's per capita emissions roughly doubled from 1990 to 2019¹⁸.

According to Senegal's revised Nationally Determined Contribution (NDC)¹⁹ in 2020, in 2015, the country emitted 10 MtCO₂e from the energy sector and 8.32 MtCO₂e from the agricultural sector. Table 2 below outlines the projected greenhouse gas (GHG) emissions by sector for Senegal from 2010 to 2030, as stated in the Nationally Determined Contributions (NDC) for 2020²⁰. The 2020 - 2030 GHG emissions profile projections are provided in the Table 4.1:

Table 4.1: Emissions projections by sector to 2030 ('000 tCO₂e)

	2010	2015	2020	2025	2030
Energy	6165	10080	13060	19512	23927
Agriculture	7354	8323.9	9110.7	9903.4	10600
Waste	1820	2061	2081	2189	2575
Industrial Processes and Product Use	1412	1986	3146	3953	3953
TOTAL	16752	21637	25404	32648	37761

Source: Senegal's NDC (2020)

Two sectors (Energy and Agriculture) emerge as the principal contributors to GHG emissions at the national level. The energy sector is projected to experience exponential growth, accounting for over 50% of the country's total emissions by 2022. Meanwhile, emissions from the agricultural sector are expected to increase gradually and steadily until 2030.

¹⁷ <https://futures.issafrica.org/geographic/countries/senegal/>

¹⁸ https://www.american.edu/cas/economics/ejournal/upload/global_majority_e_journal_15_1_minden.pdf

¹⁹ [Senegal's Nationally Determined Contribution \(2020\)](#)

²⁰ [Senegal's NDC \(2020\)](#)

5 Environmental and social risk assessment

5.1 Programme Categorization

All activities to be funded by the GCFF Programme will be assigned one of the six risk categories, based on the E&S screening as per Table 5.1 below.

Table 5.1: Risk Categorization

Risk categorization	
Category A	Activities with potential significant adverse environmental and/or social risks and impacts that, individually or cumulatively, are diverse, irreversible, or unprecedented
Category B	Activities with potential limited adverse environmental and/or social risks and impacts that individually or cumulatively, are few, generally site-specific, largely reversible, and readily addressed through mitigation measures
Category C	Activities with minimal or no adverse environmental and/or social risks and/or impacts
If proposed funded activity involves wholesale green lending through local financial institutions, then the risk categorization of activities is defined as financial intermediation as follows	
I1 (High level of intermediation)	When an intermediary's existing or proposed portfolio includes or is expected to include financial exposure to activities with potential significant adverse environmental and social risks and impacts that, individually or cumulatively, are diverse, irreversible, or unprecedented.
I2 (Medium level of intermediation)	When an intermediary's existing or proposed portfolio includes, or is expected to include, substantial financial exposure to activities with potential limited adverse environmental or social risks and/or impacts that are few in number, generally-site specific, largely reversible, and readily addressed through mitigation measures; or includes a very limited number of activities with potential significant adverse environmental and/or social risks and/or impacts that are diverse, irreversible, or unprecedented
I3 (Low level of intermediation)	When an intermediary's existing or proposed portfolio includes financial exposure to activities that predominantly have minimal or negligible adverse environmental and social impacts

The GCFF E&S Manager shall review risk classification assigned to the activities each quarter during activity implementation, and will change the classification where necessary, to ensure that it continues to be appropriate.

Each sub-project will develop a site-specific ESMP when the exact locations of each sub-project are identified (see Annex 6) and/or an ESIA (see Annex 5) if needed. Only activities categorized as B and C, or I2 and I3 can be funded by the Programme, as Category A and I1 activities are excluded from financing as per exclusion list (see Annex 4).

5.2 Potential Direct Impacts

5.2.1 Environmental Impacts

The environmental impacts of the programme are expected to be varied and case specific. Increasing the availability of financial services to rural smallholder organizations (Output 1.1) and Capacity building to increase smallholder farmer resilience. climate change (Component 2) will lead to an expansion and intensification of their agricultural production methods.

Agricultural adaptation can potentially impact surrounding ecosystems negatively, through habitat fragmentation, release of agrochemicals, reduction of genetic diversity on plots or introduction of alien and invasive species. The type of impact, its spatial and time scale, as well as adequate mitigation measures are case-dependent and evaluated separately (see Table 5.2).

Table 5.2: CSA Practices and their impacts

CSA Practices	Positive Impacts	Negative Impacts
Agroforestry	Increased habitat diversity and wildlife abundance.	Initial investment in tree planting
	Improved pollination services by attracting pollinators	Requires land for tree growth
	Enhanced soil fertility and nutrient cycling.	Competition with crops for resources
	Moisture retention and reduced erosion	Competition for water between trees and crops in some systems
	Reduced greenhouse gas emissions (GHG) through carbon sequestration in trees and soil	Clearing existing vegetation for planting trees can release stored carbon.
	Increased soil organic matter content, leading to improved carbon storage	
Conservation Agriculture	Reduced soil erosion	Initial investment in equipment
	Soil organic matter improvement	Potential pest and weed problems
	Improved water retention	Not suitable for all soil types and climates
	Reduced water usage	Knowledge and skill requirements
	Improved long-term yield potential	
	Resilience to climate extremes	
Crop Rotation	Increased soil health and fertility	Potential yield reduction in the short term
	Decrease in pest and disease pressure	Higher initial investment
	Improved water use efficiency	Potential weed issues
	Increased biodiversity and ecosystem services	Potentially higher labor requirements
	Nutrient cycling improvement	Requires careful planning
	Reduced soil erosion	
Precision Agriculture	Resource use efficiency	High initial investment in technology
	Reduced input wastage	Technological dependency
	Enhanced productivity	Technical expertise needed
	Reduced water usage through targeted irrigation and soil moisture monitoring	Eutrophication and air pollution from potential misuse of fertilizers and pesticides
	Improved soil health through precision nutrient management and cover cropping	Increased land degradation due to reliance on monoculture farming practices

Irrigation	Increased crop yields	Water scarcity issues
	Improved crop quality	Soil salinity concerns
	Year-round cultivation possible	Energy costs associated with pumping water
	Mitigation of climate variability	Potential for water pollution

5.2.2 Climate Impacts

5.2.2.1 Climate Change Mitigation

Climate change mitigation achieved via replacing fossil fuel-powered generators with RETs (e.g. biodigester use) and promotion of low-emission agricultural techniques e.g. improved rice production techniques such as the System of Rice Intensification (SRI), where methane emissions are minimized.

Agroforestry will also contribute to climate change mitigation carbon sequestration in biomass and soils, reducing greenhouse gas emissions, and emissions avoidance through reduced fossil fuel and energy usage on farms.

5.2.2.2 Climate Change Adaptation

Climate-smart agriculture (CSA) is an integrated approach to managing landscapes-cropland, livestock, forests, and fisheries-that address the interlinked challenges of food security and climate change²¹.

The programme aims to increase farm productivity, enhance farmer and ecosystem resilience, and reduce vulnerability to drought, pests, shortened seasons and erratic weather patterns. Climate smart agricultural practices have an impact on the microclimate and can manipulate habitats through increased rainfall and water availability.

The proposed Programme will hinge on transformative agricultural practices to increase smallholder farmer adaptive capacity and strengthen ecosystems. This will enhance both ecosystem and community-based adaptation.

5.2.3 Social Impacts

The main objective of the programme is to support smallholder farmers' access to affordable agricultural credit and increase farm productivity, and household income, especially in rural areas. The development of climate-smart lending will shield credit providers from climate-related default exposure due to increased farmer income.

²¹ <https://www.worldbank.org/en/topic/climate-smart-agriculture>

Engaging women, youth, the marginalized and vulnerable will increase access to finance for marginalized groups by making them credit ready.

There are however unintended maladaptive impacts that may occur. The reality is that for many smallholder farmers who are faced with poor soil quality and minimal land holdings, agriculture per se may not represent a pathway out of poverty. CSA activities can also inadvertently contribute to maladaptation, therein maintaining or exacerbating inequalities among smallholder farmers who will be in this programme.

Table 5.3: Summary of potential direct Programme impacts.

Output Activity	Potential Direct Environmental Impacts		Potential direct Climate impacts		Potential direct Social Impacts	
	Positive (Opportunities)	Negative (Threats)	Positive (Opportunities)	Negative (Threats)	Positive (Opportunities)	Negative (Threats)
Output 1.1: Establishment of a dedicated Line of Credit for LBA's CSA lending operations	- Reduced GHG emissions from agriculture, e.g. improved soil management, reduced use of synthetic fertilizers, and adoption of renewable energy - Increased soil carbon to offset greenhouse gas emissions from other sectors. - Improved water quality by reducing soil erosion and runoff, benefiting human and ecosystem health. - Habitat creation for pollinators and other beneficial insects and protection of threatened species.	- Increased agricultural production might lead to eutrophication of water bodies due to nutrient pollution. - Depletion of water resources from irrigation - Unregulated pesticide and fertilizer use could contaminate water sources and impact biodiversity and soil quality.	- CSA practices like cover cropping, zero-tillage farming, & improved grazing management enhance soil health, and increases soil carbon. - Promotion of nitrogen-fixing cover crops and precision agriculture techniques - Decrease in reliance on synthetic fertilizers, a major source of nitrous oxide emissions. - Improved feed management and biogas production reduce methane emissions from livestock. - Water harvesting, drought-resistant crop varieties, and diversified cropping systems improve farm resilience.	- Rise in loan driven agricultural expansion can negate climate benefits by releasing stored carbon and increasing emissions from land-use change. - Drip irrigation may be vulnerable to floods. - Increased yields might lead to further intensification and consumption, negating emissions reductions achieved through improved practices. - Improper use of fertilizers & pesticides can lead to increased GHG emissions,	- higher incomes for farmers, particularly smallholders as a direct impact of CSA - Creation of new employment opportunities in rural areas, boosting local economies and stemming rural-urban migration. - Targeted access to credit and training for women farmers can empower them to participate more actively in income-generating agricultural activities, contributing to gender equality and empowerment	- Crop production practices cannot fully be able to restore degraded land. anthropogenic soil erosion has affected 7.15% of Senegal's land use. - Increased economic opportunities for women and youth could exacerbate existing gender and generational tensions within communities
Output 2.1 Development of climate-smart credit products, risk scoring tools, and compliance monitoring tools tailored to CSA investments (Activity 2.1.1)	- Risk assessments can identify areas vulnerable to climate change impacts and protect biodiversity. - Highlight areas with water scarcity or vulnerability to droughts and encourage lenders to prioritize loans for practices promoting water conservation, - Reduced deforestation and habitat loss: Assessing climate risks in land use can help identify areas where deforestation or unsustainable land-use change pose risks to ecosystems and biodiversity. - Training on climate risk assessments will equip farmers with the knowledge and	- Greenwashing and ineffective practices: focusing solely on meeting loan disbursement criteria ultimately damaging the environment. - Environmental benefits might be limited and exacerbate existing inequalities in environmental stewardship if training caters to specific types of agriculture or excludes certain groups (e.g., traditional practitioners)	- Reduced Greenhouse Gas (GHG) Emissions due to improved land management. - Loans directed towards on-farm renewable energy sources, identified as beneficial can reduce dependency on carbon-intensive energy sources. - By identifying areas vulnerable to extreme weather events, the portal can guide loans towards CSA practices, building farm resilience to these shocks.	Misinterpretation of risks or poorly designed adaptation strategies could lead to maladaptation, where interventions increase vulnerability to climate change	- Farmers equipped with knowledge and tools to understand and manage climate risks can make informed decisions and adopt adaptation strategies, reducing vulnerability. - The online portal and training program can equip smallholder farmers with the knowledge and tools to access loans and resources previously	Implementing new practices without considering traditional knowledge and cultural norms can lead to conflict and resistance within communities, hindering effective adoption and social cohesion.

Output Activity	Potential Direct Environmental Impacts		Potential direct Climate impacts		Potential direct Social Impacts	
	Positive (Opportunities)	Negative (Threats)	Positive (Opportunities)	Negative (Threats)	Positive (Opportunities)	Negative (Threats)
	tools to understand and prepare for climate shocks. - Through loans for climate-resilient practices, LBA and its partners can help farmers adapt to impacts of climate change. - Climate risk assessments can inform regional and national disaster risk management plans by identifying areas susceptible to specific climate hazards.		Farmers equipped with risk assessment tools can anticipate and adapt to changing weather patterns and manage climate- risks more effectively, protecting their livelihoods.		unavailable due to perceived climate risks.	
Output 2.1 (Activity 2.1.2 – Activity 2.1.5)	- Loans directed towards CSA practices can improve soil health and structure, reducing erosion and minimizing land degradation. - Investing in practices like drip irrigation, rainwater harvesting, and drought-resistant crops can decrease water use and prevent overexploitation of water resources. - By incentivizing sustainable land-use practices, the lending system can help prevent deforestation and habitat loss. - Drip irrigation, rainwater harvesting, and drought-resistant crops can decrease water use and prevent overexploitation of water resources. - Loans for early warning systems, climate-resistant crop varieties, and infrastructure improvements build farmers' resilience to climate shocks. - Agroforestry and conservation agriculture can enhance carbon sequestration in soil and biomass.	Technological Dependence and Maladaptation	- Reduced greenhouse gas (GHG) emissions: - Enhanced carbon storage in soil and biomass		- CSA practices can reduce credit providers' climate-related default exposure due to increased farmer incomes. - Job creation and economic development - Enhanced gender equity - Increase of income and coverage for more farmers - Financial inclusion and empowerment - Improved livelihood and food security	- Loans intended for sustainable practices could be misused. - Digital financial services might not be equally distributed, potentially excluding marginalized communities or individuals without smartphones
Output 2.2: Improved investment capacities of			- Increased climate resilience to climate shocks like droughts, floods, and extreme weather events - Reduced vulnerability		- It will lead to gender Equality. - Improved livelihood thus food & income security	Increased economic opportunities for women and youth could exacerbate existing gender

Output Activity	Potential Direct Environmental Impacts		Potential direct Climate impacts		Potential direct Social Impacts	
	Positive (Opportunities)	Negative (Threats)	Positive (Opportunities)	Negative (Threats)	Positive (Opportunities)	Negative (Threats)
smallholder farmers and MSMEs					- Increased economic empowerment of youth and women. - Enhanced skills and knowledge and youth skills	- tensions within communities. - Social conflict and tensions: Increased competition for resources or changes in land ownership
Output 3.1: Creation and dissemination of policies, standards, and finance mechanisms promoting CSA investments	- Enabling environment for CSA adoption, - Reduced greenhouse gas emissions - Enhanced land and water management - Increased investment in climate-smart solutions - Enhanced environmental risk management. - Building capacity and awareness	Unintended consequences and trade-offs			- Empowering farmers and rural communities - Strengthening food systems and nutrition - Promoting knowledge sharing	Exacerbation of inequalities
Output 4.1: Establishment of partnerships for CSA data collection and reinforcement of knowledge-sharing platforms	- Improved decision-making for sustainable land management - Promoting biodiversity and ecosystem services - Wider adoption of CSA practices:		- Increased climate resilience and adaptation - Improved climate change monitoring and attribution - Building adaptive capacity and resilience - Enhanced climate resilience		- Building Capacity and Fostering Learning - Enhanced knowledge and skills	- Exacerbating inequalities in data access and use - Misuse of data and biased information sharing

5.3 Potential indirect impacts

5.3.1 Environmental Impacts

Establishing a dedicated line of credit for LBA's CSA lending operations may promote financial inclusion and boost agricultural productivity.

The portal can systematize assessing climate risks associated with loan applications, allowing lenders to identify potential environmental harm from proposed projects and mitigate them through loan conditions and technical assistance.

The programme will also promote traditional knowledge to build resilient agricultural systems.

Digital lending will provide easier access to finance for smallholder farmers and resource-constrained communities enabling them to invest in CSA practices e.g. drought resistant crops and water harvesting.

The Programme will benefit ecosystems and communities through reduced land degradation, a result of sustainable land management.

Negative impacts may be manifested through intensification of agricultural practices straining resources like water and soil due to rapid expansion of agriculture.

5.3.2 Climate Impacts

Climate-Smart Agriculture (CSA) projects increase climate resilience and reduce farmer and ecosystem vulnerability.

Soil health and conservation practices like cover cropping, composting, and agroforestry increase soil organic matter and reduce greenhouse gas emissions from agriculture.

Increased capacity to track and measure progress towards climate change mitigation and adaptation goals, effective climate-smart practices and policies informed by data-driven insights.

Indirect negative impacts include:

- Maladaptation and increased vulnerability of smallholder farmers.
- Limited climate change mitigation and adaptation benefits may occur if policies are not comprehensive.

5.3.3 Social Impacts

The indirect social impacts of the Programme are expected to be largely positive. These include:

- Empowering rural communities and strengthening social cohesion.
- Promoting Gender Equality and Youth Engagement and building long-term resilience and adaptive capacity.
- Enhancing financial inclusion and access to capital.
- improvement of social well-being and health.
- Increased income and livelihood opportunities for farmers
- Empowering communities through participation in policy development and creation of green jobs and economic opportunities.
- Promote the creation of sustainable jobs for young people in rural areas.

Indirect negative social impacts include.

- Exacerbating Inequalities and excluding vulnerable groups.
- Exclusion of marginalized groups or smallholder farmers if policies are not inclusive or adaptable to diverse contexts.
- Unequal distribution of benefits if large-scale projects prioritize profits over environmental considerations, potentially harming local communities and ecosystems.
- Risk of child labor or forced labor being used by service providers for projects like biogas component which requires construction activities.
- Risk of sexual exploitation, abuse, and harassment (SEAH) during programme implementation.

Table 5.4: Summary of potential indirect Programme impacts

Output /Activity	Potential Indirect Environmental Impacts	Potential Indirect Climate Impacts		Potential Indirect Social Impacts		
	Positive	Negative	Positive	Negative	Positive	Negative
Output 1.1: Establishment of a dedicated Line of Credit for LBA’s CSA lending operations	- Increased Adoption of CSA Practices - Enhanced land management and resource conservation	Unintended Land use change and environmental degradation	Climate change mitigation and adaptation.	Maladaptation and increased vulnerability	- Empowering rural communities and strengthening social cohesion - Promoting gender equality and youth engagement - Building long-term resilience and adaptive capacity	Exacerbating social inequality and land grabbing
Output 2.1 Development of climate-smart credit products, risk scoring tools, and compliance monitoring tools tailored to CSA investments	- Enhanced environmental risk management and decision-making. - Lower emissions and sustainable land management		- Enhanced Climate resilience and reduced emissions - Lower vulnerability and adaptation to climate change	Maladaptation and unforeseen consequences	- Empowering Communities and Building Resilience - Reduced vulnerability and marginalization - Enhanced skills and knowledge of climate risk management	Exacerbating inequalities and excluding vulnerable groups
Output 2.1 (A2.1.2 – A2.1.5)	- Increased adoption of sustainable agricultural practices - Reduction in greenhouse gas emissions - Increased access to finance - Transparency and accountability		Improved resilience to climate change	Possibility of proliferation of unsustainable agricultural activities	- Empowering Communities and Building Resilience - Enhanced financial inclusion and access to capital. - Improved social well-being and health	
Output 2.2: Improved investment capacities of smallholder farmers and MSMEs	- Enhanced diversity and adaptability of agricultural systems- - Reduced land degradation and biodiversity loss	Unintended Land-Use Changes and Resource Pressure	- Enhanced carbon sequestration and reduced emission - Increased climate resilience and adaptive capacity		Empowering individuals and building capacities	

Output 3.1: Creation and dissemination of policies, standards, and finance mechanisms promoting CSA investments	• Clear guidelines and incentives • Enabling environment for innovation • Reduced deforestation and land degradation due to increased funding for sustainable land management	• Unintended consequences like resource depletion due to poorly designed incentives • Ineffective allocation of funds due to poor screening or lack of robust environmental safeguards, leading to the financing of unsustainable practices disguised as "climate-smart".	• Increased climate resilience (reduced vulnerability to extreme weather) - Reduced greenhouse gas emissions • Mitigated greenhouse gas emissions from agriculture through decreased use of synthetic fertilizers and adoption of renewable energy sources	• Limited climate change mitigation or adaptation benefits if policies are not ambitious or comprehensive • Limited climate change mitigation or even increased emissions if green finance is not directed towards truly effective solutions -	• Increased income and livelihood opportunities for farmers • Empowering communities through participation in policy development • Creation of green jobs and economic opportunities • Improved livelihoods and economic opportunities for farmers with access to financing for CSA investments • Increased food security and nutrition due to higher agricultural productivity and resilience	• Exclusion of marginalized groups or smallholder farmers if policies are not inclusive or adaptable to diverse contexts • Unequal distribution of benefits if large-scale projects prioritize profits over environmental considerations, potentially harming local communities and ecosystems
Output 4.1: Establishment of partnerships for CSA data collection and reinforcement of knowledge-sharing platforms	• Enhanced understanding of environmental changes and impacts of agricultural practices through robust data collection and analysis. • Informed decision-making on land use, resource management, and policy development based on reliable and accessible data • Strengthening of local knowledge systems and integration with scientific advancements for effective application of CSA practices	• Potential misuse of data to justify unsustainable practices or greenwashing • Spreading of misinformation or outdated information about CSA practices, leading to unintended environmental harm	• - Increased capacity to track and measure progress towards climate change mitigation and adaptation goals • More effective climate-smart practices and policies informed by data-driven insights - • Increased resilience of agricultural systems to climate change through strengthened capacity for risk assessment and early warning systems	• Hampered progress towards climate change mitigation and adaptation goals due to unreliable or biased data informing strategies • Hampered progress towards climate change mitigation and adaptation goals due to inaccurate or misleading information about effective practices	• Increased transparency and accountability in environmental management and climate action efforts • Empowering communities through participation in data collection and decision • Stronger social cohesion and collaboration among stakeholders through shared learning and knowledge exchange • Empowerment of local communities through ownership and control of their learning processes	• Exacerbation of social inequalities, if marginalized communities are excluded from data collection or their data, is misinterpreted or misused • Exacerbation of social inequalities if marginalized communities are excluded from learning opportunities or receive inadequate information

5.3.4. Potential Environmental (Physical and Biological) and Social Risks and Impacts

Table 5.4 below outlines the potential environmental (physical and biological) and social risks and impacts associated with the various activities that are intended to be supported by the programme. This includes *inter alia* on-lending to farmers, the installation and use of biodigesters, crop diversification, the storage and use of fertilizers and pesticides, construction activities for climate-smart agricultural interventions and the restoration of degraded lands, afforestation and agroforestry program. Each activity is analyzed to identify the likely environmental and social risks and impacts ensuring comprehensive risk management and mitigation strategies are in place.

Table 5.5: Summary of Potential Environmental & Social Risks and Impacts

Activity	Potential Environmental Risks and Impacts	Potential Social Risks and Impacts
On-lending to Farmers	The use of fertilizers and pesticides can lead to soil degradation, reducing its fertility and productivity over time.	Exposure to fertilizers and pesticides may cause health issues such as respiratory problems and skin irritation.
	Agricultural runoff containing chemicals may contaminate local water bodies, affecting both human and aquatic life.	Economic displacement due to changes in land use may lead to loss of income and increased poverty
	Changes in farming practices may disrupt local ecosystems, potentially leading to a loss of biodiversity	Conflicts over resource use can arise, leading to social tension
Installation and Use of Biodigesters	Workers may be exposed to biogas leaks, which can cause respiratory issues or explosions if not properly managed.	Accidents related to biodigesters, such as biogas leaks, can pose significant health risks to nearby communities
	Nearby communities could be affected by biogas exposure or accidents, necessitating stringent safety measures.	
Crop diversification	Introducing non-native crops can disrupt local ecosystems, potentially leading to the spread of invasive species that outcompete native flora.	Changes in crop type can impact local food security and livelihoods.
	Changes in crop types can alter local flora and fauna dynamics, affecting ecosystem balance.	The introduction of new crops may lead to conflict over land and water resources.
Storage and use of fertilizers and pesticides	Run-off from fields can carry chemicals into local water bodies harming aquatic life and contaminating drinking water sources.	Workers handling these substances face health risks, including skin and respiratory issues.
	Overuse of chemicals can degrade soil health, reducing its long-term productivity.	Community members may also be exposed to these chemicals leading to health problems
Construction activities	Dust emissions from construction machinery can degrade air quality, affecting both workers and nearby residents.	Construction activities can lead to temporary displacement of communities and disruption of local livelihoods. Noise and air pollution may affect community health and well-being.
	Construction noise can disturb local communities and wildlife, leading to stress and displacement	
	Habitat destruction during construction can displace local wildlife affecting biodiversity.	
Restoration of degraded lands, afforestation and agroforestry programs	While restoration of degraded lands, afforestation and agroforestry programs aim to restore ecosystems and enhance biodiversity, improper implementation can harm existing ecosystems. Temporary impacts during restoration activities can disrupt local habitats and species	Restoration activities can lead to temporary displacement of communities and changes in land use which in turn could affect livelihoods and access to resources potentially leading to conflicts

5.3.5. Social Assessment

The social assessment helps identify risks and develop mitigation strategies. Exposure to fertilizers and pesticides can cause health issues such as respiratory problems and skin irritation.

Risks associated with biodigesters and other agricultural equipment has the potential to lead to injuries or fatalities.

Economic displacement due to changes in land use can lead to loss of income and increased poverty. Restrictions on land use may limit communities' access to essential resources, affecting their livelihoods and well-being.

Conflicts over land and water resources can arise leading to social tensions and potential violence.

5.3.6. Decision Making Procedure

A clear decision-making procedure is necessary to ensure that all the activities under the programme comply with environmental and social standards. This procedure guides the approval process and ensures that risks are adequately managed;

- i. Conducting thorough environmental and social impact assessments for all potential activities is essential to identify and mitigate risks. This is guided by Annexes 2-4, with further due diligence via Annexes 5 and/or 6 depending on the sub-project's categorization.
- ii. Clauses relating environmental and social risk mitigation will be included in agreements with Baobab and sub-borrowers to ensure compliance with the ESMF requirements.
- iii. Criteria for on-lending activities based on the results of these assessments of Annex 2 and 3 will be incorporated in the Operations Manual. The Credit Officer approves the funded activity based on the Credit Brief (CB). The CB will include Environmental and Social (E&S) Summary Report section, summarizing the material E&S risks and opportunities found in the course of E&S due-diligence, and will include respective ESMP and/or ESIA as appropriate.
- iv. The Credit Officer will review the environmental and social assessment of the activities; and make an investment decision accordingly. Only projects where risks are largely reversible and readily addressed through mitigation measures as detailed in Borrower Specific ESMP will be approved.

- V. For the funded activity that receives a positive decision, the E&S Manager shall liaise with the Credit Officer so that respective legal clauses are incorporated into agreements with the borrower to ensure compliance of the “funded activity” with the relevant local laws in Senegal, GCFF ESMS and borrower specific ESMP developed during DD stage. These standard E&S contractual terms will be developed during the GCFF Programme implementation stage with expert legal guidance.

6 Environmental and social management plan

6.1 Overview

The Environmental and Social Management Plan (ESMP), as part of the ESMF, includes measures to be considered to minimize or avoid significant environmental and health and safety impacts from the proposed programme activities.

The programme is not anticipated to be a significant emitter of greenhouse gases (GHGs). The programme activities will contribute to better resource use efficiency. The Risk Assessment applied in the ESMP involves a standardized risk assessment matrix of consequence versus likelihood for all aspects that are to be evaluated.

The purpose of this ESMP is to provide a practical plan to manage the potential unintended environmental and social negative impacts associated with the programme's activities, as well as to allow for meaningful and inclusive multi-stakeholder consultations and engagement throughout the Programme's lifecycle. This particularly considers the circumstances of the vulnerable and marginalized individuals. The ESMP also aims to assist the Government of Senegal in cooperation with the PMU and LBA team to maintain and/or improve its environmental and social management system during the implementation phase. Recommended measures have been suggested based on the relevant legal acts, policies, regulations, and guidelines.

The risk management score system evaluates the potential hazards that might arise throughout the course of a project's implementation. This evaluation is carried out based on the likelihood that the event will occur and how it will affect the project's goals if it does (see Table 6.1).

Table 6.1: Factors considered while assigning scores.

Impact rating	Description
Extent	An area of influence covered by the impact, if the action produces a much-localized effect within the space, it is considered that the impact is low. If, however, the effect does not support a precise location within the project environment, having a pervasive influence beyond the project footprint, the impact will be at local level or could be Beyond Country.
Timing	Refers to the moment of occurrence, the time lag between the onset of action and effect on the appearance of the corresponding factor, classified in five categories from a weight of (1) implying short term to a weight of (5) implying permanent.

Intensity	Refers to the degree of impact on the factor, in the specific area in which it operates, ranked from low (1) to high (5).
Probability	Refers to the likelihood of the impact occurring during the project implementation, this is also ranked as probable to highly probable.

Impact severity is determined based on the capacity of the receptor to sustain shocks triggered by the impact. In this regard the impact severity could be termed as negligible, low, medium, or high as summarized in the below.

Table 6.2: Impact severity

Sensitivity	Definition (considers duration of the impact, spatial extent, reversibility, and ability to comply with legislation)	Color Connotation
High	Vulnerable receptor (human or ecological) with no capacity to absorb proposed changes or no opportunities for mitigation.	
Medium	Vulnerable receptor (human or ecological) with limited capacity to absorb proposed changes or limited opportunities for mitigation.	
Low	Vulnerable receptor (human or ecological) with some capacity to absorb proposed changes or moderate opportunities for mitigation	
Negligible	Vulnerable receptor (human or ecological) with good capacity to absorb proposed changes or and good opportunities for mitigation	

The ESMP includes a stakeholder engagement approach that details how stakeholders (PMU, Finance institutions, farmers and farmer organizations and cooperatives) will be consulted and their participation ensured throughout the Programme. Among its guiding principles, the Programme will make efforts to mitigate all impacts affecting the equal participation and benefit sharing of vulnerable communities

Table 6.3: Environmental and Social Management Plan

Proposed Programme Outputs	Impact	Significance Rating	Extent	Recommended mitigation measures	Responsibility	Indicators	Frequency of verification
Component 1. Innovative Financing Facility to provide concessional loans to foster climate-smart agricultural practices.							
Irrigation Mechanisms e.g. drip irrigation, hydroponics	Potential water scarcity due to overextraction if not properly managed. Increased cost of water due to the need for expensive equipment. Uneven water distribution, potentially stressing some crops	High	Local	Development of a water training manual Training of farmers on efficient irrigation techniques, farm management techniques that encourage water infiltration. Conduct water resource assessment and subsequently surface and ground water monitoring plans. Adoption of a phased implementation plan to allow for gradual cost absorption. Regular maintenance and adjustment of the irrigation systems to ensure optimal water use. Introduction of drought resistant crops and breeds	LBA PMU Farmer Organizations Agricultural cooperatives	Number of farmers or groups that have adopted water-saving technology over time. Frequency of maintenance visits, Number of farmers who complete the training, MoV: Field visits; Attendance lists; Project reports	Bi-annually
Irrigation systems (including use of solar-powered pumps)	High water consumption could create competition for resources among different users. potential land degradation due to excessive water usage.	Medium	Local	Promote efficient irrigation techniques like drip irrigation. implement water conservation methods to reduce pressure on water sources. regularly monitor water usage and impacts on local sources. prioritize solar-powered irrigation to reduce GHG emissions	LBA	No. of farms using water-efficient systems, monitoring reports on water usage, no. of GHG monitoring sessions from solar pump systems.	Bi-Annually

Intermittent Rice Irrigation Mechanism	Potential vulnerability increases to extreme weather events e.g. drought and heavy rainfall which could affect crop yields.	High	Local	Implementation of a buffer stock system to store excess water during abundance periods to be used during periods of scarcity. Optimization of irrigation timing to coincide with the crop's water needs. Training of farmers on SRI techniques	PMU Farmers	Volume of water saved by the buffer stock system. Cost savings resulting from the implementation of the buffer stock system. No. of farmers trained	Quarterly
Zero to Minimum Tillage	Has the potential to reduce soil fertility and increase soil erosion over time especially in areas with high rainfall and poor soil structure	Medium	Local	Adoption of soil conservation practices such as contour ploughing, check ploughing, and ridge tillage. Training of farmers on minimum tillage techniques Regular soil testing	PMU Farmers	Soil health indicators e.g. pH, nutrient levels Crop yield differential. No. of farmers trained	Annually
Promotion of Zai pits and half-moon techniques	These techniques require significant labor input and could potentially disrupt traditional farming practices, leading to resistance from farmers.	Medium	Local	Organization of training programmes that cover the theory behind these techniques, practical demonstrations, and hands-on experience.	FOs Cooperatives PMU Farmers	Crop Yield differential. No. of Zai pits coverage No. of farmers trained to apply the Zai pit and half-moon techniques in their farming practices.	Quarterly
Use of organic fertilizers such as compost manure	Organic fertilizers may not provide the same nutrient content as conventional fertilizers, potentially leading to lower crop yields. They could also pose challenges in terms of availability and affordability. Collection and processing of these wastes could pose sanitation challenges.	High	Local	soil testing before and after use of organic fertilizers. training of farmers on organic fertilizer use and GHG reduction strategies visual soil assessment using the visual soil assessment scorecard provided by the fao. establishment of proper waste collection and segregation systems.	FOs Farmers PMU	Soil health indicators e.g. pH, nutrient levels No. of farmers trained. Crop yield differential. Quantity of organic fertilizer produced at farm level. No. of waste management plans developed, no. of farmers trained on composting practices, no. of GHG emissions monitored.	Annually

	Has the potentially to lead to GHGs emission if not properly managed Potential waste generation, runoff from organic fertilizer use could lead to water contamination, GHG emissions from decomposing organic matter and overuse could lead to soil degradation.			organization of sanitation and hygiene awareness programs among farmers Management plan for runoff, regular GHG monitoring from waste breakdown, and safe handling of organic material. Introduction of best practices in waste composting to reduce emissions and leaching.			
Deployment of Certified Climate-Resilient Seed Materials	The availability and acceptance of these seeds could be limited Use of hazardous pesticides and excessive water use during seeding can lead to toxicity in crops and water resource stress for competing users.	High	National	Formation of partnerships with seed companies or agricultural research institutions to distribute the seeds. Training on low-toxicity pesticides and safe use according to fao code of conduct, adoption of water-saving irrigation methods, and solar-powered equipment.	MSMES Cooperatives FOs LBA PMU	No. of farmers deploying certified seeds Crop yield differential. Crop survival rate. No. of farmers trained on safe pesticide use, No. of water-saving systems implemented, No. of solar-powered devices distributed.	Bi-annually
Agricultural Leasing	Potential conflicts over land use and tenure rights	High	Local	Contractual agreements detailing the rights and responsibilities of both the landowner and the tenant. Regular meetings to discuss the progress and any issues faced by the tenant	Fos Farmers PMU LBA	Percentage of landowners who have entered into lease agreements with tenant farmers. No of Tenant Farmer empowered (food, income, and nutritional security) No of disputes arising from leasing arrangements No of resolved disputes	Annually
Agroforestry Programmes	Disruption of traditional farming practices leading to resistance from farmers.	Medium	Local	Development of an agroforestry training manual Training sessions with farmers	LBA MSMEs Cooperatives	No of farmers adopting agroforestry practices No. of partnerships third-party partnerships entered.	Bi-annually

	Availability and affordability of trees for planting			Third-party partnerships with tree suppliers and off takers (timber, NTFPs, fruits etc.) Regularly monitor the interaction between trees and crops to identify any problems early on Involvement of local communities in the management of the agroforestry system (economies of scale).	FOs PMU	No. of trees planted by farmers. Volume of timber, NTFPs and fruits sold. Amount of carbon sequestered by the agroforestry trees.	
Post-Harvest Strategies	These strategies could potentially increase the costs of crop production in the short term, particularly if they require specialized equipment or infrastructure	Medium	National	Investing in setting up drying and storage facilities. Training programs to teach farmers how to properly dry and store their produce.	PMU FOs	No. of solar dryers and storage facilities at Fos and cooperatives No. of farmers trained on post-harvest storage. Level of post-harvest loss (in tons)	Every harvesting season
Use of pesticides	Risks of soil contamination, water pollution from runoff, impact on non-target species, human toxicity, and accumulation of hazardous materials in ecosystems. GHG emissions from production and application.	High	National	Integrate pesticide management according to FAO code of conduct. use low-toxicity pesticides, provide training on safe storage, handling, and disposal. monitor water and soil quality regularly. avoid pesticides classified as who hazard class IA or IB.	LBA PMU	No. of farmers trained on pesticide use, no. of incidents of pesticide runoff or leaching, water and soil quality reports. GHG emissions monitored from pesticide use	Annually
Intercropping and Crop Rotations	Increased crop diseases transmission if not properly managed. Increase of farming system complexity requiring more knowledge and skills from farmers.	Medium	National	Development of a crop rotation plan that details the sequence of crops to be grown and the duration of each crop. Training of farmers on how to manage different crops and how to implement the crop rotation plan.	PMU FOs Farmers	Number of farmers trained to use crop rotation plan. Soil health indicators e.g. pH, nutrient levels Crop Yield differential	Each planting season

Construction of Biodigesters	Accumulation of methane gas due to improper venting pose explosion risk, posing health hazard to workers and nearby residents.	High	Local	Implementation of strict safety protocols for workers handling biodigesters. Provision of regular safety training to all workers involved in the operation of the biodigesters. Mandatory use of personal protective equipment (PPE)	PMU Farmers FOs	No of biodigesters constructed. No of persons trained in safety protocols. Number of farmers and MSMEs using appropriate occupational health safety measures.	Bi-annually
	Noise pollution during construction phase	High	Local	Development of noise reduction strategies e.g. noise barriers or soundproofing materials. Regular noise monitoring to track and manage noise levels	PMU Farmers FOs	No. of initiatives deployed per site for noise reduction. Level of noise generated. No. of complaints received within adjacent community	During construction phase of biodigesters
	Construction takes up a significant amount of land which could be used for other purpose e.g. agriculture. It could equally lead to displacement of people	High	Local	Development of a comprehensive land use plan to ensure that the construction of biodigesters does not encroach on other land uses.	PMU LBA Farmers FOs	Environmental Indicators (amount of methane produced, carbon footprint reduction achieved, waste reduction rate, and energy efficiency of the biodigester) Social Indicators (number of jobs created during the construction and operation of the biodigester, the level of engagement with local communities) Economic Indicators (e.g. the return on investment, the cost savings associated with reduced waste, and the contribution to the local economy through job creation and the sale of biogas)	Bi-annually

Improvement of Feed Quality	Requires skilled labor and knowledgeable farmers. Without proper training and application, they might not yield the expected benefits	Medium	Local	Provision of farmers with access to technology that can aid in the improvement of feed quality. This could include machinery for processing feed ingredients, equipment for measuring feed quality, or software tools for managing feed production. Training of farmers on producing quality feeds	PMU FOs Farmers MSMEs Cooperatives	No. of farmers trained in quality feed production. Feed quality metrics (e.g. protein, fiber & moisture content, presence of harmful substances like mycotoxins and heavy metals)	Quarterly
Low-Emission Feeds from Crop By-Products and Co-Products from the Agri-Food Industry	Requires significant investment in processing facilities and transportation to collect and transport the by-products and co-products	Medium	National	Optimizing transportation routes for efficiency and reducing unnecessary travel. Bulk purchasing options with transport companies to secure lower rates. Waste management system to handle any by-products or co-products that are not suitable for feed.	PMU FOs Cooperatives	Percentage reduction in fuel consumption Percentage reduction in transportation costs due to bulk purchasing options	Yearly
Fodder Banks	Require significant investment in infrastructure and management to ensure that the feed stored is safe, and suitable for livestock consumption. Requires significant land area	Medium	Local	Development of a zoning plan to allocate specific areas for fodder banks ensuring they don't encroach on other land uses. Training of farmers, FOs, and cooperatives of fodder bank management techniques	PMU Farmers	Amount of carbon sequestered by the fodder banks. No of fodder banks located within designated zones.	Bi-annually
Component 2: Capacity Building and Technical Assistance for LBA, FOs, women and youth organizations, cooperatives and MSMEs							
Output 2.1: Development of climate smart credit products, risk scoring tools,	Technical glitches or downtime, which could disrupt the operations. Potential risks related to data privacy and security, which	High	National	Undertaking of a climate risk assessment Development of training manuals on climate risk assessments	LBA PMU	Number of climate-related risks identified. Number of stress tests conducted using climate scenarios.	Programme life cycle

and compliance monitoring tools tailored to CSA investments (Activity 2.1.1)	could lead to breaches of confidentiality or unauthorized access to the data. Resistance that could stem from fear of change, lack of technical skills. Incorrect risk assessment and due to staff misunderstanding the climate risk assessments leading to increased environmental damage. Misuse of resources (water/energy) due to lack of proper evaluation. inefficient use of energy for operational processes. Greenwashing and Ineffective Practices: Focusing solely on meeting loan disbursement criteria without a proper understanding of underlying environmental principles could incentivize the adoption of ineffective or even harmful practices under the guise of being "climate-smart," ultimately damaging the environment.			Development of robust schematic design for the portal Developing robust data protection and management plan Comprehensive training of staff members on climate risk assessment, resource efficient strategies and energy conservation method. Ensure systems monitoring water usage and energy are set up Track sub-borrowers Environmental Impact regularly and provide updated training.		No of LBA staff trained on Climate Smart Lending. Data protection plan implemented. Portal downtime monitored. No. of energy and water conservation monitoring sessions, tracking reports from sub-borrowers, training programs on resource efficiency implemented	
Output 2.1 (A2.1.2 - 2.1.4)	Require significant investment in technology and skilled personnel. The creditworthiness of farmers and their loan portfolios would be	High	National	Clear communication of the benefits of these new practices Provision of adequate training and support to farmers	LBA PMU	Number of farmers registered on CSA Platform No of repeat borrowers based on the CSA platform. No. of blacklisted farmers	Quarterly

	significantly influenced by their adherence to CSA practices. If farmers do not comply with these practices, their credit scores could be reduced, which could increase their loan interests. This could potentially lead to higher loan defaults.			Formation of partnerships with technology companies & relevant development partners Provision of transparent guidelines to farmers on how to comply with CSA practices. Regular monitoring and refinement of the credit scoring tool		No of partnerships entered.	
Output 2.1 (A2.1.5)	Not all farmers may be digitally literate, hence may not understand how to use the digital platform or navigate the loan process. Not all farmers may have access to a mobile phone, thus exclude potential borrowers. Security of digital lending platform	High	National	Provision of training to farmers on how to use the digital platform and navigate the loan process. Providing affordable mobile phones to farmers, or help towards the purchase of one (e.g. PAYG systems) Implementation of security measures to protect data breaches. This could include encryption, multi-factor authentication, and regular security audits	LBA PMU	No of farmers who using digital lending platform No of repeat borrowers Repayment rates of the loans	Monthly
Output 2.2: Improved investment capacities of smallholder farmers and MSMEs	Gender inequality if men feel underrepresented or left out of the training and capacity building activities, it could reinforce traditional gender roles and limit the overall effectiveness of the Programme. Exclusion of ethnic minorities and other vulnerable groups from Programme activities Lack of interest from youth, ethnic minorities, and	Medium	National	Development of training manuals Provision of training programs and workshops Development of standard business plan templates and digital mobile lending systems Establishment of a helpline in all LBA and Baobab Microfinance branches Development of training manuals that integrate resource efficiency and pollution control. ensure equal gender representation in training on safe agricultural practices.	LBA Baobab Microfinance PMU Fos Cooperatives	No of Women and Youth participating in trainings & workshops Number of female and youth-headed households adopting CSA practices. Percentage of women and youth accessing financial services and credit for investing in CSA practices. Number of business plans developed.	Quarterly

	vulnerable groups excluded from Programme activities. Exclusion of gender groups in certain training on environmentally safe practices. improper waste and resource management leading to environmental degradation.					No of farmers who have regular access to climate information services and price information services. No of beneficiaries of ethnic minority background No. of training programs on resource management and pollution prevention, no. of women and youth participating in sessions.	
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Component 3: Enabling environment for CSA practice adoption enhanced

Output 3.1: Creation and dissemination of policies, standards, and finance mechanisms promoting CSA investments (Activity 3.1.1)	Potential of increased public debt. Creation of institutional and legal Framework could conflict with existing laws and regulations, hence, require political will to implement. Changes in agricultural practices could have negative impacts on livelihoods, cultural practices, & access to resources for local communities. Loss in traditional knowledge due to overemphasis of CSA practices. Impact on livelihoods and cultural practices Increased pressure on resource availability, including water and energy due to CSA policy changes. potential soil/ land	High	National	Incentivize private participation to ensure minimal public investment in agriculture and agribusiness hence reduce debt risk. Monitor the effectiveness of public sector investments. Stakeholder engagement with farmers, agribusinesses, CSOs, and government institutions, to ensure that the new institutional and legal frameworks are inclusive, transparent, and accountable. Preservation of traditional knowledge in policies CSA policies include resource efficiency guidelines and monitoring requirements for water, soil, and land use. include stakeholder consultation in policy formulation to avoid conflicts with existing resource laws.	LBA PMU LFIs	No of new investments resulting from new CSA policies and guidelines Amount of private & public investment made in agriculture and agribusiness. No of farmers and agribusinesses consulted No. of resource efficiency guidelines integrated into policies, stakeholder feedback on resource use.	Annually
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	degradation from policy incentives favoring unsustainable practices.						
Output 3.1 (A3.1.2)	Delays in reaching consensus. Regulatory incentives could lead to unfair advantages for certain sectors. Unfair distribution of finance could lead to overuse of resources in certain sectors, impacting resource availability for other stakeholders	High	National	Development of a communication plan Training of LBA staff on green finance mechanisms Promotion of equal access to financial support Incentivize sustainable use of resources (water/energy) in loans and funding applications. include monitoring requirements for resource use for loan recipients.	LBA PMU LFIs	Level of stakeholder participation No of LBA staff trained No. of Green Finance Mechanisms implemented No. of sustainable resource management loan conditions integrated, monitoring reports on water and energy usage from loan recipients	Bi-annually
Component 4: Dissemination of CSA information, knowledge sharing and documentation							
Output 4.1: Establishment of partnerships for CSA data collection and reinforcement of knowledge-sharing platforms (A4.1.1)	Data privacy concerns among engaged stakeholders Lack of interest from potential partners Potential for incorrect or incomplete data collection leading to inefficient resource use. data mismanagement could lead to impacts on resource allocation decisions.	High	National	Implementing robust data protection measures, Obtaining explicit consent from participants before collecting data and ensuring that data is only used for the purposes agreed upon. Effective stakeholder engagement with potential partners to establish a win-win scenario. Training of LBA staff on FPIC & data privacy Implement data accuracy protocols and ensure partners use resource monitoring mechanisms to track resource use efficiency (water, energy, pesticide usage). train partners on data management for resource conservation	LBA PMU	No of Partnerships Established No of stakeholders engaged. No of LBA staff trained on FPIC No. of data accuracy protocols implemented, monitoring reports on resource use efficiency.	Quarterly

Output (A4.1.2)	4.1	Not all stakeholders may have access to technology needed to view explainer videos, webinars, or use the Programme website. This could exclude some stakeholders from participating in the learning process most especially in the rural areas. Lack of interest among potential beneficiaries. Technology limitations in rural areas could prevent the adoption of resource-efficient practices. lack of knowledge on safe pesticide use could increase environmental risks.	High	National	Ensure that the communication materials are accessible to all stakeholders, regardless of their technology access. This could involve providing hard copies of materials, arranging for internet access, Sensitization of potential beneficiaries. Ensure training materials on resource efficiency and pollution prevention are accessible to rural communities. provide hard copies and in-person training sessions on safe use of chemicals and pesticides.	LBA PMU	No of stakeholders engaging the various CSA dissemination mechanisms Frequency stakeholders interact with the materials. No. of training sessions on resource efficiency and safe pesticide use, participation levels from rural communities	Quarterly
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6.2 Roles & responsibilities

1. LBA

Being the accredited entity for the programme, LBA will ensure the programme aligns with the GCF standards. LBA as the AE is responsible for ensuring that all sub-projects financed through both the direct and indirect lending channel adhere to the set requirements, including the E&S requirements established. They will be responsible for

- Disbursement of funds and implementation of an integrated financial and project management system
- Setting applicable eligibility criteria requirements, screening for ESS risks and impacts, ESS due diligence and risk management; and conducting independent ESS audits.
- Monitoring and reporting on the environmental and social impacts of the programme i.e. tracking the progress of the programme, identifying any adverse impacts, and taking corrective action as recommended.
- Reporting to the GCF as per the Accreditation Master Agreement and the Funded Activity Agreement requirements

The Programme's E&S Manager shall manage the day-to-day environmental and social safeguards of the activities funded by the Programme (see Annex 7 for E&S Manager's roles and responsibilities).

2. Baobab Microfinance

Baobab Microfinance, as a co-executing entity, will co-execute Component 1 in collaboration with LBA. They will be required to conform to the ESMF Requirements as outlined. This will be done through:

- Updating of Baobab's existing ESMS to align with the requirements set forth in this ESMF, including the GCF ESS/IFC PS requirements adopted and all developed annexes.
- Quarterly meetings with the E&S Manager to outline any challenges and seek guidance if needed on E&S issues
- Development of semi-annual reports on the integration of E&S requirements into the lending operations under Component 1 of the Programme.

The above will be incorporated into the Subsidiary Agreement between LBA and Baobab Microfinance.

3. GCF Secretariat

As the financier of the LBA CSA programme, the GCF Secretariat ensures that the funds are used effectively to achieve the programmes objectives and deliver tangible results for the environment and the local communities. LBA will submit an annual E&S Report to GCF Secretariat.

4. Programme Management Unit (PMU)

Headed by a Programme manager, the PMU will ensure:

- Efficient coordination, monitoring, and evaluation of programme activities, linked to the loan including the subprojects and related ESMF.
- Stakeholder awareness and participation
- Production of technical and financial reporting in line with GCF standards.
- Designing, organizing, and implementing capacity building programmes for the programme activities and other key stakeholders
- Defining programme priorities based on technical and policy development priorities.
- Establishing and organizing a reporting system in line with LBA's guidelines that implementing institutions

PMU will constitute of the following key staff: a finance manager, adaptation specialist, environmental specialist, gender & youth specialist, agricultural expert, and M&E specialist. The Programme's E&S Manager will report quarterly to the PMU on programme-level E&S issues, and advice, where needed, the PMU on any arising E&S concerns.

5. Implementing Partners

These include Farmer Organizations (FOs), rural Cooperatives and MSMEs. They are also responsible for ensuring the programme benefits translate down to the farmer. The sub project beneficiaries are responsible for implementation of the ESMF requirements as guided through the PMU. They are also responsible for ensuring their contractors and subcontractors adhere to the ESMF requirements as well as reporting for their overall ESS reporting and performance. Quarterly progress reports to include progress in assessing and implementing environment and social safeguards, will also be prepared by the sub-project's borrowers (such as FOs, MSMEs, Cooperatives and Biodigester operators).

6. Third Party Consultants

Third Party Consultants could be brought on board during the implementation of the ESMP. They could include.

- Agronomist: Offers expert advice on the planning and implementing agroforestry practices and soil health practices that are sustainable and beneficial.
- Feed Quality Specialist: to assist in improving the quality of animal feed, which can enhance livestock health and productivity.
- Biogas experts: expertise in biogas technology to assist in designing, installing, and operating biodigesters. They can also help in optimizing the process to maximize energy output and minimize greenhouse gas emissions.
- Climate Change Adaptation and Mitigation Expert: will ensure that activities carried out promote regenerative agriculture and enhance the proposed programmes objectives and KPIs.
- Hydrology expert/Engineer: They ensure appropriate consideration of the hydrology of the area, movement, distribution, and management of water on and in the soil including the water cycle and water resources.

Effective implementation of the ESMP ensures that the impacts are adequately managed at each stage of the project implementation. Hence some of the following activities may be carried out by third-party consultants at each phase of the project.

a) Full proposal development:

- Development of the key environmental risks and impacts and suggested management plan.
- Formation of draft screening criteria including a climate smart credit scoring tool.
- Development of a preliminary stakeholder engagement and public participation plan

b) Implementation phase:

- Development of specific ESS and training materials.
- Building the capacity of all relevant stakeholders on environmental and social safeguards
- Conduct initial assessment of eligible subprojects to establish their environmental and social baselines against national and international standards.

- Develop a critical ecosystem map to highlight biodiversity hotspots in the target regions as well as gather from national statistics and other sources environmental and socioeconomic baselines for target regions.
- Develop an ESS checklist/criterion for inclusion in all contracts.
- Sensitization of key stakeholders, particularly community level beneficiaries on the project objectives, scope, and targets.
- Regular monitoring and reporting of environmental and social safeguards as part of the overall project established monitoring and evaluation framework.

c) Closure:

- Evaluation of environmental and social standards against baselines established in the implementation phases.
- Development of completion reports which should provide specific analysis of the impact of social, environmental and climate issues (may include risk management and disaster preparedness) arising from project implementation.
- Development of lessons learnt from all project implementation partners in particular challenges encountered in adhering to set environmental and social safeguards, insights and resolutions adopted over the life of the programme.

6.3 Screening of sub-projects

To evaluate the eligibility of proposed investments in the context of the Programme, as well as anticipate the level of further studies which will be required before approving the investment, LBA will be required to categorize the proposed investment. This will be done in alignment with the IFC guidelines for project categorization²² (see Table 6.4).

Table 6.4: Overview of IFC E&S risk categories.

Category	Level of E&S risk
A	Business activities with potential significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented. Projects falling under this category will not be eligible for funding under the proposed Programme.
B	Business activities with potential limited adverse environmental or social risks and/or impacts that are few, generally site-specific, largely reversible, and readily addressed through mitigation measures. It will be required that the appropriate level of environmental and social impact

²² See [IFC: Environmental and Social Categorization](#).

	assessment be carried out. A partial ESIA or Environmental and Social Management Plan (ESMP) is mandatory for this category and a climate adaptation and mitigation plan could be prepared prior to approval.
C	Business activities with minimal or no adverse environmental or social risks and/or impacts. No further environmental and social assessment is required but a Summary Project Report (SPR) can be developed to briefly describe each planned activity and management measures in place.

The classification of each sub-project under the appropriate environmental and social risk category will be based on the screening results, and sub-projects will be categorized as per their risks and impacts magnitude. To facilitate this process, a screening form has been developed. The scoping procedures to be adopted are laid out in LBA's ESMS Guidelines²³.

To determine risk classification, project developers and LBA's E&S Safeguard team must consider:

- a) Type, location, sensitivity, and scale.
- b) Nature and magnitude of potential environmental and social risks and impacts.
- c) Capacity and commitment of the Project Staffs (and others responsible for project implementation) to manage climate change, environmental and social impacts.

If a sub-project is categorized as ESS risk category B, it will require the preparation of an ESIA (Annex 5) and ESMP (Annex 6). If a sub-project is categorized as ESS risk category C, it will require the preparation of an ESMP (see Annex 6). Category A projects are not eligible for financing under the programme.

Table 6.5: Project Category Rating Tool

Category A Projects	Category B Projects
1. Adversely impact important features e.g., Forests, natural protection areas, wetlands, important cultural heritage sites 2. Have significant transboundary impacts or relevance to international treaties (e.g., conventions on international waste management regulations or water use, or agreements on the protection of biodiversity. 3. This leads to high consumption of resources, e.g., soil, land, or water. 4. Are associated with high risks to human health or safety (e.g. project actions near residential areas with harmful	6. Have potentially adverse risks and impacts on climate and the environment and on the social conditions of those concerned, (to a lesser extent than these of category A & can usually be mitigated through standard mitigation approaches). 7. Typically, the potential impacts and risks of category B measures are limited to a local area. 8. Impacts are in most cases reversible and are easier to mitigate through appropriate measures. 9. For category B the need for and the scope, the priorities and depth of an ESIA are determined

²³ [LBA Environmental and Social Management System](#)

emissions and/or handling hazardous substances).	through a case-by-case evaluation;
5. Have large scale resettlement, or lead to a significant loss of livelihood	
Category C Projects	
10. Have no or only minor adverse environmental and social impacts or risks; Implementation does not require any particular protection, compensation or monitoring measures.	
11. Category C measures usually do not require any additional analysis or any further E&S measures but should, however, be monitored for any relevant changes over the project cycle.	

The screening steps are as follows:

1. The GCFF team shall screen each activity against Exclusion List to ensure that the activity does not fall under excluded activities. Given that Category A and I1 activities are under the Exclusion List, proposed activities to be funded by the GCFF Programme will be classified into one of the six risk categories (A, B, C or I1, I2, I3).
2. In determining the appropriate risk categorization, the risks and impacts considered will include direct and indirect, induced, long-term and cumulative impacts, potential environmental and social risks to the activities, including risks related to SEAH and Indigenous Peoples, and will consider the activities' areas of influence, including associated facilities and third-party impacts. In screening activities, the environmental and social risks and impacts, as well as the nature, magnitude, and complexity of these risks, the specific characteristics of the influence area including risks of displacement, involuntary resettlement of indigenous peoples and impact on the use and access of their lands, natural resources and cultural heritage, and legal and policy contexts will be considered. In addition, commitment, capacity, and track record of the borrower to manage the environmental and social impacts in a manner consistent with the ESMS will be also assessed.
3. The preliminary screening checklist is provided in Annex 2; this screening checklist can be refined by the E&S Manager to be appointed during 1st year of Programme commencement.
4. The risk category to be assigned will be proportional to the nature, scale, and location of the activity, its environmental and social risks and impacts, including in relation to SEAH, and the vulnerability of the receiving environments and communities, including Indigenous Peoples. During screening stage, applicable GCF standards and IFC PS will be determined.

5. The activities that are identified to be part of the exclusion list, or that does not meet the local legislation will not be funded. Only activities categorized as B, C or I2 and I3 will advance to environmental and social due-diligence stage.
6. The environmental and social risk category (B or C, I2 and I3) will further determine the nature and depth of environmental and social due diligence (i.e. whether an ESMP (see Annex 6) and/or ESIA (see Annex 5) will be required prior to funding). The GCFF E&S Manager shall advise the borrower on next steps of due diligence, depending on the screening results.
7. The E&S Manager will subsequently generate an E&S Summary Report to the GCFF Team that includes his/her findings and recommendations.

6.4 Monitoring and reporting (post-investment)

The post-investment monitoring & reporting shall be done as follows

- Level 1 (Baobab to LBA): On its financed portfolio, LBA shall conduct site visits on sample basis to verify the information provided in the Due Diligence reports. Further, in the scenario of indirect financing i.e. financing via Baobab, Baobab Microfinance will be expected to comply with and report as per LBA's E&S supervision, monitoring & reporting standards, as will be stipulated in the Subsidiary Agreement.
- Level 2 (LBA to GCF): LBA will submit an annual E&S Report to GCF. LBA will ensure requisite staff with relevant skills are engaged for supervision, monitoring & reporting.

The programme-level E&S monitoring framework including key parameters, performance indicators, compliance status, and timelines for monitoring the E&S performance of the programme is included below:

IFC Standard	Performance indicator	Compliance status	Monitoring frequency	Target/Standard
PS1: Assessment and Management of E&S Risks and Impacts	- % of loans screened for E&S risks. - Number of E&S risk management plans developed and implemented. - % of projects with active E&S monitoring and reporting.	- Compliant - non-compliant	- Baseline before loan - Quarterly E&S monitoring - Annual review	- 100% of loans are screened for E&S risks. - All projects have an E&S management plan in place.

PS2: Labor and Working Conditions	- % of projects complying with labour laws and IFC standards. - Number of reported labour grievances. - % of grievances resolved within a specified timeframe. - # of incidents/accidents reported	- Compliant - non-compliant	- Quarterly monitoring - Annual review	- 100% compliance with national labour regulations and IFC standards. - 100% grievance resolution.
PS3: Resource Efficiency and Pollution Prevention	- % reduction in GHG emissions from agriculture. - % improvement in water-use efficiency per project. - Number of projects adopting pollution control measures.	- Compliant - Partial compliance - non-compliant	- Quarterly review - Annual evaluation	- X% reduction in GHG emissions aligned with national goals. - X% improvement in water use efficiency.
PS4: Community Health, Safety, and Security	- % of projects with active community engagement plans. - Number of community safety incidents reported. - Number of security personnel trained on human rights standards.	- Compliant - Partial compliance - non-compliant	- Quarterly reviews - Annual assessment	- Zero significant community safety incidents. - 100% of projects with community engagement plans.

6.5 ESMF Monitoring Budget

Costs of the implementation of preventive, control, or mitigation and/or corrective measures of each of the impacts identified are included as part of the implementation activities of the project. Therefore, they are part of the overall project costs of the funding proposal.

Table 6.6: Cost estimate for ESMF implementation

Sn	Activity	Description	Estimated cost
1	E&S Specialist	Hiring an environmental and social specialist for the programme, during the lifetime of the Programme, estimated at € 2000 per month	€120,000
2	ESMF training manual	Development of ESMF guidebook + Associated printing of approx. 10,000 copies	€75,000
3	Training of beneficiaries to create awareness and provide technical guidance	1 training per region per year, each training will cost €7,000 x 6 regions x 5 years. (costs include catering, transport, conference hall, trainers, and support persons)	€210,000
4	Training of designated staff	Headquarters training	€50,000
		6 branches x €9,000 x 5 years	€270,000
5	Carrying out ESIA for sub projects	Technical costs for MSMEs, FOs, Rural cooperatives & farmer groups involved in the programme to be able to	€200,000

		carry out ESIA's and/or feasibility studies of their individual activities prior to funding @ €4,000 per assessment for 50 MSMEs, FOs, Rural cooperatives & farmer groups.	
6	Grievance redress mechanism	Establishment & operationalization of GRM	€50,000
Sub-total (included under "ESS Safeguards" budget line)			€975,000
Monitoring of ESMF implementation @ 12% (Incorporated in the PMC costs under "Gender and ESS related PMC")			€117,000
Total			€1,092,000

The Programme budget is meant to be indicative, and the amounts are to be understood as an orientation. The budget for the implementation of the ESMF is estimated as € 1,092,000. Table 6.6 gives minimum values for the costs covered by the Programme.

The costs listed in Table 6.6 do not include individual costs incurred by Executing Entities as actual costs in implementing an identified environmental and social safeguard measure. These costs will be covered on a sub-project basis and will be incurred by the funded sub-projects.

7 Stakeholder engagement and public participation

7.1 Overview and Justification

According to the reference framework which includes IFC PS4, EP5 and 6, LBA policies GCF regulations, stakeholder engagement and public involvement processes, all projects must have sufficient measures in place. This entails placing a focus on the involvement of programme-impacted communities.

Women, youth, individuals with disabilities, and other site-specific targeted groups that will be affected by the proposed programme will have the opportunity to voice concerns about potential impacts, be involved in the planning process, and be provided with sufficient compensation if the programme components affect their regular means of subsistence. Certain circumstances may be subject to additional regulations from the reference framework, such as PS7 (Indigenous Peoples).

The following guiding concepts will serve as the basis for this Stakeholder Engagement Plan (SEP):

- The project will ensure **ownership** from all relevant parties, which will be made sure of by adhering to a multi-stakeholder and consultative procedure.
- The SEP should encourage a **culture of accountability and responsibility** sharing among all parties involved in the GCF process, according to their respective roles.
- Involving stakeholders will be **a continual process that requires regular progress assessments, follow-ups, and updates.**
- The SEP will guarantee and encourage **an inclusive and gender-sensitive** environment in its operations. In particular, the Indigenous Peoples Planning Framework (IPPF).
- The SEP to guarantee that none of the parties taking part in the GCF process have **a conflict of interest.**
- Closing the Loop: The Programme team needs to make sure that the feedback providers are **informed adequately about the activities** that have been done in response to their initial comments. This is essential for generating outcomes, maintaining engagement, and fostering trust.

7.2 Public Consultation Process

This Stakeholder Engagement Plan (SEP) for the Programme should be able to establish a functioning platform for effective interaction and meaningful consultations with potentially affected parties, programme beneficiaries and proponents (LBA) and persons, who have interests in the implementation, and outcomes of the programme. The Programme should be committed to engaging with local rural communities (direct and indirect beneficiaries) in programme-related activities. To achieve this, the following steps in Table 7.1 must be followed.

Table 7.1: Stakeholder consultation process during Programme Implementation

Step	Description	Key element
Planning and Preparation	a) Identify Stakeholders: List all potentially affected parties (beneficiaries, impacted communities, businesses, NGOs, government agencies, marginalized groups). (b) Set Clear Objectives: Determine what you want to achieve (gather feedback, inform decisions, build consensus, address concerns). (c) Develop a Consultation Plan: Choose appropriate methods (meetings, focus groups, surveys, online forums), allocate time and resources, and establish a communication strategy.	Clear stakeholder mapping, defined consultation goals, a detailed plan with methods, timeline, budget, and communication strategy.
Communication and Engagement	a) Transparency and Inclusivity: Be open about the Programme, and decision-making process, and ensure equal participation opportunities. (b) Active Listening and Response: Listen attentively, address concerns promptly, and demonstrate value in stakeholder input. (c) Accessibility: Use diverse communication methods and materials accessible to all audiences (translated materials, alternative formats, community outreach). (d) Culturally Sensitive Communication: Adapt communication to cultural sensitivities and preferred communication styles.	Transparent communication, responsive engagement, accessible methods, and a culturally sensitive approach.
Feedback Collection and Analysis	a) Design Effective Tools: Develop clear and accessible tools for gathering feedback (surveys, interview guides, discussion prompts). (b) Encourage Open Dialogue: Create a safe and respectful environment for expressing opinions and concerns. (c) Analyze Feedback Systematically: Identify common themes, concerns, and suggestions through qualitative and quantitative analysis.	Clear feedback tools, open dialogue practices, and systematic analysis of collected data.
Response and action	a) Share the Results: Inform stakeholders about the consultation findings and how their input will be used. (b) Develop an Action Plan: Address concerns raised and implement adjustments based on feedback (modifying Programme plans, mitigating risks, enhancing communication). (c) Be Responsive and Accountable: Continuously update stakeholders on Programme progress and demonstrate the impact of their input.	Transparent presentation of results, actionable plan based on feedback, ongoing communication, and accountability.
Monitoring and Evaluation	a) Evaluate the Consultation Process: Assess how well the process met its objectives and engaged stakeholders. Identify areas for improvement for future consultations. (b) Monitor Programme Impacts: Track how stakeholder feedback influenced Programme outcomes and adjust future programs accordingly.	Evaluation of consultation effectiveness, monitoring of Programme impacts and adjustments based on feedback.

7.3 Free, Prior and Informed Consent Process

Free, prior, and informed consent (FPIC) describes the principle that a planned investment cannot be implemented unless all affected populations have given their consent voluntarily and without coercion or manipulation (free) before the final decision on implementation is taken (prior) and after being given access to all relevant information (informed).

The process of obtaining Free, Prior and Informed Consent (FPIC) from potentially affected communities is essential for any project funded by the Green Climate Fund (GCF). LBA has been at the forefront of ensuring that the development process respects human rights, dignity, culture, and livelihoods. LBA implements a management system consistent with this Policy, thereby providing for free, prior, and informed consent and a systematic, consistent, and transparent management of risks and impacts from GCF-financed activities.

7.3.1 Free, Prior and Informed Consent Implementation Framework

This FPIC Implementation Framework, which will be included in the Expanded Stakeholder Engagement Plan (Social Inclusion Plan), is developed to ensure that any activities will not commence unless FPIC process has been conducted with affected persons. The following checklist will help determine if programme activities require Free, Prior and Informed Consent (FPIC) process.

Table 7.2: FPIC checklist

Checklist for appraising whether an activity may require an FPIC process	Yes / No
1. Will the activity involve the relocation/resettlement/removal of the communities from their lands?	
2. Will the activity involve the taking, confiscation, removal, or damage of cultural, intellectual, religious and/or spiritual property?	
3. Will the activity adopt or implement any legislative or administrative measures that will affect the rights, lands, territories and/or resources of indigenous peoples (e.g. in connection with the development, utilization or exploitation of mineral, water, pastoral lands other resources; land reform; legal reforms that may discriminate de jure or de facto against indigenous peoples, etc.)?	
4. Will the activity involve natural resource extraction such as logging, mining, pastoral or agricultural development on the lands/territories?	
5. Will the activity involve any decisions that will affect the status of rights to their lands/territories, resources, or livelihoods?	
6. Will the activity involve the accessing of traditional knowledge, innovations, and practices of indigenous and local communities?	

7. Will the activity affect indigenous peoples' political, legal, economic, social, or cultural institutions and/or practices?	
8. Will the activity involve making commercial use of natural and/or cultural resources on lands subject to traditional ownership and/or under customary use?	
9. Will the activity involve decisions regarding benefit-sharing arrangements, when benefits are derived from the lands/territories/resources of the communities	
10. Will the activity have an impact on the continuance of the relationship of the communities with their land or their culture?	

If the answer is 'Yes' to any of these questions, FPIC will be required for the potentially affected peoples for the specific activity that may result in the impacts identified in the questions.

7.3.2 FPIC Processes

The following are the recommended FPIC processes to be conducted, following IFC Performance Standard 6.

- Identification of all affected individuals and groups who might be affected by the project. This will include, smallholder farmers, local communities and any other stakeholder that might be impacted by the project.
- Engagement with these stakeholders to understand their concern, needs and expectations through meetings, surveys and Focus Group Discussions will then follow.
- During the pre-engagement, culturally appropriate and easily understandable details of the programme including its objectives, potential impacts and benefits will be discussed with the stakeholders.
- Will then hold full consultations with the stakeholder based on the shared information. During these consultations, we will get stakeholders' concerns, provide clarifications, and address their questions. It's important to generate all inputs received during consultations.
- We will then obtain consent either verbally or signing of consent documents by the stakeholders.
- The LBA Unit of Sustainable Financing will be responsible for periodically monitoring and ensuring the programme continues to meet the needs and expectation of the stakeholders.

Table 7.3: Outline for FPIC Plan for LBA's Programme (Timeline Indicative)

Step	Description	Timeline	Responsibility
Preparation (Scoping) and Information gathering	- Identify potentially affected communities. - Gather information about communities' customs, traditions, decision-making processes, and potential impacts of the project.	1-2 Months	LBA PMU
Preparation (Develop FPIC Plan)	- Define the FPIC approach based on the information gathered. - Establish communication strategy and materials: Identify community representatives and communication channels; Set up a grievance mechanism.	1-2 months	LBA PMU
Preparation (Building capacity and awareness)	Train community representatives on the FPIC process and project details: Raise awareness in communities about the project and FPIC rights.	1-2 months	LBA PMU
Consultation and consent (Initial Meeting)	Organize initial meetings with community representatives to introduce the project and the FPIC process: Ensure communities understand project details, potential impacts, and alternatives.	1 month	LBA PMU
Consultation consent (Information sharing and feedback)	Share detailed project information through various channels (meetings, workshops, materials): Address community questions and concerns. Gather feedback and consider community suggestions	2 months	LBA PMU
Consultation and consent (Internal Deliberations)	Provide communities with time for internal discussions and decision-making according to their customs.	1 month	LBA PMU Communities
Consultation and consent (Consent Meeting)	Organize a formal meeting to receive community consent or rejection of the project. - Ensure decision is freely made without coercion or intimidation.	1 month	LBA PMU
Document Consent Process	Document the entire FPIC process transparently, including meetings, decisions, and grievances.	Ongoing	LBA PMU
Grievance Mechanism Implementation	Ensure the grievance mechanism is accessible and functioning effectively. - Address any grievances raised by communities.	Ongoing	LBA PMU
Monitoring and Reporting	Monitor the ongoing impacts of the project on communities. - Report regularly to communities and relevant stakeholders	Ongoing	LBA PMU

7.4 Social Inclusion

Social Inclusion is the process of improving the terms for individuals and groups to take part in society, and the process of improving the ability, opportunities, and dignity of those disadvantaged based on their identity. It ensures everyone, regardless of their background or identity, has a fair chance to participate in and benefit from the project. The Sustainable Development Goals (SDGs), according to target 10.2, aim to empower and promote the social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, relation or economic or other status. It focuses on the

need for action to re-balance these power relations, reduce disparity and ensure equal rights, opportunities, and respect for all individuals regardless of their social identity.

The Programme will guarantee that all social groups are included. These will include women and men of all ages, particularly from minority groups. Emphasis will be on ensuring that women, girls, men, boys, youth, ethnic minorities, the elderly, differently abled, and different faiths all benefit from GCF activities.

Unsafe and unhealthy working conditions: Working conditions across sectors are generally poor in the rural areas due to relatively weak extension systems, and limited awareness of and non-compliance with health and safety standards in agriculture and energy appliance systems. In the agricultural sector farmers are vulnerable to agro-chemical toxins from wrong methods of handling and overuse of fertilizer and pesticides. In addition, due to the high level of poverty, children often help in the production and/or processing of agricultural commodities.

7.5 Stakeholder Engagement and Community Sensitization

Effective stakeholder engagement process must be transparent and accountable requiring that relevant information, particularly E&S issues, be made available to the affected and potentially affected communities, as well as to external stakeholders. LBA will publish information on financed projects and programs on its website. The appropriate measures are described in the Programme Stakeholder Engagement Plan (SEP), including a clear communication strategy and the organization of community sensitization activities on a regular basis (See Annex 17 on SEP).

For the sub-projects, distinct SEPs should be created to address the following elements:

- Principles, goals, and area of involvement
- Rules and (institutional) specifications
- A synopsis of prior stakeholder engagement initiatives.
- Engagement strategies.
- Communication routes and key messages.
- Grievance mechanism
- Monitoring and evaluation

Alternatively, a detailed communication / outreach strategy should be developed during the first six months of Programme implementation. Community sensitization (i.e.

awareness-raising and training) activities need to be clear, timely and culturally appropriate. Key messages need to be communicated in a format and language that is easy to understand, and during a time that is convenient and sufficient for all key community groups, particularly women and youth.

8 Capacity building, training, and technical assistance

8.1 Introduction

The ESMF will be implemented using the existing administrative and management structure of LBA Environmental and Social Policy and the Programme Management Unit (PMU) which will be formed and strengthened by providing resources and training at relevant levels to build capacity.

The Environmental and Social Impact Assessment (ESIA) Reports, and Management Plans, that are prepared for investments to be identified by the proposed Programme will be screened, approved, and supervised by the PMU to ensure that the ESMF requirements are met. At every stage of its operations, the PMU must have a supportive administrative/management structure (i.e. national, zonal, regional, district and branch).

The PMU will be mainly situated at LBA headquarters. Lending Officers appraising a loan application at lower levels, whether the borrower is Corporate, MSMEs or any other eligible borrower are also responsible for identifying, assessing, and monitoring environmental and social risks in the credit approval process. They will undertake:

- Selection of the E&S measures,
- Communication with the clients regarding the E&S legal agreement,
- Recording clients E&S obligations in the loan agreement and
- Completion of environmental and social screening forms attached (see Annexes 2 & 3).

Successfully implementation of this ESMF relies in establishing a unit at the branch level or assigning the screening duties to the appropriate department within the LBA arrangement at the branch, district, or regional levels, which will oversee the managing and supervising lending work. This will simplify the screening process and increase efficiency.

8.2 Training of Designated Staff

The PMU will hire an E&S Manager to have overall accountability for the environmental and social performance of the sub-loans, including the implementation of this ESMF and resources necessary to support such implementation. The E&S Manager will (see Annex 7 for the E&S Manager's responsibilities):

- be responsible for the day-to-day implementation of the ESMF, including the environmental and social procedures.
- Ascertain that adequate resources are available for management of and training in environmental and social issues.
- Ensure that adequate technical expertise, either in-house or external expert support, is available to carry out due diligence and manage the environmental and social risks of the Programme sub-loans.

The success of LBA Environmental and Social Management System implementation is pegged on support to key managers and staff members through a reliable training plan in line with the ESMF goals. LBA will ensure that all training needs are met for the ESMF's successful implementation. At least, all workers will receive general orientation training on the bank's environmental and social policy. For concerned employees, additional training specific to each role will be organized as per the ESMF training program (Table 8.1).

8.2.1 Training of PMU and designated Lending Officers

This should be designed for enhancing the skills of designated lending officers in environmental and social issues so that they are able to implement the above proposed screening process and mitigation measures. The training should take the form of Training of Trainers (TOT) in the areas of environmental and social screening, impact assessment, developing mitigation plans, monitoring, and reporting etc. They would then train other staff at a lower level as needed. The proposed training regime would serve as the basis for a 6-days training course for zones, giving the personnel the necessary skills to implement the ESMF.

Table 8.1: Proposed Training programme

Topic	Target audience	Duration (Days)
Environmental and Social Management Framework (ESMF) Overview	PMU, LOs	0.5
Environmental and Social Impact Assessment (ESIA) Process • Screening process • Identification of impacts • Design of appropriate mitigation and monitoring measures (EMP) • Rationale for using Screening form.	PMU, LOs	2.5

• Preparation of terms of reference for carrying out environmental and social impact assessment (ESIA) • How to incorporate EMP in project designs and in contract documents • How to review/approve an ESIA, screening list, and the kind of criteria for use in this regard. • How to review and approve overall project proposals • The importance of public consultations in the EIA process • How to monitor and report project implementation • Case studies		
Environmental and social policies, procedures, and sectoral guidelines • Review and discussion of Senegal's environmental policies, procedures, and legislation. • Review and discussion of the Bank's safeguards policies. • Review of ESIA report and ESMF • How to collaborate with institutions at the local, regional, and national levels.	PMU, LOs	2
Environmental and Social Monitoring and Reporting	PMU, LOs	0.5
Grievance Redress Mechanism (GRM)	PMU, LOs	0.5

8.2.2 Awareness for responsible people who will review/approve the sub-projects.

Workshops for raising awareness and providing training on environmental and social assessment, and processes, as well as environmental and social policies, will be held for participating financial institutions that oversee endorsing and approving of subprojects. Subjects covered could include but not limited to the following:

- Main environmental and social problems and challenges related to the programme.
- Review of environmental and social screening and assessment process
- Review of the Screening Form and eligibility screening forms
- How to approve an ESIA, screening list, and the kind of criteria for use in this regard.

8.2.3 Training of Agricultural extension officer

Output 2:3 recommends the provision of agricultural extension and advisory services (EAS) to enable youth and women to undertake CSA activities as per loan term conditions. LBA will focus on developing capacities for more sustainable extension support to beneficiaries and ensure adoption of sustainable mechanisms and improvement in the use of adaptation technology. To effectively connect with target communities, farmers

and vulnerable groups, hired agricultural extension experts must complete social development communications training. Agricultural Extension specialists must get specialized training on the management and use of pesticides; optimal farming techniques that preserve soil organic matter, preserve soil nutrients, conduct afforestation, conserve subsurface water, and effectively manage pests and diseases.

8.2.4 Training of service providers and other support agencies

Smallholder farmers, corporates, MSMEs, and microfinance institutions (MFIs) across the agriculture value chain are the primary, direct beneficiaries of the LBA Programme. They will take responsibility in the planning, assessing, reviewing, mitigating all impacts related to the whole programme and its sub-projects through preparation and implementation of ESIA's. Currently, these potential beneficiaries do not have the requisite capacity and knowledge for implementing the ESIA process. To build this capacity, LBA in collaboration with Centre de Suivi Ecologique will identify training materials and individuals who will be involved in the implementation of sub-projects categorized as B.

8.2.5 Environmental assessment of sub-projects costs

Creating an environmental assessment (EA) for sub-projects within the scope of climate-smart agriculture for large and medium-scale farmers, and a biogas component involves several key steps and considerations. The recruitment of an environmental consultant to carry out these assessments requires a comprehensive understanding of the specific needs, costs, and outcomes expected from these projects. The average cost of individual sub-projects that may require ESIA's is estimated to be around \$3,000 to 5,000 per sub-project (depending on the location and size of the sub-project).

9 Grievance Redress Mechanism

9.1 Introduction

This Grievance Redress Mechanism (GRM) has been prepared for the Climate Smart Agriculture programme that LBA intends to implement in the urban and rural areas of the Republic of Senegal. A Grievance Redress Mechanism (GRM) aims to provide a fair, transparent, and effective process for addressing concerns and grievances raised by project-affected communities.

The GRM will be developed in a manner that is legally sound, ethically responsible, and in line with the overall goals of the programme. The key steps for designing an effective GRM are broken down as follows (World Bank, 2012):

- Survey existing formal and informal in-country GRMs and build on them. Formal systems can be within ministries or departments, information centres, or judicial systems. Informal systems can be councils of village elders, or chiefs. These may already have responsibility for grievance redress and resolution and can be built upon rather than replaced.
- Estimate number of users and assess available resources for the GRM. Projects can have a variable number of users and different levels of human, financial, and technological resources. Determination of the GRM's scope and scale, and to identify resource gaps in advance.
- Develop standard operating procedures and flowcharts to help codify how grievances will be redressed for all stages of the process. Project management will develop operating procedures, guidelines, and flowcharts detailing how the grievance redress process will unfold within the project's operating structures and how it will be monitored and reported on.
- Assign grievance redress responsibilities and train staff to handle grievances. Project management will assign responsibility for handling grievances to staff at all levels of the project. Training should include information about interacting with beneficiaries about grievances, LBAs service standards, and internal policies and procedures in relation to grievance redress.

9.2 Grievance Redress Mechanism

LBA will establish a GRM for the programme to address complaints and grievances related to the Programme interventions. Through discussion and consensus, the GRM will try to resolve the issues/conflicts amicably, fairly, and efficiently.

Affected persons will be given copies of grievance procedures as a guide on how to handle grievances. As a part of the GRM, LBA will set up project-specific Grievance Redress Committee(s) which will include representatives of the beneficiary/affected communities, at the local level, besides other relevant stakeholders including representatives of LBA itself.

The GRM procedures shall be established to receive and resolve the issues of programme affected communities/person. The mechanism shall be based on principles such as.

- i. Proportionality: scaling the mechanism to the programme needs. In programmes with low potential adverse impacts, simple and direct mechanisms for problem solving is preferred for addressing and resolving complaints such as public meetings, telephone hotline, existing media, brochures, and a community liaison officer.
- ii. Accessibility: establishing a mechanism which is clear, free of charge and easy to access for all segments of the affected communities and other potential stakeholders. Staff with the appropriate skills, training and familiarity with community liaison work should be employed in the field. Accessibility will enable LBA to build more constructive relationships with local communities. This will also help intervene quickly in any dispute or environmental issues and in an appropriate manner because maintaining a regular presence of a familiar face in the field greatly helps engendering trust and thus, constructive, and closer relations.
- iii. Transparency: members of the affected communities know who is responsible for handling the complaints and communicating the outcomes of corrective actions to be taken about the complaints. This will be helpful in that people have confidence in the grievance mechanism to be used.
- iv. Culturally appropriateness: having cultural sensitiveness while designing and executing the grievance mechanism.

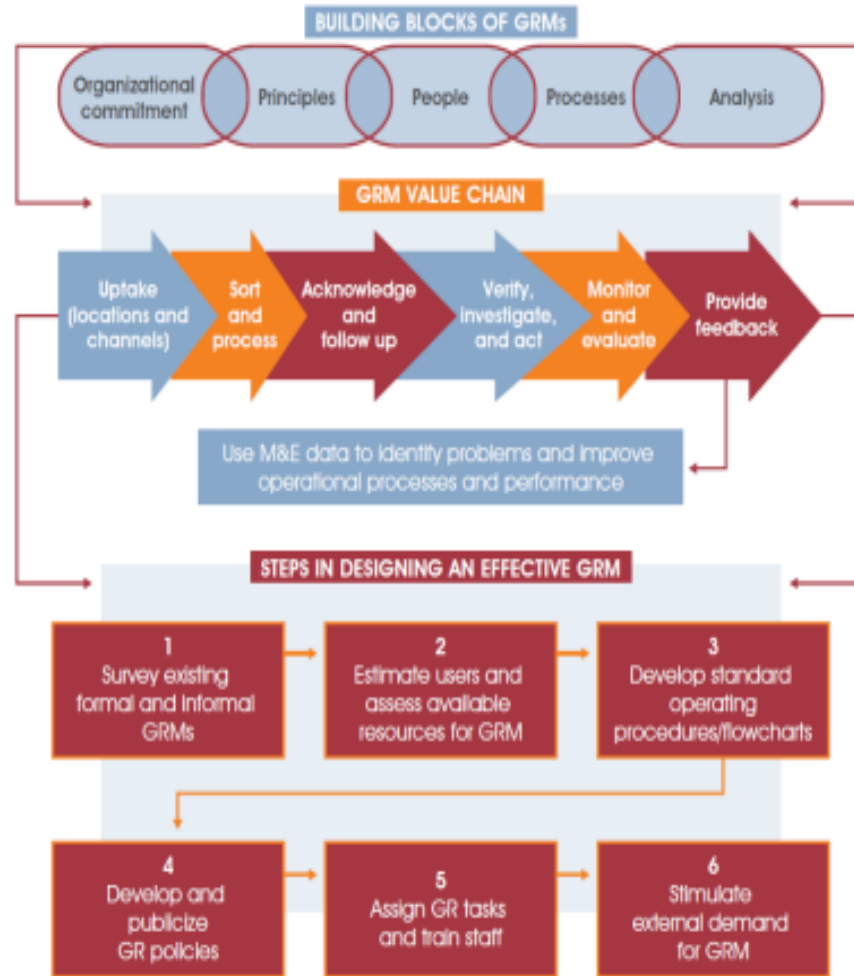


Figure 9.1: GRM Framework (Condensed from World Bank 2012²⁴)

In addressing grievances, a bottom-up approach will be adopted as shown in **Figure 9.1**. Grievances will be discussed first at local level i.e. in group level to solve among the community themselves. If required, the issue will be referred to the regional level and finally it may be addressed at National level.

9.2.1 Receive and Register Grievance

- Ensure aggrieved stakeholders can communicate their grievances through different channels. These will include phone, letter, email, website, village meeting,

²⁴ World Bank. (2012a). Part 1: The theory of grievance redress. Vol. 1 of Feedback matters: designing effective grievance redress mechanisms for Bank-financed project. Washington, DC: World Bank.
<http://documents.worldbank.org/curated/en/2012/01/16306144/feedback-matters-designing>

- Explain the purpose of GRM, different options available to the community to communicate their grievances about the programme, and where they can get help and advice on how to communicate their grievances.
- Ensure that designated staff from LBA, or from the local level are known to the people where they can lodge their complaints.
- Ensure that centralized system of logging and tracking of grievances are put in place to ensure accountability and enable continuous learning.
- Information about each complaint should be made available to the public, including date received, whether determined eligible, main concerns raised, status of response, and how the grievance was resolved.
- If a complainant requests that their identities be made confidential, GRM should honor those requests, while still making basic information about the complaint publicly available.

9.2.2 Acknowledge, Assess, Assign

- a) Acknowledge: The LBA staff who will be responsible for received grievance, shall provide timely communication back to the complainant(s) that their grievance has been received, will be logged, and reviewed for eligibility, and if eligible, will generate an initial response. Acknowledgement should be as prompt as possible upon receipt of the grievance.
- b) Assess: The person receiving the complaint must ensure that the issue being raised is relevant to the programme. Clear guidelines on what kinds of issues are eligible to be filed through the GRM should be determined and be made available to the public.
- c) Assign: The complaint must then be assigned to the most appropriate office or individual that can respond to the nature of grievance.

9.2.3 Develop a Proposed Response

The GRM set-up for the programme will provide the following types of response:

- i. Direct action to resolve the complaint.
- ii. Further assessment and engagement with the complainant and other stakeholders to determine jointly the best way to resolve the complaint.

- iii. Determination that the complaint is not eligible for the GRM, either because it does not meet the basic eligibility criteria, or because another mechanism (within the bank or outside it) is the appropriate place for the complaint to go, or both.

The responsible person from LBA will determine whether the grievance can be addressed directly through a relatively simple action agreed with the complainant; or whether the grievance is complex enough that it requires additional assessment and engagement with the complainant and other stakeholders to determine how best to respond.

9.2.4 Communicate Proposed Response and Seek Agreement on the Response

The person responsible for handling GRM must communicate proposed response to complainant in a timely fashion, in writing (and orally, in case this is more effective) and seek agreement on the response. Complainants will also be contacted via telephone or set-up a meeting to review and discuss the initial approach. The response should include a clear explanation of why the response is being proposed; what the response would be; and what the complainant's choices are, given the proposed response. Those choices may include agreement to proceed, request for a review of an eligibility decision or a referral decision, further dialogue on a proposed action, or participation in a proposed assessment and engagement process or pursuit of the complaint through other channels.

9.2.5 Implement the Response to Resolve the Grievance

Decisions agreed at any stage of the process will be binding on LBA in the implementation of the Programme. In case, there is no agreement between the parties and the programme affected communities/person, the Grievance Redress Committee shall incorporate independent parties who should be either from recognized NGOs/CBOs operating in Senegal or an eminent person of appropriate standing. Decisions made by this committee and agreed by all parties shall be legalized in terms of a resolution of the participating MSMEs, farmers, pastoralists, and Agri-communities.

9.3 Independent Redress Mechanism

The Independent Redress Mechanism (IRM) provides an avenue for individuals, communities, and other stakeholders who believe they are adversely affected by a GCF-financed project to file complaints. It ensures that GCF adheres to its social and environmental safeguards and other policies. The IRM offers problem-solving services to address and resolve complaints amicably and constructively, without attributing blame.

This function aims to restore dialogue between the project implementer (LBA) and the affected parties to find mutually agreeable solutions.

Table 9.1: IRM Process

Step	Process	Description
Filing a Complaint	Initiation	Stakeholders affected by a GCF-financed project can file a complaint to the IRM if they believe they are adversely affected by the project
Screening	Eligibility Assessment	The IRM assesses the complaint to determine if it meets the eligibility criteria, such as direct impact by the GCF project, and relevance to GCF policies and procedures.
Selection of Resolution Pathway	Pathway decision	Depending on the nature of the complaint and the complainant's preference, the IRM facilitates either a problem-solving process or proceeds with a compliance review.
Problem-Solving	Conflict resolution	Aimed at achieving amicable resolutions, this process restores dialogue between the project implementer (e.g., the bank) and the affected parties to find mutually agreeable solutions
Compliance Review	Policy Adherence evaluation	If selected, the IRM conducts a compliance review to assess whether the GCF and its financed project have complied with the Fund's policies and procedures, including environmental and social safeguards.
Advisory Services	Policy Guidance	The IRM offers advice to the GCF Board, Secretariat, and Accredited Entities on improving the Fund's accountability framework and avoiding potential grievances.
Resolution and Remedial Actions	Outcome Implementation	Based on the chosen pathway and findings, the IRM facilitates the implementation of resolutions or remedial actions to address the grievances
Monitoring and Follow-Up	Implementation oversight	The IRM monitors the implementation of resolutions or recommendations made during the problem-solving or compliance review processes to ensure compliance and satisfaction of all parties involved.
Reporting	Transparency and accountability	The IRM reports on its activities, findings, and outcomes to enhance the transparency and accountability of the GCF's project implementations

9.4 The LBA 's Grievance Redress Mechanisms

Creating an effective Grievance Redress Mechanism (GRM) within La Banque Agricole, especially for addressing issues related to Climate Smart Agriculture (CSA) financing and other sub-projects projects, involves several key steps. This process is designed to ensure

that any complaints or grievances from LBA programme stakeholders, including farmers, communities, and project participants, are addressed fairly, efficiently, and transparently.

Table 9.2: LBA's GRM Process

Step	Process	Description
Awareness and Access	Information dissemination	Inform stakeholders about the GRM, including how to access it, through various channels (e.g., bank branches, project sites, online platforms).
Grievance Submission	Filing a grievance	Provide multiple, accessible ways for stakeholders to submit grievances (e.g., in person, by phone, online, through community meetings).
Acknowledgement	Receipt of Grievance	Acknowledge receipt of the grievance promptly, providing the complainant with a reference number and information on the next steps.
Assessment	Initial review	Conduct an initial review to assess the grievance's eligibility based on predefined criteria (e.g., relevance, timeliness).
Investigation	Detailed Evaluation	If necessary, carry out a detailed investigation to understand the grievance's context and implications.
Resolution	Finding Solutions	Develop and propose solutions to address the grievance, involving relevant stakeholders in the decision-making process.
Implementation	Action	Implement the agreed-upon resolutions or corrective actions to address the grievance.
Feedback	Closing loop	Provide feedback to the complainant on the resolution process and outcome, ensuring transparency.
Monitoring and Learning	Continuous Improvement	Monitor the implementation of resolutions and use feedback and outcomes to improve the GRM and project implementations.
Reporting	Documentation and Transparency	Maintain records of all grievances and their resolutions, and report periodically on GRM activities to enhance accountability.

9.4.1 Channels for Receiving project-related grievances.

The key channels for receiving grievances for this programme:

- **Community Meetings and Public Consultations:** Regularly scheduled meetings where stakeholders can voice concerns directly to project staff in a structured yet open environment. These will be effective for addressing minor grievances or misunderstandings before they escalate.

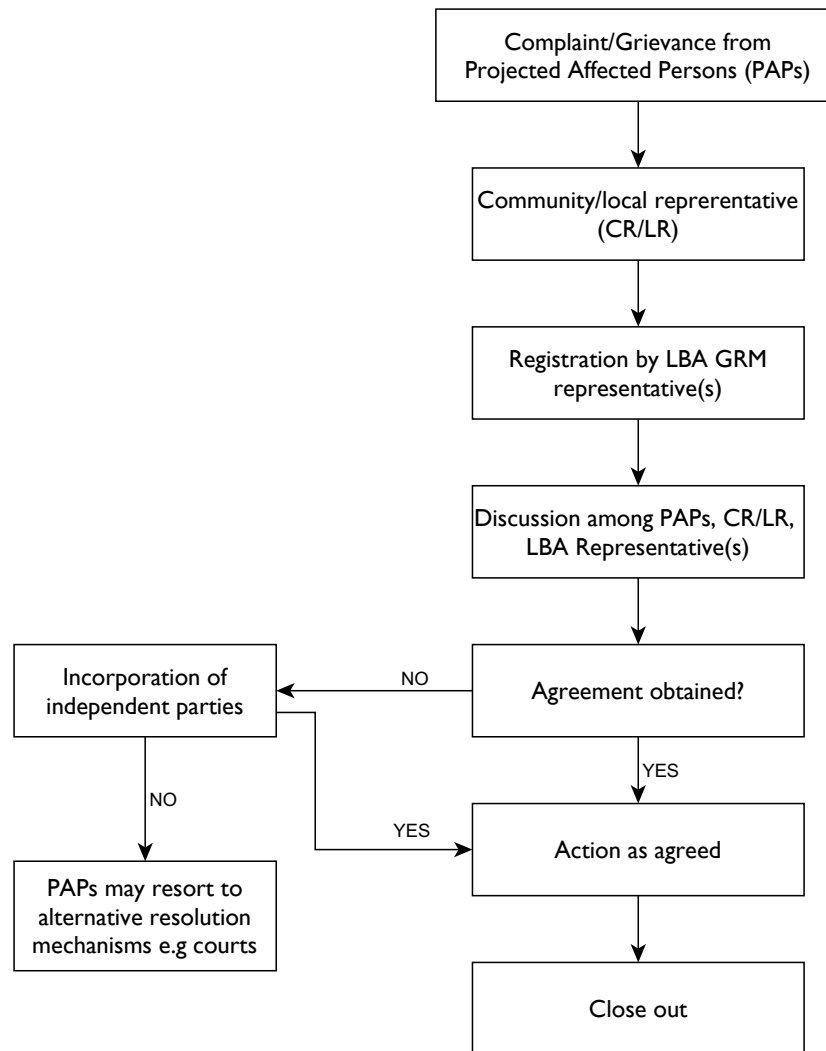


Figure 9.2: Basic Complaints and Grievance Mechanism of the Project

- **Dedicated Hotlines and Help Desks:** Setting up toll-free hotlines or help desks will allow for anonymous and direct reporting of grievances. These lines will be staffed by trained personnel who can document complaints and provide initial guidance on the grievance process.
- **Online Platforms and Email:** A project website or a dedicated email address for grievances will facilitate submissions from stakeholders who prefer digital communication. This channel is particularly useful for documenting grievances and initial responses.
- **Suggestion Boxes:** Placed in community centers, local government offices, and project sites, suggestion boxes will provide an anonymous way for individuals to

submit written grievances. These need to be regularly monitored and emptied by project staff.

- **Mobile phones:** The use of mobile phones, and in particular SMS texts, seem to be a particularly valuable medium for dealing with grievances. Phone-based mechanisms can also involve call centers or automated voice systems. The use of USSD will enable use of phones to report grievances and /or suggestions as most areas where the project will cover have USSD networks.
- **Social media:** While not a formal channel, being responsive to grievances that emerge on social media platforms are important for managing public perception and identifying issues that may not be captured through other channels.
- **Direct Engagement with Project Staff:** Ensuring that all project staff are approachable and trained to receive grievances informally helps in early identification and resolution of concerns. Staff should know how to document and escalate these grievances through the formal GRM.
- **Liaison with Local NGOs and CSOs:** Collaborating with local NGOs and CSOs is key to reaching wider communities, especially those that might be marginalized or less likely to use formal grievance channels. These organizations can act as intermediaries, submitting grievances on behalf of individuals or communities.

Confidentiality and non-retaliation:

- The GRM will have a policy of non-retaliation by protecting the identity of complainants, particularly in sensitive cases like gender-based violence, financial fraud, etc.
- The GRM will see to it that complainants face no negative consequences for submitting grievance.
- Maintain a detailed log of grievances, including their resolution status and outcomes.
- Regularly report grievance data to GCF and local stakeholders and publicly disclose anonymized grievance data to enhance accountability.
- Periodically review the efficiency and effectiveness and feedback from users, and update procedures to reflect changes in the programme and resident community needs.

The LBA GRM will:

- Ensure that all community members, especially vulnerable groups like women, youth, and the elderly, can access the GM.
- Set out clear, straightforward procedures for submitting and resolving grievances.
- Rapid response to grievances and establishment clear communication channels and timelines for investigation and resolution.
- Maintain open communication channels with all LBA potential affected persons and partners on grievance handling and resolution to build trust and ensure compliance with the GCF standards.
- Allow complainants to escalate issues to an independent body if they are unsatisfied with the project's resolution.

Suggested Grievance Handling Process:

Confirm receipt of grievances and provide a reference number for tracking. Anonymous complaints are will not be accepted. All efforts are made to resolve each complaint received by the Bank generally within stipulated time as per the escalation matrix.

Level	Office	Officer-in-charge	Resolution time (no. of working days)
First	Branch level at LBA and Baobab Microfinance	Branch Manager	8
Second	LBA Head Office - Dakar	Lead officer of Grievance Resolution	8
Third	PMU	Programme Manager	5

The 3-tier GRM mechanism is detailed as follows:

First-level – Branch Office Level

At the Branch Office, a complaint can be filed in person, post/ email to LBA and/or Baobab Microfinance and registered online. When a complaint is registered, a unique Complaint ID will be generated/issued. The following complete details to be furnished while registering the complaints enabling to address the concern(s) in a holistic and timely manner:

- Full name of Complainant
- Customer ID if an existing Customer
- Complainant's Contact details (address, telephone number and e-mail)

- Reference number of Transaction/Complaint ID, depending on purpose

In case of non-receipt of reply within 8 working days of registering the complaint or unsatisfactory reply, it can be escalated to Level 2, using Complaint ID.

Second-level – LBA Head Office Level

If registered complaint is not resolved satisfactorily within 8 working days from date of escalation at branch level (Level 1), the complaint is escalated to the Chief Grievance Officer/ Alternate Chief Grievance Officer for redressal.

Third level – Programme Management Unit

If registered complaint is not resolved satisfactorily within 8 working days from date of escalation at Head Office level (Level 2), the complaint is escalated to the PMU level. The PMU also tracks the following:

- Number of complaints/ queries received,
- Category of complainants (Type of stakeholder),
- Status of the complaints (rejected, closed, reopened, ongoing),
- Response time involved in the resolution of complaints,
- Feedback from the aggrieved/ complainants, if any

Furthermore, GCF Independent Redressal Mechanism (IRM) can be accessed on the following link (<https://irm.greenclimate.fund/>), wherein affected parties/person can directly file a complaint if they are not satisfied by the GRM process in place.

9.5 Information disclosure

The GCF requires Accredited Entities (AEs) to publicly disclose project/programme-level information, including environmental and social documentation. The prior disclosure of Key Project Documents listed below will be done before project implementation

The following documents are subject to disclosure in line with GCF's Information Disclosure Policy²⁵:

- For Category B subprojects, the fit-for-purpose ESIA and an Environmental and Social Management Plan (ESMP) will be disclosed at least 30 days before the AE approval decision. This will be through LBA's website, all LBA Branches, and at the sub-project sites(s)

²⁵ <https://www.greenclimate.fund/sites/default/files/document/information-disclosure-policy.pdf>

- For Category C sub-projects, no advanced disclosure will be required.

Resettlement Action Plans (RAP)-There is no resettlement envisioned for this programme (See section 2.12).

Indigenous Peoples Plans- There are no identified indigenous people in the Programme but if a group was to be identified as Indigenous Peoples, an Indigenous Peoples Plan must be disclosed, ensuring that their rights and livelihoods are protected including consultation records, compensation measures, and respect for Free, Prior, and Informed Consent (FPIC).

LBA mandates that all executing entities, including the AE, identify stakeholders as early as possible in planning any programme. The results of the preliminary environmental and social screening, and draft environmental and social assessment, shall be made available for public consultations (both online and through physical disclosures) for at least 30 days via LBA's website. Further, the scope and frequency of stakeholder engagement depends on the nature and scale of the programme and its potential environmental and social risks. The stakeholder engagement plan shall identify relevant stakeholders, plan an engagement with the stakeholders, disclose project related information in a timely manner, and address and respond to the grievances.

10 Conclusion and recommendations

10.1 Conclusion

This ESMF report has identified potential positive and moderate environmental and social impacts for the proposed programme. The programme is categorized as category B/I-2 as its intended activities will result in potentially limited adverse environmental and/or social risks and impacts that individually or cumulatively, are few, generally site-specific, largely reversible, and readily addressed through mitigation measures.

The ESMF provides a general framework for implementation of the identified mitigation measures of the sub-components, how the implementation of each mitigation measure will be monitored, and what actions will be required for effective implementation. The ESMF will serve as a template for the ESIAs that will be prepared for subprojects that will follow and be a resource for preparation of the actual ESMPs. The detailed site-specific ESIAs will be based on an evaluation of the sub project ESS risks. It is important that these mitigation measures are appropriately applied to the sub projects and this management plan provides a strategic framework for their implementation.

10.2 Recommendations

- The specific measures set out in the ESMP will be fully adhered to by all the sub projects implementers. The ESMP implementation will avoid significant impacts on the bio-physical, socioeconomic, or health aspects during activities implementation. Where impacts cannot be avoided, they will be mitigated against using appropriate measures.
- A comprehensive training needs assessment and development of a training strategy plan be carried out as an initial implementation activity which will, *inter alia*, determine whether the intense training program proposed will suffice or is required.
- Ensure obligatory that environmental and social assessment procedures are followed in relation to environmental and social screening, review, and approval prior to implementation of sub-projects to be financed under the programme.

References

Abebe et.al 2021, Rural households livelihood vulnerability to climate variability and extremes

AfDB 2021 Preventing, mitigating, and responding to sexual exploitation, abuse, and harassment (SEAH) within AfDB operations.

GCF Gender Equality and Social Inclusion Policy and Action Plan 2018–2020

GCF Indigenous People's policy <https://www.greenclimate.fund/document/indigenous-peoples-policy>

GCF Revised Policy on the Prevention and Protection from Sexual Exploitation, Sexual Abuse, and Sexual Harassment

Green Climate Financing Facility for Local Financial Institutions (LFIs) in Latin America. 2020

Inclusive Green Financing INITIATIVE (IGREENFIN): Greening Agricultural Banks & the Financial Sector to Foster Climate Resilient, Low Emission Smallholder Agriculture in the Great Green Wall (GGW) countries Phase 1

Integrating Climate Change (CC), Gender, and Social Inclusion (GSI) into Planning and Budgeting in Thailand (2008)

Legese, S.A.; Olutayo, O.A.; Sulaiman, H.; Rao, P. Assessing Climate Change Impacts in the Lake Tana Sub-Basin, Ethiopia Using Livelihood Vulnerability Approach. J. Earth Sci. Clim. Chang. 2016

Morse, S.; McNamara, N. Sustainable Livelihoods Approach: A Critique of Theory and Practice; Springer Science & Business Media: Amsterdam, The Netherlands, 2013.

Seeking, free, prior, and informed consent in IFAD investment projects (2021).

Stakeholder Engagement Strategy for Green Climate Fund (GCF)-related Activities in Sri Lanka, 2020

The Africa Integrated Climate Risk Management Programme: Building the resilience of smallholder farmers to climate change impacts in 7 Sahelian Countries of the Great Green Wall (GGW)

World Bank <https://thedocs.worldbank.org/en/doc//original/OP-4-10-Annex-A-Social-Assessment>

Annex 1: Indicative Target Beneficiary List

The Green Climate Finance Facility for Climate-Smart Agriculture (CSA) in Senegal would have various target beneficiaries and affected stakeholders, including competing resource users. Here's an overview of the key groups:

Target Beneficiaries

1. Farmers and Agricultural Communities
Smallholder Farmers- Are the primary beneficiaries and most vulnerable to climate change impacts such as drought, floods, and unpredictable rainfall. CSA practices are geared to help improve their livelihoods, productivity, resilience, and income.
Women and Youth Farmers- They play critical roles in agriculture but often lack access to resources like finance, technology, and land. They will be key target beneficiaries due to their high levels of vulnerability and potential for empowerment through CSA interventions.
Organized farmer groups or cooperatives can benefit from increased capacity building, access to CSA tools, and financing options.
2. Agri-Businesses and Value Chain Actors
Small and medium enterprises involved in the agriculture value chain, such as suppliers of seeds, tools, or CSA technologies, will benefit from expanded market opportunities.
Agro-processors- improved quality and quantity of produce through CSA practices and consistent supply chain and product standards.
3. Local Communities and Pastoralists
Rural Communities- smallholder farmers and rural communities will benefit from ecosystem services, improved food security, and better water management.
Pastoralist groups-pastoralist groups, who depend on livestock grazing or mixed agricultural practices will benefit from interventions that increase resilience.
4. Government and Policy Stakeholders
These entities will benefit from enhanced food security, rural development, and economic stability. Policy makers will integrate CSA into Senegalese agricultural policy.
Environmental and Agricultural Ministries- direct participation in managing and participating in the LBA programme and ensuring alignment with Senegal's national climate adaptation plans.
5. Financial Institutions
Baobab Microfinance will be a co-executing entity under Component 1.
Other Banks and Microfinance Institutions – potential beneficiaries under Component 3

6. Research and Development Institutions
Research Organizations and Universities will benefit from the demand for innovative agricultural practices, climate-resilient seeds, and water-efficient technologies through CSA approaches. Collaborative projects with farmers to pilot new techniques will also be achieved through CSA.
7. Environmental NGOs and Development Organizations
NGOs focused on climate adaptation, agriculture, and rural development will benefit by having access to learning activities and creation of complementarities as well as scaling up CSA practices through additional similar projects.
9. International Development Agencies:
These groups are often involved in financing, capacity building, and technical support for CSA and would likely want to be involved at some stage in the implementation of the LBA Programme e.g. IIED evaluating project impact etc.

Competing Resource Users

Resource users	Competing Interest
Livestock Herders -Crop Farmers	Possible competition between pastoralists and crop farmers in areas where land and water resources are shared.
Water Users: Smallholder irrigation practices vs Other Water dependent sectors	CSA might increase demand for efficient irrigation technologies, potentially affecting water availability for other sectors like drinking water, industry, and/or natural ecosystems.
Land Users (Agriculture vs Forestry)	The LBA/GCF-CSA Programme activities could potentially compete with the need to preserve forested and natural areas, especially under reforestation and conservation efforts

Annex 2: Indicative eligibility screening form for potential beneficiaries

a) Screening form for CSA applicants

Project name	
Name of the applicant (group)	
Beneficiary Information	
Name	
Age	
Gender	
Location	
Location (Village/Community)	
Land Size (Owned/Leased)	
Main Crops/Livestock Raised	
Financial Viability	
Current annual income from agriculture	
Access to formal financial services (Yes/No)	
Existing loan history (Yes/No):	
If yes, the current outstanding loan amount and repayment status	
Willingness to participate in financial literacy training (Yes/No)	
Environmental Impacts	
Question	Yes/No
1 Describe your current farming practices e.g., tillage, irrigation, use of inputs)	
2 Do you use any fertilizers, pesticides, or herbicides? If yes, what types and how are they applied?	
3 Are you aware of any soil erosion or water quality issues on your land?	
4 Will the project develop any wetlands?	
5 Will the project activities include the construction/rehabilitation of rural roads or other rural infrastructure in protected / sensitive areas?	

6	Will the project include the construction of roads or other infrastructure that entails the total area being cleared of 50 ha or above?	
7	Does the project involve significant extraction, diversion, or containment of surface water?	
8	Will the project involve significant extraction of groundwater above the recharge capacity?	
9	Does the project include drainage or correction of natural water bodies (e.g. river draining)?	
10	Will the project significantly increase the use of agrochemicals?	
11	Will the project result in economic displacement (loss of assets or access to resources) or physical resettlement?	
12	Will the project potentially cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. habitat loss, erosion, / other form of land degradation, fragmentation, hydrological changes)?	
13	Does the proposed project target area include ecologically sensitive areas, areas of global significance for biodiversity conservation, biodiversity-rich areas or essential habitats for endangered species?	
14	Will the activities involve transboundary impacts on air, water or other natural resources?	
15	Is the project likely to be located on modified, natural and/or critical habitats or in protected or internationally recognized ecological areas?	
16	Is there a likelihood of the project posing the risk of introducing invasive alien species?	
17	Does the project involve the introduction of Genetically Modified Organisms (GMOs) or Living Modified Organisms (LMOs) that may hurt threatened biodiversity?	
18	Are the activities likely to have impacts on indigenous peoples, use of / access to / restrictions on lands and natural resources subject to traditional ownership or tenure, including but not limited to collective ownership or under the customary use or occupation of indigenous peoples?	
19	Are the activities likely to lead to physical displacement of indigenous peoples?	
20	Are the activities likely to lead to restrict the access of indigenous peoples to lands and resources resulting in loss of livelihood?	
21	Will the project or programme be located on areas that are considered to have archaeological (prehistoric), paleontological, historical, cultural, artistic and religious values or contain features considered as critical cultural heritage?	
22	Could the project expose communities to health risks such as: pollution and the contamination of land, resources or food; biological hazards, including transboundary animal diseases; incidents of soil-borne, waterborne, vector-borne diseases, zoonotic diseases, food-borne diseases; the availability of drinking water; injuries; and detrimental effects on mental health and well-being?	
23	Could the project lead to conversion, or land use change, or fragmentation, or degradation of natural habitats, modified habitats or critical natural habitats (water and/or land)?	If Yes, ESIA will be required
24	Could the project implement irrigation activities? AND/OR: Potentially lead to wastewater or runoff of contaminated water? AND/OR: restrict or alter riverine systems (e.g. dams, reservoirs, river basin development, significant water diversion or withdrawals)?	If Yes, ESIA will be required
25	Could the project implement activities on, or potentially lead to, degraded, depleted or polluted soil?	If Yes, ESIA will be required
26	Could the project directly or indirectly result in procurement, supply and/or use of pesticides on crops, livestock, aquaculture or forestry?	If Yes, ESIA will be required

27	Could the project include activities related to management or disposal of waste pesticides, obsolete pesticides or pesticide contaminated waste materials?	If Yes, ESIA will be required
28	Could the project lead to the use and/or management of fertilizers?	If Yes, ESIA will be required
29	Could the project activities lead to the one-time or continuing increase in the release of pollutants with potentially negative impacts on air quality, the environment and/or local communities?	If Yes, ESIA will be required
30	Could the project lead to: Significant generation and handling of wastes (e.g. plastic, wastewater, pesticide-related waste, veterinary waste or animal residue); AND/OR: The use of hazardous substances and materials that may have negative environmental impacts?	If Yes, ESIA will be required
31	Could the project activities negatively affect communities not targeted by the project that rely on the same natural resources? E.g. a community that depends on the same river downstream.	If Yes, ESIA will be required

Climate change

Question	Yes /No
32 Have you experienced negative impacts from climate change on your farm (e.g., droughts, floods, heat stress)?	If Yes, ESMP will be required
33 If yes, how have these changes affected your agricultural activities and yields?	
34 Have you experienced any negative consequences from climate change, such as crop losses or damage to infrastructure? IF YES, what are you doing about it?	If Yes, ESMP will be required
35 What would be the biggest barriers to adopting new climate-smart practices (e.g., cost, knowledge, access to resources)?	If Yes, ESMP will be required
36 Are you aware of your community's vulnerabilities to future climate risks?	If Yes, ESMP will be required
37 Are you interested in adopting CSA practices to improve your resilience and livelihood?	
38 If Yes, which CSA practices do you currently practice and/or intend to adopt for the proposed project?	
39 Has significant depletion due to climate change or overutilization has occurred?	If Yes, ESMP will be required
40 Could beneficiaries develop dependencies on climate-adaptation resources or services promoted by the project that may be hard to maintain after project completion (due to factors such as cost, expertise, etc.)?	If Yes, ESMP will be required

Social Issues

Question	YES/NO
41 Are the activities likely to involve the acquisition of lands, land rights or land-use rights through expropriation or other compulsory procedures in accordance with the legal system of the Senegal?	
42 Are the activities likely to alter existing land use and restrict access to natural resources resulting in loss of livelihoods and other economic activities?	
43 What is the composition of the workforce (family, hired labour):	
44 Will the project require a migrant task force during execution?	If Yes, ESMP will be required

45	Will the activities result in the use of child and/or forced labour?	
46	Could the project use, or operate in, a value chain where there have been reports of forced labour? Or will it work in areas with increased risk of forced labour e.g. crisis, fragile and conflict-affected area or a host community for internal migration or refugees?	If Yes, ESMP will be required
47	Could the project: (a) operate in a sector, area or value chain where producers and other agricultural workers are typically exposed to significant occupational and safety risks, and/or (b) promote or use technologies or practices that pose occupational safety and health (OSH) risks to farmers, other rural workers or rural populations in general?	If Yes, ESMP will be required
48	Will the project require seasonal workers to plant or/and harvest produce?	If Yes, ESMP will be required
49	Will the sub-project activities pose occupational health and safety risks to workers, including supply chain workers?	If Yes, ESMP will be required
50	Are sub-project activities aligned to local labor requirements, are there gaps vis a vis ILO best practice?	If Gaps are present, ESMP will be required
51	Are there any SEAH risks in labor and working conditions given local context ²⁶ ?	If Yes, ESMP will be required
52	Do you feel all community members have equal access to information and opportunities within the project?	If Yes, ESMP will be required
53	Do you understand the grievance redress mechanism available if you have concerns about the project's social impacts?	If Yes, ESMP will be required
54	Will the activities increase the risk of sexual exploitation, abuse and harassment?	
55	Will there be a need for an emergency preparedness and response plan that also outlines how the affected communities will be assisted in emergencies?	If Yes, include in ESMP
56	Will there be potential risks posed by the security arrangements and potential conflicts at the project site between the workers and the affected community?	If Yes, include site-specific conflict risk assessment and the identification and implementation of commensurate actions/measures in the ESIA and/or ESMP
57	Are there any health and safety risks for local communities or consumers associated with the company's operations or products?	If Yes, ESMP will be required

Evaluation of the Screening Form

Responses	Evaluation/Result
"Yes" to any of the questions 4 – 22, 41, 42, 45 & 54	The project would be Category A, not eligible for funding
"No" to questions 4 – 22, 41, 42, 45 & 54, but "yes" to any of the other questions	The project is Category B, eligible for funding, but ESIA and/or ESMP will be required
"No" to all questions	The project is Category C, and eligible for funding without further studies.

²⁶ E&S Manager in collaboration with Gender Specialist will screen level of SEAH risk (high, medium, low) applicable to the funded activity. Only activities with medium to low SEAH risks will be funded.

b) Screening forms for Biogas Component

Screening questions	Yes	No	Additional notes if "Yes"
1. Project siting: Is the project area adjacent to or within any of the following environmentally sensitive areas: physical cultural heritage site, special habitats for biodiversity, wetlands; mangrove, estuarine, offshore (marine)?			
2. Potential Environmental and Social Impacts Will the project cause:			
a. Large-scale land disturbance and land use impacts especially due to diversion of productive lands?			
b. Involuntary resettlement of people? (Physical displacement and/or economic displacement)			
c. Disproportionate impacts on the poor, women and children, Indigenous Peoples, or other vulnerable groups?			
d. Noise, vibration, and dust from construction activities?			
e. An increase in local traffic during construction?			
f. Aesthetic degradation and property value loss due to the establishment of plant and ancillary facilities?			
g. Changes in flow regimes of the water intake from surface water or underground wells due to abstraction for cooling purposes?			
h. Pollution of water bodies and aquatic ecosystems from wastewater treatment plants, cooling towers, and wash water during operation?			
i. A threat to bird or bat life from colliding with the project facilities and/or being burned by concentrated solar rays?			
j. Industrial liquid (dielectric fluids, cleaning agents, and solvents) and solid wastes (lubricating oils, compressor oils, and hydraulic fluids) generated during construction and operations are likely to pollute land and water resources.			
k. Soil/water contamination due to use of hazardous materials during installation, operation, and decommissioning?			
l. Noise disturbance during operation due to the proximity of settlements or other features?			
m. Visual impacts due to reflection from solar collector arrays resulting in glint or glare?			
n. Large population influx during project construction and operation that causes an increased burden on social infrastructure and services (such as water supply and sanitation systems)?			
o. Social conflicts between local laborers and those from outside the area?			
p. Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during construction, installation, operation, and decommissioning?			

q. Risks to community health and safety due to the transport, storage, and use and/or disposal of materials and wastes such as explosives, fuel and other chemicals during construction, and operation?			
r. Community safety risks due to both accidental and natural causes, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation, and decommissioning?			

Responses	Evaluation/Result
"Yes" to any of the questions 1, 2a-2c	The project would be Category A, not eligible for funding
"No" to questions 1,2a-2c, but "yes" to any of the questions 2d – 2r	The project is Category B, eligible for funding, but ESIA and/or ESMP will be required
"No" to all questions	The project is Category C, and eligible for funding without further studies.

Annex 3: Indicative eligibility screening for FOs, Farmer Groups and rural cooperatives

A. Eligibility Screening

a) General

Organization name: _____

Name of organization head: _____

Contact details of organization head (email, phone number): _____

Name of contact person: _____

Contact details of main contact person (email, phone number): _____

Date of organization registration (please attach registration certificate): _____

Location (village, commune, region): _____

b) Organizational details

Type/nature of establishment.

Farmer organization

Farmer Group

Micro Small & Medium Enterprises (MSMEs)

Rural Cooperative

Microfinance Institutions (MFIs)

Renewable Energy Technology (RETs)

Total number of employees

Number of adult men (age 35 and older): _____

Number of adult Women (age 35 and older): _____

Number of young women (age 18-35): _____

Number of young men (age 18-35): _____

Total number of members

Number of adult men (age 35 and older): _____

Number of adult Women (age 35 and older): _____

Number of young women (age 18-35): _____

Number of young men (age 18-35): _____

Company shareholding: _____

Percent owned by women: _____

Percent owned by men: _____

c) Organizational activities

What is the main activity of the organization?

Agriculture (livestock and or crop farming)

Agricultural processing

Renewable energy technologies

Financial services

For how many years/months have you engaged in this activity? _____

d) Financials

Does your organization use an accounting and financial reporting system?

If yes, which one _____

If no, what is your personnel and financial capacity to shift an accounting and reporting system? _____

Have you taken any loan/debt to engage in the main activity above?

If yes, is the amount fully repaid? _____

If no, why? _____

What is your credit rating with your selected bank? _____

What form of guarantees do you have access to? _____

What amount of funding are you requesting (XOF)? _____

e) Environmental and social compliance

Does your organization have a gender action plan? _____

If no, how does your organization incorporate gender issues into its operations? _____

Does your organization have an environmental and social safeguards procedure/guide? _____

If no, how does your organization incorporate environmental and social safeguards into its operations? _____

B. Evaluation Criteria of Eligibility Screening Form

Aspect	Criteria/Evidence
Organization Size	Number of employees (1-100) Registration certificate
Target Group	Smallholder farmers, FOs, MSMEs, traders and processors of agricultural products, biogas companies, traders, and importers. Registration Certificate
Property/Land Ownership (Farmer organizations and Cooperatives)	• Agricultural land holding of between two- and ten-hectares. • Title deed/Certificate of ownership. • Lease certificate
Loan management/Repayment capacity	• Proof of guarantors/guarantees Bank Statement • Contribution statement • Smart credit tool (to be developed during project implementation)
Credit rating	• Bank statement. • Smart credit tool (to be developed during project implementation)
Established financial/Accounting System	• Organizational financial statement operational for at least two years • Financial records and books
Environmental and Social safeguards	• Assessment of organizational activities including their impacts to environmental and social parameters. • Eligibility screening form (Annex 2) • Business plan • Environmental and social safeguard plan • Gender action plan
Commitment to Gender and Youth Issues	• Percent of youth and or women in the organization membership and leadership • Activities targeted for youth and or women in the organization
Vulnerability to climate change	• Business plan (includes adaptation measures or proposals) • Evidence of climate change effects on proposed activities (as per eligibility screening)
Adaptation focused business plans	• Ecosystem based adaptation: Business plans that promote CSA practices (crop rotation, intercropping, cover cropping, agroforestry, slash and mulching, organic composting, contour bunding, biopesticides, organic farming). • Seedbanks: Business plans that promote distribution and or sale of climate resilient seeds. • Sustainable livestock: Business plans that promote: (i) grazing corridors for livestock; (ii) vaccination against diseases and prevention. • Forestry: Business plans that promote agroforestry systems • Digital solutions: Business plans that promote digital solutions on climate change and agriculture. • Climate resilient infrastructure and technologies: Business plans that

	promote seed storage, tools, rehabilitation of degraded lands, water conservation, efficiency measures in water harvesting and irrigation, flood management and drainage, agricultural insurance, and early warning systems.
Women Led organization	• 51 percent of organizational assets and profits owned by women. • At least 30 percent of the board of directors' members or individuals in senior management positions are women. • Minimum firm size of about three employees of which 60 percent are women. • Public registry documentation
Youth Led Organization	• 51 percent of its assets, holding or shares owned by youth, defined as individuals who are between 18 and 35 years old. • At least 30 percent of board of directors, members or individuals in senior management positions are youth. • Minimum firm size of about three employees, of which 60 percent are youth. • Public registry documentation

C. Screening Form to evaluate climate change vulnerability of applicants.

Question	Yes	No	Additional information
1. Is the project area subject to extreme climatic events such as flooding, drought, tropical storms, or heat waves?			
2. Do climate scenarios for the project area foresee changes in temperature, rainfall or extreme weather that will adversely affect the project impact sustainability or cost over its lifetime?			
3. Will the project make investments in low-lying coastal areas/ zones exposed to river flooding and coastal storm surge?			
4. Will the project promote agricultural activity in marginal and/or highly degraded areas that have increased sensitivity to climatic events (such as on hillsides, deforested slopes, or floodplains)?			
5. Is the project located in areas where rural development projects have experienced significant weather- related losses and damages in the past?			
6. Will the project develop/ install infrastructure in areas with a track record of extreme weather events?			
7. Is the project target group entirely dependent on natural resources (such as seasonal crops, rain-fed agricultural plots, migratory fish stocks) that have been affected by in the last decade by climate trends or specific climatic events?			
8. Will climate variability likely affect agricultural productivity (crops/ livestock/fisheries)			
9. Is there evidence of climate change-related incidence of pests and diseases for the project target groups?			
10. Is the project likely to result in a significant increase in agrochemicals?			
11. Would weather-related risks or climatic extremes likely adversely impact upon key stages of identified value chains in the project (from production to markets)?			
12. Is the project investing in climate-sensitive livelihoods that are diversified?			

13. Is the project investing in infrastructure that is exposed to infrequent extreme weather events?			
14. Is the project investing in institutional development and capacity building for rural institutions (such as farmer groups, cooperatives) in climatically heterogeneous areas?			
15. Does the project have the potential to become more resilient through the adoption green technologies at a reasonable cost?			
16. Does the project intervention have opportunities to strengthen indigenous climate risk management capabilities?			
17. Does the project have opportunities to integrate climate resilience aspects through policy dialogue to improve agricultural sector strategies/policies?			
18. Does the project have potential to integrate climate resilience measures without extensive additional costs (e.g., improved crop variety, capacity building; or including climate risk issues in policy processes)			
19. Based on the information available would the project benefit from a more thorough climate risk and vulnerability analysis to identify additional complementary investment actions to manage Climate risks?			

D. Evaluation criteria of Climate Screening Form

Responses	Evaluation/Result
"Yes" to any of the questions	Sub project demonstrates evidence of vulnerability to climate change, hence eligible for funding.
"No" to all questions	Sub project does not demonstrate evidence of vulnerability to climate change, hence not eligible for funding.

Annex 4: Programme Exclusion list

To ensure that the Programme maintains the environmental and social risk categorization B & C, the following activities cannot be financed:

1. Production or trade in any product or activity deemed illegal under Senegal's laws and regulations or ratified international conventions and agreements.
2. Any equipment, sector or service subject to economic sanctions imposed by the United Nations, the European Union or France, with no absolute or relative amount restriction.
3. Category A Projects with potential significant adverse environmental and/or social risks and impacts that, individually or cumulatively, are diverse, irreversible, or unprecedented. And I1 i.e. when an intermediary's existing or proposed portfolio includes or is expected to include financial exposure to activities with potential significant adverse environmental and social.
4. Production or activities involving harmful or exploitative forms of forced labour²⁷, human trafficking²⁸, child labour²⁹, or practices that are discriminatory or prevent employees from freely exercising their right to association and collective bargaining.
5. Illicit activity on organs, tissues and products of the human body or genetic engineering activities prohibited by the national bioethical standards of France³⁰, the country or countries of destination, or by the European or international standards³¹ applicable in this area
6. Trade, production, breeding or keeping of animals, plants or any natural products that do not comply with the provisions of CITES³²;
7. Production, use, storage, transportation or trade in hazardous materials (such as asbestos fibres or polychlorinated biphenyls) and any products (including chemicals, pharmaceuticals, pesticides/herbicides, ozone-depleting products³³ or any other hazardous products) that are

²⁷ "Forced labour" is any work or service, performed involuntarily, obtained from an individual by the threat of force or punishment as defined by the conventions of the International Labour Office (ILO).

²⁸ Council of Europe Convention on Action against Trafficking in Human Beings (2005); Directive 2011/36/EU.

²⁹ Employees must be at least 14 years of age as defined by the ILO's fundamental human rights conventions (Minimum Age Convention C138, Art. 2) unless local legislation specifies compulsory school attendance or a minimum age for work. In such circumstances, the higher age should be used.

³⁰ See AR. 16 to 16-14 of the Civil Code (resulting mainly from Law No. 94-653 of 29 July 1994 on respect for the human body and Law No. 2004-800 of 6 August 2004 on bioethics).

³¹ Council of Europe Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine (Oviedo, 04/04/1997); Council of Europe Convention against Trafficking in Human Organs (Santiago de Compostela, 25/03/2015).

³² CITES : Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, 1973).

³³ Any chemical component that reacts with, and destroys, the stratospheric layer of ozone leading to the formation of "holes" in that layer. The Montreal Protocol lists ODS (Ozone Depleting Substances), their reduction targets and their phase-out deadlines.

prohibited from production or use or subject to a progressive ban in the regulations of the destination country or internationally.

8. Production or trade in pesticides/herbicides subject to international phase outs or bans as agreed by Senegal based on Stockholm Convention on Persistent Organic Pollutants.
9. Transboundary trade in wastes, except those that comply with the Basel Convention and its regulations³⁴.
10. Diamond mining and diamond marketing in non-Kimberley States
11. Funding for the following activities, whose actual or potential negative impacts on human rights, inequality, climate or biodiversity, are considered incompatible with this objective is also excluded:
 - a. Production or trade: related to pornography or prostitution;
 - b. Production or trade³⁵ of arms and/or ammunition; tobacco; alcohol for human consumption (excluding beer and wine); gambling houses, casinos or any equivalent business³⁶ ;
12. Production and distribution or participation in racist, anti-democratic or discriminatory media of a part of the population
13. Production or activities that impinge on the lands owned, or claimed under adjudication, by indigenous peoples, without full documented consent of such peoples
14. Illicit trade or activity likely to facilitate the illicit trafficking of cultural property³⁷
15. Operations resulting in an irreversible modification or significant displacement of a critical cultural heritage element³⁸.
16. Conversion of wetlands into agricultural or pastureland
17. Conversion of significant areas of natural forests or other wild lands into agricultural or pastureland

³⁴ The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal is available at : www.basel.int

³⁵ In addition, clients or counterparties whose activities represent more than 10% of turnover or, if the client is a financial intermediary, more than 10% of the assets under management in its portfolio are also excluded.

³⁶ Any direct funding of these projects or activities that include them (e.g., a hotel that includes a casino). This does not apply to urban development plans that could later integrate such projects.

³⁷ Trade in cultural property is regulated by the Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property (1970).

³⁸ "Critical cultural heritage" shall be considered to be any element of heritage that is internationally or nationally recognized as being of historical, social and/or cultural interest

18. Biodiversity: Any funding in (a) Zero Extinction Alliance (AZE) sites^{39,40}, (b) natural and mixed sites inscribed on the UNESCO World Heritage List and legally protected areas (IUCN categories⁴¹) and, any operation resulting in a negative⁴² and irreversible⁴³ residual impact on a critical habitat⁴⁴; Any agricultural project with a large footprint (>100 ha) that does not implement a zero-deforestation methodology⁴⁵.
19. Activities which are suitable to lead to a loss of natural habitats, loss of biodiversity or decreased provision of ecosystem services in sensitive areas, which include:
 - a. Protected areas and their buffer zones
 - b. Ecologically sensitive areas
 - c. Mangrove swamps
 - d. Small island ecosystems
 - e. Areas of global or national significance for biodiversity conservation and/or biodiversity-rich areas
 - f. Habitats on which endangered species rely.
20. Activities in sites with high risk of destruction because of geophysical hazards (landslides, earthquakes, volcanic eruptions etc.)
21. Natural resource management practices considered unsustainable or exceeding the respective plot's carrying capacity. If sustainable yields or carrying capacity are unknown for certain plots, they must be explored by adequate studies before making the final decision on an investment.
22. Projects for the construction, extension or renovation of fossil fuel power plants
23. Infrastructures associated with a unit for the production, storage or processing of fossil energy resources (mines, processing units, refinery, storage, etc.) or the production of fossil fuel-

³⁹ Unless the funding is for the conservation or restoration of these areas.

⁴⁰ Unless the area of influence of the financed activities and their associated facilities does not encroach on areas that actually meet the AZE designation criteria – <https://zeroextinction.org/site-identification/aze-site-criteria/>

⁴¹ Unless the funding is for the conservation or restoration of these areas or is in accordance with the management and development arrangements for these areas, as formalised in plans to international standards relating to the activities covered by the funding – category I-VI in [World Database on Protected Areas | IUCN](#)

⁴² Residual impact: a measurable impact of the project on a biodiversity value, after the application of avoidance and mitigation measures, but before the application of restoration and compensation measures.

⁴³ Irreversible impact: Conversion or permanent degradation of biodiversity or ecological functions or features for which critical habitat has been identified.

⁴⁴ Critical habitat: as defined by the World Bank's Environmental and Social Standard 6 – 2018 or IFC-GN PS6 2019.

⁴⁵ Methodology including (i) a reference framework, equivalent to the HCS approach, allowing the qualification of forests, (ii) a guarantee that no high-carbon forest will be converted as part of the project and (iii) monitoring of forest cover (satellite or field monitoring).

based electricity referred to in the above list⁴⁶;

24. Exploration, production or processing projects, or dedicated exclusively to the transport of coal, gas and oil (conventional and unconventional);
25. Non-conventional prospection, exploration and extraction of oil from bituminous shale, tar sands or oil sands.
26. Activities related to thermal coal mining; coal-fired electricity generation; peat extraction; and peat power generation.
27. Production or trade of radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment for which MIGA considers the radioactive source to be insignificant and/or sufficiently protected.
28. Large-scale production forestry and commercial logging from tropical forests.
29. Production or trade of timber or other forest products not from sustainably managed forests.
30. Large-scale aquaculture projects, including fishing activity using a driftnet more than 2.5km long
31. Activities which significantly increase the use of agrochemicals which may lead to public health and safety concerns.
32. Extraction of water from surface or groundwater bodies which are susceptible to depletion from overextraction or the effects of climate change.
33. Activities which introduce, research, purchase, promote or multiply potentially invasive or genetically modified seeds or species which might impact the genetic composition of native species or have an adverse effect on local biodiversity.
34. Projects whose purpose or approach is contrary to human rights, and in the case of financing to the private sector, projects that are in line with the United Nations Guiding Principles on Business and Human Rights⁴⁷; Projects for which a forced eviction within the meaning of the United Nations⁴⁸ has taken place at the impact site of the proposed project, for which a causal

⁴⁶ An infrastructure is said to be associated with a fossil fuel production unit if the following two conditions are met: (i) the infrastructure would not have been built in the absence of the fossil fuel unit, and (ii) the fossil fuel unit would not be economically viable without the infrastructure.

⁴⁷ https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_fr.pdf

⁴⁸ Resolution of the United Nations Sub-Commission on Human Rights No. 1993/41: "Forced evictions". "The term 'forced eviction' means the permanent or temporary eviction, against their will and without adequate legal or other protection, of individuals, families or communities from their homes or from the lands they occupy" (Committee on Economic, Social and Cultural Rights, [General Comment No. 7](#)).

link can be established with the object of that project and for which it is materially impossible to provide compensation⁴⁹.

35. Activities which may impact health of sensitive ecosystems or vulnerable communities through their pollution, or which might be impacted by the pollution of an existing activity.
36. Activities which include any of the following:
 - a. Construction of dams or reservoirs with a wall height of more than 15 meters, with a crest of more than 500 meters length, and/or with a reservoir exceeding 3 million m³
 - b. Construction of dams or reservoirs with an incoming flood of more than 2,000 m³/s.
 - c. Construction, rehabilitation, or upgrade of rural roads that necessitate clearing more than 10 km of space.
 - d. Construction, rehabilitation, or upgrade of rural roads that necessitate disposition of more than 10% of the land from local farmers.
 - e. drainage or correction of natural water bodies
 - f. extraction or diversion of water from natural water bodies which leaves less than 20% of natural flow plus the water requirements of downstream users.
37. Activities which lead to:
 - a. Economic and/or Physical displacement, whether temporary or permanent
 - b. Negative impacts to at least 10% of any community's, households, or individual farmer's assets
 - c. Conversion and/or loss of physical cultural resources
 - d. Significant adverse social impacts to local communities, including disadvantaged, vulnerable or indigenous groups.

This Exclusion List will be made available to all Programme partners and beneficiaries (MSMEs, farmer organizations, rural cooperatives, MSMEs, Baobab Microfinance and government actors) and included in the training materials, to ensure that no supported activities feature on the Exclusion List.

⁴⁹ Because of a refusal by the project owner or its inability to identify the populations that are victims of forced evictions. Projects for which a remedy for the infringement of rights could be made will not be excluded.

Annex 5: Indicative outline for ESIA for Category B/I2 subprojects

An ESIA will be applicable for projects identified through ESMS as Category B. The implementation team will be guided by Senegal's ESIA procedure incorporating requirements of IFC's PS and Green Climate Fund's revised ESS policies. The ESIA will also be established in accordance with the guidelines of LBA's Environmental and Social Safeguard Policy which is aligned with the requirements of the World Bank and the Green Climate Fund safeguard policies.

The ESIA's scope and extent will depend on the nature, complexity, and significance of the identified issues under the subprojects to be conducted under the Programme. Below is a tentative outline for the ESIA report.

1. **Executive Summary:** Concisely discusses significant findings and recommended actions.
2. **Project Description:** Provides a brief overview of the proposed project's geographical, environmental, social, and spatial context, project objectives and implementation arrangements.
3. **Legal and Institutional framework:** examines the project's institutional and legal structure, which serves as the basis for the environmental and social evaluation. It describes the context within which the sub-project will take place including regulations on the environmental, social impact assessments to which the Programme will adhere, including international treaties, national laws and regulations and guidelines on environmental reviews and impact assessments. As per IFC PS1 Para 7, *"When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternative performance level is protective of human health and the environment."*
4. **Stakeholder identification and analysis:** Highlights who should be included in the ESIA process and how, as well as outlining potential impacts on stakeholders. This included a list of all the parties that were involved in the project's design and an explanation of each party's expectations, influence, interests, and potential impacts on their livelihoods, as well as how they should be involved in the ESIA.

5. **Environmental, Climate and Social Baseline:** explains the social, environmental, and political situation in which the sub-project will be implemented.
6. **Assessment of Environmental and Social Impacts:** It entailed determining the impacts—both direct and indirect—calculating the likelihood that they would occur and evaluating their importance.
7. **Environmental and Social Management Plan (see Annex 6):** This is the main output of the ESIA process and is a strategy for managing risks and mitigating impacts. The risk management is guided by the mitigation hierarchy and documented in the ESMP. It will contain the following subsections:
 - a. Mitigation Measures
 - b. Roles and Responsibilities
 - c. Institutional Arrangements
 - d. ESIA implementation budget
 - e. Timelines
 - f. Monitoring and Reporting
8. **Results of stakeholder consultations:** Details the results of stakeholder involvement and consultation.
9. **Conclusion and Recommendations:** Gives a brief explanation of the assessment's conclusion and offers suggestions.
10. **Appendixes:** Includes references, Tables, and list of reports used.

Annex 6: Environmental and Social Management Plan for Subprojects

The ESMP should be formulated in such a way that it is easy to use. References within the plan should be clearly and readily identifiable. Also, the main text of the ESMP needs to be kept as clear and concise as possible, with detailed information relegated to annexes. The ESMP should identify linkages to other relevant plans relating to the project, such as plans dealing with indigenous peoples'/ethnic minority groups' issues. The following aspects should typically be addressed within ESMPs:

1. **Summary of the potential impacts of the proposed project:** The predicted adverse environmental and social impacts for which mitigation is required should be identified and briefly summarized.
2. **Description of the recommended mitigation measures:** Each mitigation measure should be briefly described with reference to the impact to which it relates and the conditions under which it is required (for example, continuously or in the event of contingencies). These should be accompanied by, or referenced to, project design and operating procedures that elaborate on the technical aspects of implementing the various measures.
3. **Description of monitoring and auditing program:** The monitoring and auditing programs should clearly indicate the linkages between impacts identified, measurement indicators, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions.
4. **Institutional arrangements:** Responsibilities for mitigation and monitoring should be clearly defined, including arrangements for co-ordination between the various actors responsible for mitigation.
5. **Capacity Building and Training Programmes:** To support timely, effective implementation of the project components and mitigation measures, an assessment and evaluation of the capability of environmental units and other institutions responsible for environmental management is necessary.
6. **Stakeholder engagement and Grievance Redress Mechanism** – necessary to ensure effective communication among key stakeholders (project affected persons, Government agencies, local communities etc.) and address concerns of affected stakeholders throughout a sub-project's lifecycle.
7. **Implementation schedule and reporting procedures:** The timing, frequency and duration of mitigation measure should be specified in an implementation schedule, showing links with overall project implementation. Procedures to provide information on the progress and results of mitigation and monitoring measures should also be clearly specified.

8. **Cost estimates and sources of funds and allocation of responsibilities:** These should be specified for both the initial investment and recurring expenses for implementing all measures contained in the ESMP, integrated into the total project costs, and factored into loan negotiations, etc.
9. Compliance with Annex 14 and/or any subproject-specific provisions in the ESMP

Environmental and Social Management Plan (ESMP) Format

Sub-project Description: Present a brief description of the Sub-project. Include the nature of the investment, the location, and any characteristics of the area that are of particular interest, e.g. near a protected area, area of cultural, historical, religious interest etc. Also, very briefly describe the general land use characteristics (farming, small industry etc.), and the location(s) of the nearest population centers. Provide a brief summary of the major Sub-project related environmental issues, how will they be managed, who will manage them and what are the environmental risks, if any

Mitigation Plan

Phase	Issue	Mitigating Measures	Cost of Mitigation (if substantial)	Responsibility*	Start Date	End Date
Construction	• • • •				☐ ☐ ☐ ☐	☐ ☐ ☐ ☐
Operation	• • • •				☐ ☐ ☐ ☐	☐ ☐ ☐ ☐
Decommissioning (where applicable)	• • • •				☐ ☐ ☐ ☐	☐ ☐ ☐ ☐

Monitoring Plan

Phase	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored/ type of monitoring equipment?	When is the parameter to be monitored- frequency of measurement or continuous?	Monitoring Cost What is the cost of equipment or contractor charges to perform monitoring	Responsibility	Start Date	End Date
Construction	• • • •						• • •	• • •
Operation	• • • •						• • • •	• • • •
Decommissioning (where applicable)	• • • •						• • • •	• • • •

Institutional Arrangements: A brief narrative discussion should be prepared to indicate how monitoring data is going to be used to maintain sound environmental performance—who collects the data, who analyzes it, who prepares reports, whom the reports are sent to and how often, what he/she does with the information.

Sample ESMP for a Biodigester sub-project

Impact	Source/Activity	Measures	Phase	Monitoring method	Frequency	Indicator	Responsibility	Cost
A-Waste water								
a.1 generation of wastewater	Animal Raising	water conservation strategies	Construction	quantify wastewater production	Monthly	Volume of waste water produced	Biodigester personnel	
B-Solid waste								
b.1 generation of manure, sludge	Feed wastage	minimize feed wastage - fixed feeding schedule; Sludge used as soil conditioner	Construction	quantify (dried) sludge produced	Monthly	Amount of sludge produced	biodigester operators	
b.3 generation of general solid wastes	General farm activities	Waste segregation	Construction	weigh solid wastes disposed of (recyclables and residuals)	Every Hauling	weight / details on wastes generated, stored, and disposed of	Biodigester personnel	
		Provide adequate collection bins						
		Reduce, reuse, recycle of materials						
C. Hazardous Materials								
.1 generation of hazardous, toxic wastes	Facilities' operation and maintenance	monitor resource usage to avoid expiration of chemicals, etc.	Operation	quantify each type of hazardous waste produced / stored and disposed of (check hazardous waste manifests)	Every hauling and disposal	quantity of each hazardous waste type stored and disposed	Pollution control officer	
		disposal through accredited TSD						
		reusing, recycling certain materials (for various construction and maintenance activities)						
D-Air pollution								
d.1 generation of biogas	anaerobic digestion	capturing through biodigesters and combustion using	Operations	record electric meter reading of biogas gensets	Daily	kWh produced	Biodigester operator	

		biogas-fueled engine - Monitoring of gas production to detect leakage						
d.2 generation of air pollutants	stand-by generator sets (fossil fuel combustion)	regular inspection and preventive maintenance of equipment -	Operations	review inspection and maintenance record	Monthly	number and details of machinery issues noted running hour	Biodigester personnel	
E. Risk of Environmental Degradation								
e.2 (risk of) pollution from fugitive biogas	biogas collection, storage, combustion	Regular inspection (leak test) and preventive maintenance	Operations	review inspection and maintenance record	Monthly	number and details of leak / breach incidents (odor detection)	biodigester operator	
F. Health and Safety – Anaerobic Digester System								
f.1 explosion hazards	biogas collection, storage, combustion	No smoking or hot works in the vicinity of biogas facility	Operations	review inspection and maintenance records, incident reports, complaints register	Monthly	number and details of explosion, fire incidents	Farm personnel	
		Restrict access to biogas facility						
		Place signages						
		Regular maintenance of biogas systems						
f.2 asphyxiation	Biogas	Buddy system when conducting work	operations	Review incident reports	Monthly	number and details of asphyxiation, poisoning incidents	Farm personnel	
		Restrict access to biogas facility						
		Regular maintenance of biogas system						
f.3 Chemical hazards	Sludge	Use appropriate PPE		review incident reports review results of health checks	Monthly Annually	number and details of infection, infestation incidents	Farm personnel	

G. Health and Safety – General Farm Operations								
G.1 odor nuisance, discomfort, health issues	- Vehicles machinery	operate equipment, machineries according to manufacturer's instruction - regular inspection and preventive maintenance of machineries - provision and use of appropriate PPE	Construction	review complaints register	Monthly	number and details of noise complaint	Pollution control officer	
G.2 dust nuisance, discomfort, health issues	Animal houses, feed handling	limits dust-generating activities during day time, low wind movement (as much as it is practical)	Construction	Review complaints register	Monthly	number and details of dust complaint	Pollution control officer	
	composting areas, dried compost handling	- use of appropriate containers, barriers -) damping of dried materials - Limit dust-generating activities during day time and low wind movement (as much as it is practical) -Provision of PPE						
	vehicles, machineries	-limits vehicular speed on unsealed roads - limit dust-generating activities during day time, low wind movement (as						

		much as it is practical) -Provision and use of PPE						
H health hazards, (risk of) contracting infectious diseases, sustaining injuries,	handling, transport, storage of hazardous and infectious materials,	- adequate training on handling of hazardous, infectious materials - provision and use of appropriate equipment for handling and storage of hazardous and infectious materials	Decommissioning	review incident reports, inspection records and complaints register, results of employees' regular health checks	Monthly	number and details of illness, injury incidents, complaints	Pollution control officer	
H explosion, fire hazard	biogas collection, storage, combustion	- WWTF-MRF constructed with durable materials - operates WWTF-MRF according to design - regular inspection (leak test) and preventive maintenance of MRF - will install signage and warnings	Operations	review inspection and maintenance records, incident reports, complaints register	Monthly	number and details of explosion, fire incidents	Pollution control officer	

Sample ESMP for a Climate Smart Agriculture sub-project

Type of Risk	Potential impacts	Risk level	Proposed mitigation measures	Monitoring frequency	Responsible
Construction Phase					
Site not suitable for CSA	CSA demonstrations works not implementable	Low	-Follow World Bank and national protocols on voluntary land acquisition to acquire plots. -Conduct E&S due diligence on proposed sites to ensure suitability.		Extension officer
Farmers not aware of E&S requirements	Non-compliance with ESMP	Moderate	Orientation of farmers on applicable Green Climate fund E&S requirements, particularly grievance mechanism, child labor and SEA/SH prohibitions, and occupational health and safety measures.		Agronomist
Implementation Phase					
Risk of forced or illegal child labor being used during farming activity	Child exploitation	Low	-The project will adhere to all Senegal law related to labor and employment -Awareness-raising will be provided to inform workers of their rights under the General Labor Law and applicable grievance and conflict resolution systems that can be followed	Monthly	Human resources subproject
Some CSA practices, such as the use of agrochemicals or biopesticides, can expose communities to harmful chemicals	Health Risks	Low	Integrated Pest Management (IPM) Use pesticides approved by the national government. Train workers in the proper handling and disposal of chemical residue and cans.	Monthly	Borrower (Farmer)
Oil leak/spills from ploughing tractors	Interruption and loss of biodiversity	Low	-Inspect the tractor to ensure that there are no fuel and oil leaks before use. -Regularly maintain the tractor to keep it safe for farm use. -Ensure safe keeping of fuel and engine oil for the tractor -When leaks are detected, promptly halt operations to repair the tractor before putting it back to use. -Prevent further spread of spilled oil by keeping it away from drains or water ways. With the aid of appropriate gloves, absorb the spill from the soil using spill absorbents.	Everyday	Borrower (Farmer)
Improper handling and use of fertilizer	Interruption and loss of biodiversity.	Moderate	-dedicated location that can be locked and properly identified with signs, - Provide farmers with comprehensive training on the proper handling, storage, application, and disposal of fertilizers.	Monthly	Extension officers

Potential risks to Biodiversity and Ecosystems	Local flora and fauna.	Low	-Establish riparian buffers along watercourses to protect aquatic ecosystems and biodiversity. -Sustainable Land Management	Monthly	Borrower (Farmer)
Occupational health and safety (OH&S) on farms	Injuries, accidents, disruption of workflow etc.	Moderate	-Include OH&S requirements in workers Code of Conduct (CoC). -Provide OH&S orientation to workers, visiting farmers and other stakeholders. -Procure and provide relevant PPE for staff working on farms sites and encourage visiting farmers to use the same.	Monthly	Borrower (Farmer)
Air pollution from land tillage	Increase risk of headache, catarrh and respiratory diseases	Moderate	-Consider doing land tillage immediately after rain or in the morning when humidity may be high to reduce floatation of loose soil particles in the air. Provide air purifying nose masks to workers doing land tillage.	Monthly	Borrower (Farmer)
Flow of pesticides contaminated run-off water from farm fields into water bodies	contamination of water bodies from pesticides to be used for crop pest/disease control	Moderate	-Promote mulching of bare plots surfaces to reduce flow of runoff water. -Pesticides and other chemical application should be scheduled to avoid likely period of heavy rains.	Monthly	Borrower (Farmer)
Indiscriminate disposal and improper handling of solid waste on the farm	Land and water pollution, poisoning of terrestrial and aquatic life.	Low	-Provide waste bins at demonstration sites. -Dispose of waste at approved waste dumpsites. -Keep hazardous substances including obsolete agrochemicals and empty agrochemical containers in a secure storage area. -Sensitize workers and visiting farmers on waste disposal arrangements.	Monthly	Borrower (Farmer)

Annex 7: Terms of Reference of Key Experts

E&S Manager

- ✓ Oversee implementation of the ESMF and its periodic reviews, improvements, and amendments.
- ✓ Ensure that each activity to be funded from the Programme is screened against the Exclusion List, and that the proposed project has been categorized for potential E&S risk.
- ✓ Update all programme-level E&S Due Diligence documents where necessary
- ✓ During project due diligence, ensure that the project's environmental performance/compliance against IFC applicable performance requirements has been assessed.
- ✓ Collaborate with LBA's Gender Focal Point on SEAH risk assessment (during E&S screening and due diligence), ESIA/ESMP development (actionable items for GBV/SEAH mitigation) and post-investment E&S monitoring and reporting.
- ✓ Ensure that standard E&S terms are incorporated into the legal agreement with the borrower.
- ✓ Ensure that projects in the portfolio are supervised and monitored against ongoing compliance with the applicable requirements.
- ✓ Review all submitted projects E&S monitoring reports.
- ✓ Prepare quarterly and annual environmental and social performance reports, based on periodic monitoring reports prepared by the borrowers, and other E&S reports as required.
- ✓ Update the PMU on new E&S Standards and guidelines, including national and international best practice.
- ✓ Provide training to the GCFF team on ESMF procedures.
- ✓ Provide capacity building to the GCFF borrowers to ensure they manage E&S risks and opportunities as per this ESMF.
- ✓ Within a framework of LBA staff training and borrower's capacity building responsibilities, collaborate with the Gender Specialist to increase awareness of SEAH prevention and response regarding GCFF-financed activities, and on how it can be effectively addressed in a survivor-centered and gender-responsive way, sensitize LBA staff and borrowers to their respective roles and responsibilities in SEAH prevention.
- ✓ Work with the GCFF PMU to ensure that adequate human, financial and material resources are available for effective implementation of E&S policies and procedures, including approval of annual budget to carry out required E&S due

diligence, knowledge management, monitoring, evaluation, learning, capacity development, and implementation support.

- ✓ Maintain a file of qualified environmental consultants and specialists who can be called upon to assist in conducting environmental due diligence and ESIA/ESMP development, including relevant expertise to perform SEAH risk assessments, and capacity building.
- ✓ Ensure that a Grievance Mechanism is in place and that comments are managed in compliance with the ESMF guidelines.
- ✓ Ensure that whenever Indigenous Peoples are present in, have or had a collective attachment or right to areas where GCFF-financed activities will be implemented, the requirements as set out in Indigenous Peoples Planning Framework of this ESMF is followed.
- ✓ Ensure that project E&S disclosures are undertaken as per the GCF's Information Disclosure Policy.
- ✓ Undertake other activities relevant to the implementation of this ESMF.

Agronomist:

- ✓ Offering expert advice on the planning and implementing agroforestry practices and soil health practices that are sustainable and beneficial.
- ✓ Conduct assessments of current agricultural practices and identify opportunities for implementing climate-smart agriculture (CSA) in crop production.
- ✓ Develop and promote sustainable land management practices, including agroforestry, conservation agriculture, and integrated pest management.
- ✓ Provide training and capacity-building to farmers and agricultural extension agents on CSA practices and technologies.
- ✓ Monitor and evaluate the effectiveness of climate-smart interventions in improving yields and reducing environmental impact.
- ✓ Collaborate with participating financial institutions to ensure loan products are aligned with sustainable agricultural practices.

- ✓ Provide regular reports and recommendations to E&S Manager on best practices and challenges related to CSA implementation.
- ✓ Support knowledge-sharing and the dissemination of lessons learned across project stakeholders.

Feed Quality Specialist:

- ✓ Assess current feed production practices and develop strategies to improve feed quality and efficiency in the context of climate change.
- ✓ Support farmers and agribusinesses in producing or sourcing high-quality, climate-resilient feed ingredients.
- ✓ Promote and implement feed management practices that reduce greenhouse gas emissions and improve animal productivity.
- ✓ Provide training to smallholder farmers, cooperatives, and feed producers on sustainable feed formulation, storage, and processing.
- ✓ Work with research institutions to evaluate the impact of feed interventions on livestock productivity and emissions reduction.
- ✓ Regularly report on the outcomes of feed quality interventions, including lessons learned and best practices.
- ✓ to assist in improving the quality of animal feed, which can enhance livestock health and productivity.

Biogas experts:

- ✓ Design and implement biogas systems.
- ✓ expertise in biogas technology to assist in designing, installing, and operating biodigesters. They can also help in optimizing the process to maximize energy output and minimize greenhouse gas emissions.
- ✓ Provide technical support and training on biogas technology.
- ✓ Monitor and evaluate the performance of biogas systems.
- ✓ Ensure integration of biogas systems with other project components.
- ✓ Oversee the implementation of the biogas component of the project.

Hydrology expert/Engineer:

- ✓ Ensure appropriate consideration of the hydrology of the area, movement, distribution, and management of water on and in the soil including the water cycle and water resources.
- ✓ Conduct assessments of water resources in project areas, identifying risks related to water availability, quality, and usage in climate-smart agricultural practices.
- ✓ Evaluate the impact of project activities on local water resources and provide recommendations for mitigating any negative environmental or social effects.
- ✓ Design and promote sustainable water management practices that are in line with climate-smart agriculture and the project's ESF guidelines.
- ✓ Provide technical guidance on irrigation, water conservation, and efficient water use technologies to reduce water stress in the smallholder agricultural systems.
- ✓ Collaborate with farmers, cooperatives, and agribusinesses to implement water management strategies that reduce vulnerability to climate change while enhancing productivity.
- ✓ Ensure that all water-related project activities are aligned with Senegal's water management policies and the project's ESF requirements.
- ✓ Monitor the environmental and social impacts of water resource management interventions and provide regular reports to the E&S Manager.
- ✓ Support capacity-building initiatives by providing training to stakeholders on sustainable water management and environmental compliance.
- ✓ Participate in field visits to project sites to assess water management practices and identify areas for improvement.

Annex 8: SEAH Framework

Definitions

Sexual Abuse: the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions.

Sexual Exploitation: any actual or attempted abuse of a position of vulnerability, differential power, or trust, for sexual purposes, including, but not limited to profiting monetarily, socially, or politically from the sexual exploitation of another.

Sexual Harassment: unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature, that interferes with work.

Introduction

LBA recognizes the need to prevent and respond effectively to SEAH and to protect persons, especially vulnerable individuals, and victims of SEAH in fund-related Activities. The Programme aims to facilitate smallholder farmers and will ensure strict guidelines are followed during all programme stages, including a comprehensive monitoring strategy. The Green Climate Fund (GCF) has zero tolerance to all forms of Sexual Exploitation, Sexual Abuse and Sexual Harassment (SEAH) in fund related activities.

SEAH violates human dignity and is unacceptable behavior. It is based on unequal relations and power dynamics resulting in a culture of discrimination and privilege. It creates hostile interpersonal relationships and work-related environments, which limit the ability of affected persons to thrive and GCF to achieve its mission. SEAH in any form is not acceptable at GCF and LBA.

GCF recognizes the imperative to prevent and respond effectively to SEAH and to protect persons, especially persons in vulnerable positions and situations, and survivors of SEAH in all fund related activities. These protections are essential to strengthen integrity and accountability throughout GCF projects. This policy forms part of a suite of GCF policies, including the Policy on Prohibited Practices, the Policy on the Protection of Whistleblowers and Witnesses, the Gender Policy (and its Action Plan), the Environmental and Social Safeguards Policy (ESS Policy), the Administrative Guidelines on Human

Resources (especially section H on Harassment). These policies provide complementarity to achieve the shared goal of zero tolerance for SEAH at GCF⁵⁰.

Senegalese law on SEAH/GBV

Senegal has a national action plan for the eradication of gender-based violence and the promotion of human rights. This multisectoral document, covering the period 2017–2021, is now being implemented and has led, among its initial results, to the formulation of regional action plans. Senegalese legislation has been guided by two concerns⁵¹.

- Protect pregnant women from arduous or dangerous working conditions and to give them equal rights with men. Pregnant women have the right to stop work for 14 consecutive weeks, including 8 after childbirth. This period may be extended for a further three weeks in the event of duly certified illness. Full pay is provided during this period.
- Eliminate all gender-based wage discrimination. It is expressly stated in the Employment Code that employed women shall receive their full salary during maternity leave. Employers may not dismiss women during this period. Women are entitled to a maximum of one hour's rest per working day for breastfeeding over a period of 15 months from the time of the child's birth. The provisions of articles 300 and 305 of the Criminal Code that discriminate against women have been factored into the proposed revision of discriminatory laws.

Mitigation Measures for SEAH

Throughout implementation of the programme, severe measures will be taken to deter incidences of SEAH, and a reporting procedure will be put in place to further safeguard and prevent incidences.

- Ensure clear human resource policy against sexual harassment that is aligned with national law.
- Integrate provisions related to sexual harassment in the employee Code of Conduct

⁵⁰GCF Revised Policy on the Prevention and Protection from Sexual Exploitation, Sexual Abuse, and Sexual Harassment

⁵¹ OCHA 2019 <https://docstore.ohchr.org/>

- Engaged contractor(s) shall require their employees, sub-contractors, sub-consultants, and any personnel thereof engaged in construction works to individually sign and comply with a Code of Conduct with specific provisions on protection from sexual exploitation and abuse.

The programme proponents will implement provisions that ensure that gender-based violence at the community level is not triggered by the Programme through:

- Continuous and well managed community engagement and consultation, particularly with women and girls.
- Review of specific project components that are known to heighten GBV risk at the community level for example financial ability through lending, compensation schemes, employment schemes for women for the biogas sub-components.
- LBA shall develop a specific plan for mitigating these known risks, e.g. sensitization around gender-equitable approaches to compensation and employment; etc.
- The contractor will ensure adequate referral mechanisms are in place if a case of GBV at the community level is reported related to project implementation.

Mitigation Measures to Risk of SEAH

Develop and implement a SEAH action plan with an Accountability and Response Framework as part of the ESMP. The SEAH action plan will follow guidance on the World Bank's Good Practice Note for Addressing Gender-based Violence. The Action plan will put in place measures that lock out abuse and harassment and lock in preventative and effective reporting and evaluation measures including:

- Draft a Code of conduct (CoC) and SEAH prevention plan and carry out ongoing sensitization of staff on responsibilities related to the CoC and consequences of non-compliance. This will be a major preventative measure.
- Response to SEA: including survivor-centered coordinated, multi-sectoral referral and assistance to complainants according to standard operating procedures; staff reporting mechanisms; written procedures related to case oversight, investigation, and disciplinary procedures at the project level, including confidential data management.

- Engagement with the community particularly the development of confidential community-based complaints mechanisms different from the standard Grievance Redress Mechanism
- Mainstreaming of SEAH awareness-raising in all community engagement activities; community-level LBA materials; regular community outreach to women and girls about social risks and their SEAH-related rights.
- Management and Coordination: including integration of SEAH in employments contracts for the biogas component and other programme related activities, development of contract policies related to SEAH, including whistle blower protection and investigation and disciplinary procedures; training for all project management; management of coordination mechanism for case oversight, investigations and disciplinary procedures; supervision of dedicated PSEA focal points in the project and trained LBA community liaison officers

Gender-based Violence (GBV) at the community level

This impact refers to gender-based violence that women and girls may experience because of programme implementation. These are inclusive of e.g. an increase in intimate partner violence (IPV) when agricultural lending from LBA that shares funds equally among husband and wife at the household level do not provide adequate sensitization and safety measures to reduce potential for increased tensions due to women receiving funds. For female headed households, former spouses have been known to return and cause violence when women are financially empowered. The GBV framework for action will address these concerns.

Mitigation Measures to Risk of GBV for the LBA programme

- Develop and implement provisions that ensure gender-based violence at the community level is not triggered by the programme including effective and on-going community engagement and consultation, particularly with women and girls.
- Project components that could intensify GBV risk at the community level will be reviewed and preventative measures examined. Some of these areas are the lending aspect, employment schemes for women in the programme and biogas sub-component.

- Specific plans for mitigating these known risks to be constituted e.g., sensitization around gender equitable approaches to financial independence/loan scheme and employment etc.
- Put in place referral mechanisms to address GBV at the community level related to programme implementation.
- Training of Workers and Partners: LBA will ensure their direct workers, partners, suppliers, and others are trained in CoC, GBV/SEA and child protection risk issues as part of their induction (and refreshers will be offered regularly). They will roll out direct training activities for all contracted, as well as community workers deployed for their activities – prior to the start of such. The community will ensure that records of all inductions are kept and shared with the Programme Management Unit. The PMU and LBA Team will further review training materials and make suggestions for revision if there are gaps.
- Cases of GBV/SEA can be reported through the general Project Grievance Redress Mechanism: GRM focal points for this project will be trained to receive Gender Based Violence/Sexual Exploitation and Abuse cases in an appropriate manner. Beneficiaries and communities will generally be encouraged to report all GBV/SEA cases through the dedicated GBV/SEA referral system and complaints resolution mechanism.
- Contact information will be made explicit in all community awareness sessions, as well as be part of the publicly disclosed information. All information will be made accessible to all project beneficiaries. The GBV/SEA referral system will ensure that survivors receive all necessary services, including medical, legal, counselling, and that cases involving children aged 16 years and below are reported to the police where applicable.

It is important that if SEAH/GBV incidences occur in the programme, a victim-centered approach be taken by LBA as the implementing entity. Below are general guidelines⁵².

- Any response and prevention action regarding GBV and SEAH cases will require balancing respect for the legality of the process with the requirements of a victim-

⁵² AfDB 2021 Preventing, mitigating, and responding to sexual exploitation, abuse and harassment (SEAH) within AfDB operations.

centered approach in which choices, needs, safety and well-being of the victim remain at the center for all questions and procedures.

- All measures taken should be guided by respect for the choices, needs, rights and dignity of the victim, which must be promoted in the process of handling the complaint.
- All appropriate measures should be taken to protect actual or potential victims, including ensuring their anonymity, physical safety and distancing themselves from the alleged perpetrators- in the event of possible retaliation due to a report of actual or alleged SEAH actions, perpetrated by covered persons in connection with programme -related.

SEAH Monitoring and Evaluation (M&E) framework

- a) Establishment of a SEAH Monitoring Framework:
 - Objective: Develop a dedicated SEAH monitoring framework within the project's M&E system to track the implementation and effectiveness of SEAH mitigation measures.
 - Key Indicators: Track indicators such as the number of SEAH cases reported, response times, community awareness levels, and the quality of support services provided.
 - Data Collection Methods: Use surveys, focus group discussions, interviews, and review of complaint records to gather both qualitative and quantitative data.
- b) SEAH Focal Points and Reporting System:
 - Objective: Designate SEAH focal points at the community and project levels to oversee SEAH-related activities, manage reporting channels, and ensure adherence to the SEAH action plan.
 - Responsibility: SEAH focal points will be responsible for collecting and reporting data, coordinating with local organizations, and ensuring that all cases are handled confidentially and appropriately.
- c) Regular Reporting and Review:
 - Frequency: SEAH-related activities and incidents will be reported monthly and reviewed quarterly by the Project Management Unit (PMU) and the Gender Focal Point at LBA.

- Review Process: Reports will be analyzed to identify trends, gaps, and areas for improvement. The findings will inform adjustments to SEAH mitigation strategies and training needs.
- d) Community Feedback and Engagement:
- Objective: Collect regular feedback from community members, particularly women and girls, regarding their perception of SEAH risks and the effectiveness of SEAH mitigation measures.
 - Mechanism: Integrate SEAH-related feedback channels into the existing Grievance Redress Mechanism (GRM), including anonymous reporting options and community forums.
- e) Independent Review and Evaluation:
- Objective: Conduct an independent evaluation of SEAH-related activities at mid-term and project completion to assess the effectiveness of SEAH measures and the impact on the community.
 - Responsibility: Engage an external evaluator to conduct the review, ensuring unbiased assessment and recommendations for improvement.
- f) Capacity Building for SEAH Monitoring:
- Objective: Train M&E teams and SEAH focal points on SEAH-specific monitoring, data collection, and reporting procedures to ensure accurate and sensitive data handling.
 - Content: Training will cover confidentiality in handling SEAH cases, culturally sensitive data collection methods, and the use of SEAH monitoring tools.
- g) Utilization of Findings:
- Objective: Use the findings from SEAH monitoring to refine and strengthen SEAH mitigation strategies, update training materials, and ensure continuous improvement of SEAH-related activities.
 - Process: Regularly update the SEAH action plan based on monitoring results and community feedback to adapt to emerging challenges and needs.

Annex 9: Livelihood Vulnerability Assessment and Action Plan

Introduction

This Livelihood Asset Vulnerability Assessment and Action Plan Framework is designed to address climatic livelihood challenges faced by smallholder farmers which will affect implementation of the programme. The proposed Programme focuses on promoting climate-smart agriculture practices and integrating a biogas component to mitigate greenhouse gas emissions.

Definition

Vulnerability is decomposed into eight major components based on exposure, sensitivity, and adaptive capacity. The Livelihood Vulnerability Index (LVI) approaches consist of variables indicating the level of exposure, sensitivity, and adaptive capacity to climate-induced disasters (for example, droughts and floods, landslides, etc.) and climate change. The LVI indicates a way to understand how vulnerability varies across time and space and to identify the main factors contributing to vulnerability, highlight strategies reducing the vulnerable level, and evaluate how efficient these strategies are in different social and ecological environments. In the past decade, the LVI has become a means of assessing farmers vulnerability to climate change and disasters around the world.⁵³ This framework will then be based on LVI when assessing smallholder farmers Livelihoods in LBA programme areas.

Livelihood sensitivity to climate will determine which interventions will be recommended. Exposure and sensitivity combined with low level of adaptive capacity can increase household's livelihood vulnerability. The biophysical and socioeconomic sensitivity to livelihood vulnerability is exacerbated by topography, soil erodibility, and population pressure. Therefore, designing livelihood zone-based identifiable adaptation strategies will be essential to reduce the exposure and sensitivity of crop-livestock mixed agricultural systems to climate change when implementing Climate Smart Agricultural activities for the programme.

Legese, S.A.; Olutayo, O.A.; Sulaiman, H.; Rao, P. Assessing Climate Change Impacts in the Lake Tana Sub-Basin, Ethiopia Using Livelihood Vulnerability Approach. *J. Earth Sci. Clim. Chang.* 2016

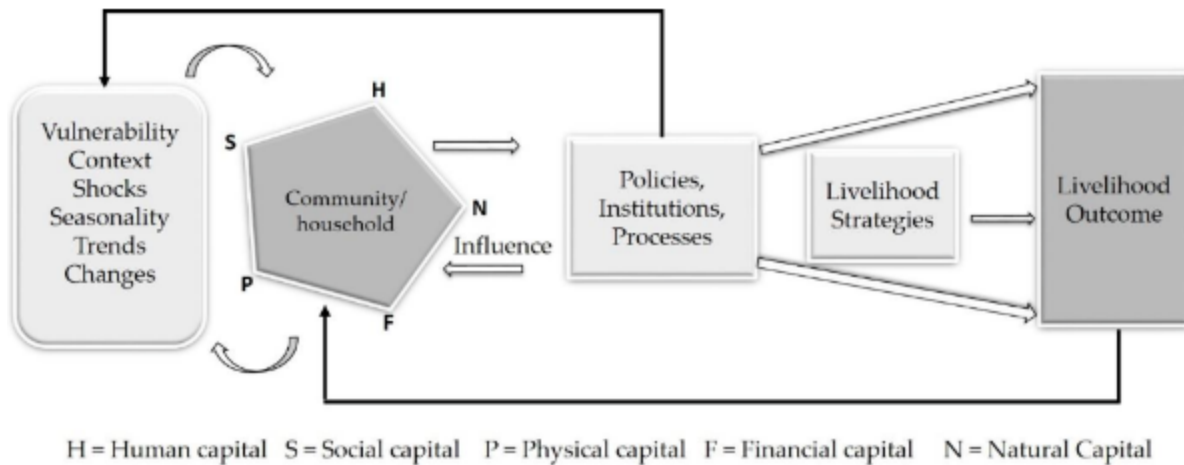


Figure A1: Vulnerability⁵⁴

The Livelihood vulnerability assessment framework will incorporate the methodology highlighted below.

Baseline Assessment:

- Identification and mapping of vulnerable agricultural areas in the planned programme sites -this will entail use of Geographical Information Systems (GIS) and remote sensing technology to identify vulnerable regions and analysis of climate patterns and soil health, water availability.
- Assessing current community livelihood assets, including natural, physical, financial, human, and social capital. Methodology to use will be through surveys and interviews with smallholder farmers to understand their current assets and practices, perusal of smallholder farmer financial records, access to credit, and savings as well as human capital e.g. knowledge and skills.
- Evaluation of historical climate data and its impact on agriculture in Senegal- methodology will include collection of historical climate data incorporating temperature, rainfall, extreme weather events and assessment of the correlation between climate events and their impact on agriculture especially crop yields and land productivity.

Morse, S.; McNamara, N. Sustainable Livelihoods Approach: A Critique of Theory and Practice; Springer Science & Business Media: Amsterdam, The Netherlands, 2013.

Climate Change Projections:

- Analyzing future climate change projections specific to the LBA programme areas inclusive of a comprehensive examination of various climatic parameters and potential impacts on the environment, ecosystems, and socio-economic systems. This will consider potential effects of climate change on crop yields from changes in temperature, precipitation, and growing seasons.
- Assessment of potential risks and vulnerabilities related to changing weather patterns: Assess risks on food security, changes in rainfall patterns and how temperature rise may cause decreased agricultural productivity or sea level rise inundating cropland. Social risks may occur where vulnerable populations are disproportionately affected by changing weather patterns.
- Examining the impact of climate change on smallholder farmers livelihoods- Integrating climate projections with vulnerability assessments to create risk maps of most susceptible regions e.g. the Sahelian zone, north of the Saint-Louis region, interrogation of traditional knowledge and local coping mechanisms.

Livelihood Asset Vulnerability Mapping:

- Developing a comprehensive vulnerability map highlighting areas where smallholder farmers are most affected.
- Categorizing vulnerability levels based on the livelihood assets of Senegalese smallholder farmers in the LBA programme sites identified.
- Prioritizing areas for intervention based on ecosystem and smallholder farmer vulnerability and climate change projection the specific programme sites. The livelihood Asset Vulnerability Mapping methodology is discussed in brief later.

Assessment of existing assets of smallholder farmers, including land, livestock, financial resources, and human capital. Methodology is through surveys, interviews, and on-site assessments to gather data on land ownership, agricultural holdings, and livestock.

In addition, an assessment of the financial status of smallholder farmers, income sources, and access to credit is important. Human capital evaluation will examine skills, knowledge, and labor available within LBA programme areas. This will establish baseline understanding of the resources available to farmers, forming the foundation for targeted LBA programme interventions.

The identification of climate change driven vulnerabilities for farmers e.g. land degradation, water scarcity, and biodiversity loss are critical⁵⁵. Land vulnerability analysis examines degradation, erosion and changes in soil health and assesses vulnerability of water sources and availability for the LBA programme. Identifying these vulnerabilities will allow for the development of strategies to enhance resilience, adaptability, and sustainability of agricultural practices.

Climate-smart Agriculture Assessment:

- An evaluation of the awareness and adoption of climate-smart agricultural practices among smallholder farmers- through surveys, interviews, and workshops to gauge farmers' awareness of climate-smart agricultural practices. Assessment of the extent to which farmers have adopted climate-smart techniques in their farming operation and the Identification of barriers that could affect adoption of climate-smart practices This evaluation will provide insights into the current state of climate-smart agriculture awareness and adoption, guiding targeted capacity-building initiatives.
- Assessment of the potential for sustainable farming techniques, including conservation agriculture, agroforestry, and water-efficient irrigation methods. The feasibility of various CSA methods will be examined as well as an investigation of the suitability of conservation agriculture practices e.g. viability assessment of irrigation methods considering local water availability and climatic conditions. This assessment will assist in identifying specific sustainable farming practices that promote resilience to climate change.

Biogas Infrastructure Assessment:

- Examination of the feasibility of integrating biogas systems into smallholder farms for energy generation
 - Conducting site visits and technical assessments to evaluate the physical layout and conditions of smallholder farms, energy needs assessment of smallholder farms and the potential for biogas to meet those needs.

⁵⁵Abebe et,al 2021, Rural households livelihood vulnerability to climate variability and extremes retrieved from <https://ecologicalprocesses.springeropen.com/articles/10.1186/s13717-021-00313-5>

- An Evaluation of economic feasibility, considering installation, maintenance costs versus potential benefits. The assessment will help identify if the biogas system is suitable for the specific requirements of smallholder farms.
- Identification of potential biogas feedstocks, such as crop residues and animal waste, and their availability. Identification of suitable feedstocks that ensure sustainable and consistent supply of raw materials for biogas production, which is crucial for the long-term programme sustainability.

Household Livelihood Security is defined as adequate and sustainable access to income and resources to meet basic needs (including adequate access to food, potable water, health facilities, educational opportunities, housing, and time for community participation and social integration). Livelihoods can be made up of a range of on-farm and off-farm activities that together provide a variety of procurement strategies for food and cash. Thus, each household can have several possible sources of entitlement which constitute its livelihood. Entitlements include the rights, privileges, and assets that a household has, and its position in the legal, political, and social fabric of society⁵⁶. The table below (Figure 1) is a guide on parameters that may threaten livelihood security and reduce LBA target communities coping capacity.

Table A1: Livelihood Asset Vulnerability Assessment:

Category	Livelihood Asset Vulnerability	Proposed Programme Measures
Natural Capital	Dependence on rain-fed agriculture	Planting climate-resilient crops
	Vulnerability to climate variability and extreme weather events	Implementation of water harvesting and irrigation systems
	Soil degradation and erosion	Soil conservation practices
	Loss of Biodiversity	Promotion of agroforestry
Financial Capital	Limited access to credit and financial resources	Lending funds to smallholder farmers for climate-smart agriculture practices
	Income instability resulting from climate-related crop failures	Crop insurance schemes for risk mitigation

⁵⁶ https://pdf.usaid.gov/pdf_docs/pnadd652.pdf

Human Capital	Insufficient knowledge and skills on climate-smart agriculture	Training and capacity-building programs on sustainable farming techniques
	Insufficient education and awareness on climate change impacts	Climate awareness campaigns and workshops
Social Capital	Some areas may be isolated or lack collaborative networks	Farmer groups, organizations, and cooperatives to enhance collective action
	Gender disparities in decision-making	Empowering women through training and inclusion in decision-making processes
	Underdeveloped social support safety nets	Strengthening community-based social support networks
Physical Capital	Poor state of roads inhibiting access to markets	Infrastructure development to boost access to markets
	Inadequate storage facilities causing post-harvest losses	Improved storage and post-harvest management practices
Livelihood Diversification	Over-reliance on agriculture as the main source of income	Integration of a biogas component for additional income generation and greenhouse gas emission reduction

The proposed Livelihood Action Plan below is a Framework that depicts which actions will be taken by the project proponents/LBA if livelihoods of the project affected persons is affected.

In this case the project persons are loan beneficiaries who will be facilitated to carry out sustainable agricultural practices through low interest loans as well as a reduction in heating and cooking bills from implementation of the biogas component of the proposed programme. It is envisaged that the programme will improve livelihoods rather than negatively impact them.

Table A2: Livelihood Action Plan

Action Area	Action Steps	Responsible Parties	Timeline	Resources Required
Stakeholder Engagement	Promotion of community participation and ownership through, FOs, Cooperatives, and local governance structures.	LBA, Local authorities, community Leaders, NGOs, and CBOs	Programme lifetime	Community engagement experts, capacity building and communication channels

	Collaboration with government agencies, NGOs, research institutions, and private sector entities.	LBA, Ministry of Agriculture, NGOs, Private Sector Representatives	Programme lifetime	Meetings, workshops, collaboration
Sensitization on Climate-smart Agriculture	Develop training programs for smallholder farmers on climate-smart agricultural practices.	LBA, Ministry of Agriculture, NGOs, Extension Services	1-2 years	Training materials, experts, venues
	Establish demonstration farms to showcase sustainable practices and facilitate knowledge transfer.	Agricultural Research Institutes, NGOs	1 year	Demonstration plots, experts
Access to Concessional Credit	Financial mechanism for providing highly concessional credit facilities to smallholder farmers establishment.	LBA & participating financial institutions	Programme lifetime	Funding, policy framework, collaboration
	LBA to collaborate with other participating financial institutions and GCF programme stakeholders to ensure availability and accessibility of credit.	LBA	Programme lifetime	Partnership and outreach programs
Biogas Energy development	Technical training on biogas system installation and maintenance for farmers.	LBA, Biogas companies, Ministry of Energy, NGOs, Biogas Experts	Programme lifetime	Training materials, experts, venues
	Facilitate the establishment of community-based biogas hubs to promote collective management and resource sharing.	As above	Programme lifetime	Community engagement, infrastructure
Knowledge Dissemination and Capacity Building	Establish information dissemination channels to share best practices and success stories.	LBA, Agriculture department, FOs, Cooperatives, NGOs, Media Organizations	Long term	Communication channels, media outreach
	Conduct capacity-building programs for local extension workers to enhance their ability to support farmers.	LBA, NGOs, Training Institutions	Year-round	Training programs, materials, experts
Monitoring and Evaluation	Monitoring and evaluation framework to track progress on adoption of climate-smart agricultural practices	LBA, Agriculture Ministry, associated NGOs, Research Institutions	Ongoing	Monitoring tools, data collection, Qualified personnel
	Assessing socio-economic impacts on smallholder farmers, including income generation and climate resilience.	LBA to employ independent M&E firms and collaborate with Research Institutions.	Periodic evaluations	Qualified M&E firms, Data analysis, Impact assessment tools

The Outputs of the livelihood vulnerability assessment should include:

- A description and analysis of present smallholder farmer livelihood asset vulnerability, including representative vulnerable groups (for instance specific livelihoods at-risk of climatic hazards pre-LBA programme).

- Descriptions of potential vulnerabilities that in future may affect livelihoods of farmers including an analysis of pathways that relate the present to the future.
- Comparison of livelihood vulnerability under different socio-economic conditions pre and post programme implementation examining climatic changes and LBA project adaptive responses.

Annex 10: Emergency Preparedness and Response

IFC Performance Standard 4 recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration and/or intensification of impacts due to project activities. While acknowledging the public authorities' role in promoting the health, safety, and security of the public, this Performance Standard addresses the client's responsibility to avoid or minimize the risks and impacts to community health, safety, and security that may arise from project related-activities.

Assessment of Potential Emergencies of the Programme

Category	Potential Emergency	Risk Description	Risk Level (Low/Med/High)	Mitigation Measures
Community Health and Safety	Disease Outbreak	Risk of waterborne or vector-borne diseases spreading from stagnant water, poor sanitation, or improper waste management.	Medium	• Ensure proper sanitation and waste management • Provide community health education on hygiene • Conduct regular health monitoring of the local community.
	Accidents during construction	Injuries to community members or workers during construction activities due to improper safety measures.	Medium	• Implement strict safety protocols during biogas construction and laying of irrigation equipment • Provide PPE to all workers • Restrict community access to Biogas construction zones.
	Respiratory Illness from Dust and Air Pollutants	Construction activities or biogas operations generating dust or harmful gases affecting air quality and causing respiratory issues.	Medium	• Implement dust suppression techniques (water spraying, etc.) • Install air filters and regularly monitor air quality in and around biogas operation sites.

Infrastructure and Equipment Design and Safety	• Structural Failures in Agricultural Facilities (e.g., irrigation systems, greenhouses) • Breakdown of Agricultural Facilities (e.g., irrigation systems, greenhouses)	Structures poor design or extreme weather events (e.g., floods, storms), leading to injuries or damage to crops and equipment	High	• Design infrastructure according to Senegal's resilience standards • Regular inspection and maintenance • Build to withstand extreme weather events. (Climate proof infrastructure)
	Equipment Malfunction	Injuries or system failures from improper use, installation and lack of maintenance of farming equipment, biogas systems, or irrigation equipment.	Medium	• Regular equipment maintenance • Ensuring that all equipment meets safety standards • Training workers on equipment use and safety protocols.
Hazardous Materials Management and Safety	Chemical Spill (Pesticides, Fertilizers)	Accidental spills of hazardous chemicals during storage, transportation, or application, leading to soil or water contamination and health risks to workers/community.	Medium	• Store hazardous materials in secure, clearly marked areas • Train workers in proper chemical handling • Implement spill response plans and use secondary containment systems.
	Methane Leakage from Biogas Systems	Potential methane leakage due to poor maintenance of the biogas plant, posing explosion risks or contributing to air pollution.	High	• Install methane leak detectors • Regularly inspect and maintain biogas facilities • Develop a rapid response plan for leak detection and containment.
Ecosystem Services	Degradation of Natural Resources (soil, water, forest cover)	Overuse or contamination of natural resources due to unsustainable agricultural practices, resulting in soil degradation, water pollution, or loss of biodiversity.	High	• Implement sustainable farming practices (e.g., agroforestry, crop rotation) • Regular monitoring of ecosystem health • Promote efficient water and fertilizer use.
	Water Source Contamination from Biogas By-products	Leakage or improper disposal of organic waste from biogas systems contaminating local water sources, affecting human and animal health.	Medium	• Proper management and treatment of biogas by-products • Regular water quality testing • Install buffer zones between biogas facilities and water bodies.

Emergency Preparedness and Response	Delayed Response to Natural Disasters (floods, storms, droughts)	Delayed or inadequate response to climate-related disasters could result in significant damage to crops, infrastructure, or community assets.	High	- Establish an early warning system for extreme weather events - Develop a disaster response plan - Train staff and communities in emergency evacuation and response procedures.
	Fire Outbreak in Biogas Plant or Agricultural Facilities	- Fire outbreaks due to electrical faults, methane leaks, or mishandling of biogas/agricultural equipment, - Potential significant damage and risks to workers and local community.	High	- Install fire detection and suppression systems - Conduct regular fire drills and staff training - Ensure fire extinguishers are available in key locations.
	Floods affecting farms and Infrastructure	Excessive rainfall causing damage to infrastructure, equipment, crops, and potential displacement of local communities.	Medium	- Design drainage systems to manage water runoff - Implement flood protection measures around critical infrastructure - Build flood-resistant storage facilities.

The Emergency Preparedness and Response Plan

Risk Identification and Analysis	Risk & Risk Mitigation
Biogas-Related Risks	
Fire and Explosion.	Improper handling of biogas systems may lead to gas leaks, which can result in fires or explosions
Gas Leaks	Methane leaks pose both an explosion risk and health risks, such as respiratory issues or suffocation
Waste Management	Improper disposal of digested slurry could contaminate water sources or lead to soil degradation.
Agricultural Risks	
Pesticide/Herbicide Exposure	Improper use of agricultural chemicals could lead to poisoning of workers or local communities.
Equipment Accidents	Improper use of agricultural machinery may result in injury.
Climate-Related Risks	

Flooding	Heavy rainfall could flood agricultural land and biogas installations. Irrigation systems could also malfunction causing risks to community
Drought	Prolonged dry periods could lead to crop failure and reduced feedstock for biogas.
Extreme Weather	High winds and storms could damage agricultural infrastructure or biogas facilities.
Preventive Measures Training and Awareness	Provide training for farmers and workers on safe use of biogas systems, handling of chemicals, and operation of agricultural machinery.
Biogas Safety Protocols	• Biogas systems to be installed and maintained by qualified personnel. • Install methane detectors and ensure proper ventilation in biogas facilities.
Climate Adaptation Measures	Construction of drainage systems to manage flood risk, and water-saving agricultural practices to cope with drought.
Emergency Drills	Conduct regular emergency response drills, particularly for fire and explosion scenarios.
Meteorological Monitoring	Establish a system to monitor weather patterns, alert farmers of extreme weather events, and advise on actions to safeguard crops and equipment.
Gas Exposure	Move affected individuals to fresh air immediately. Administer first aid and call for medical assistance.
Response to Agricultural Incidents	
Chemical-Exposure (Pesticides/Herbicides)	Remove the affected individual from the exposure area and provide fresh air. Rinse any affected skin or eyes with clean water for at least 15 minutes. Seek medical attention immediately.
Machinery Accidents	Stop machinery immediately if an accident occurs. Administer first aid and seek medical help.
Human health effects from pests	Irrigation may bring about diseases like bilharzia, malaria among others. Measures will be taken to mitigate this including the provision of safety nets and health care
Response to Climate-Related Incidents	
Floods	Evacuate people and livestock from flood-prone areas. Secure biogas installations and agricultural machinery to prevent damage or contamination.
Drought	• Activate water-conservation measures such as mulching and use of drought-resistant crops. • Inform communities about the need to reduce water usage.
Emergency Response Team (ERT)	• Designate a trained Emergency Response Team (ERT) within each farming cooperative or community responsible for coordinating emergency responses. • Ensure the ERT includes individuals with first aid training, fire safety knowledge, and familiarity with biogas systems.
Community Liaison	Assign a Community Liaison Officer to act as the main point of contact for local communities regarding safety concerns and emergency updates.
Coordination with Local Authorities	Establish communication protocols with local emergency services, such as fire departments, hospitals, and local government offices.

Resources and Equipment	
Fire equipment	Foam and CO2 extinguishers should be placed near biogas facilities.
First Aid Kits	Ensure all facilities and farmer cooperatives where smallholder farmers will visit for training are equipped with first aid kits.
Protective Gear Evacuation Routes	• Personal protective equipment (PPE) for workers handling chemicals or biogas components. • Identify safe evacuation routes for farms and biogas sites in case of floods or other hazards.
Training and Capacity Building	
	• Regular training sessions for workers, farmers, and local communities on emergency procedures, including biogas safety, fire safety, chemical handling, and first aid. • Specialized training for the Emergency Response Team on responding to gas leaks, explosions, and severe weather events.
Monitoring and Reporting	
Incident Reporting	Establish a system for reporting and documenting all emergencies, including near misses, to improve future responses.
Periodic Reviews	Regularly review the EPRP, particularly after significant incidents or changes in the project scope, to ensure its relevance and effectiveness.

Annex 11: Indigenous Peoples' Policy Framework

Introduction and rationale

This Indigenous People Policy Framework (IPPF) will be applied if Indigenous Peoples (IPs) are present as identified during the environmental and social screening process or subsequently during a sub-project ESIA. The subproject developers and LBA are responsible for implementing the necessary actions to meet the requirements outlined by this framework.

Indigenous peoples are unique and a distinct stakeholder of the GCF. The rights of indigenous peoples are affirmed by international human rights instruments, including binding treaties and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Indigenous peoples have invaluable and critical contributions to make to climate change mitigation and adaptation. Yet they are also facing serious threats to the realization of their rights from climate change actions. The importance of engaging with indigenous peoples in climate change policies and actions has been recognized by the Conference of the Parties (CoP) to the United Nations Framework Convention on Climate Change (UNFCCC), including in the Cancun Agreement (decision 1/CP.16). In many cases, IPs do not receive equitable access to project benefits, or benefits are not devised or delivered in a form that is culturally appropriate, and they are not always adequately consulted about the design or implementation of activities that would profoundly affect their lives or communities.

LBA recognizes the importance of indigenous communities and the role they play in conservation, biodiversity as well as cultural preservation. The programme does not envisage impacting IPs but were this to occur, a comprehensive engagement exercise and IP Plan aimed at protecting their rights will be operationalized.

Policy objectives

The overall objective of GCF Policy on IPs is to provide a structure for ensuring that activities are developed and implemented in such a way that fosters full respect, promotion, and safeguarding of indigenous peoples so that they: (a) benefit from GCF activities and projects in a culturally appropriate manner; and (b) do not suffer harm or adverse effects from the design and implementation of GCF-financed activities.

Definition of IPs

According to the Green Climate Fund (GCF) Policy, the term **Indigenous Peoples** is used to refer to a distinct social and cultural group possessing the following characteristics in varying degrees: (a) Self-identification as members of a distinct indigenous social and cultural group and recognition of this identity by others; (b) Collective attachment to geographically distinct habitats, ancestral territories, or areas of seasonal use or occupation as well as to the natural resources in these areas; (c) Customary cultural, economic, social, or political systems that are distinct or separate from those of the mainstream society or culture; and (d) A distinct language or dialect, often different from the official language or languages of the country or region in which they reside. This includes a language or dialect that has existed but does not exist now due to impacts that have made it difficult for a community or group to maintain a distinct language or dialect⁵⁷.

The World Bank in OP 4.10 defines indigenous people (IPs) as a “distinct, vulnerable, social and cultural group possessing the following characteristics in varying degrees: (i) self-identification as members of a distinct indigenous cultural group and recognition of this identity by others; (ii) collective attachment to geographically distinct habitats or ancestral territories in the project area and to natural resources in these habitats and territories; (iii) customary cultural, economic, social or political institutions that are separate from those of the dominant society and culture; and (iv) an indigenous language, often different from the official language of the country or region. IPs generally include minority groups following traditional livelihoods, generally marginalized, and discriminated against by the wider society.”⁵⁸

IPs in Senegal

Senegal is home to several groups who self-identify as Indigenous Peoples especially in the Casamance region. Some of these are hunter-gatherers with some transitioning to agro-pastoralism, others nomadic or seminomadic pastoralists and fishing communities. In the absence of updated and reliable statistics, it is difficult to give precise demographic data of the various groups. Estimations vary greatly and depend on personal or institutional judgments of which group is considered as Indigenous Peoples. A preliminary assessment indicates that it is not likely that indigenous people who meet the World Bank criteria under OP 4.10 will be present and affected in the projects area of influence. This

⁵⁷ <https://www.greenclimate.fund/document/indigenous-peoples-policy>

⁵⁸ <https://thedocs.worldbank.org/en/doc//original/OP-4-10-Annex-A-Social-Assessment>

framework is developed as a precautionary measure to guide mitigating adverse impacts on the vulnerable and marginalized groups, should screening of any sub-project indicate the presence of IPs.

Objective

Although it is not envisaged that indigenous people will be impacted by the programme this framework is developed only as a precautionary measure to ensure that should IPs be affected, measures are put in place to: a) Avoid potentially adverse effects on the Indigenous Peoples' communities; or b) When avoidance is not feasible, minimize, mitigate, or compensate for such effects; c) Ensure that the IPs receive social and economic benefits that are culturally appropriate and gender as well as inter-generationally inclusive; and d) Ensure that there is broad IPs community support for the project. Should screening show the existence of IPs in the project's area of influence, an Indigenous Persons Plan (IPP) will be prepared.

Scope

The requirements of this IPPF apply to communities of Indigenous Peoples identified within each Project Area of Influence of each area where programme is anticipated to occur.

Policy and Legislative

Constitution of Senegal

Indigenous Peoples rights despite not being in well recognized in Senegalese laws, are enshrined in the Constitution of Senegal in several Articles. Article 1 states that *"The Republic of Senegal shall be secular, democratic, and social. It shall ensure equality before the law for all citizens, without distinction as to origin, race, sex, or religion. It shall respect all faiths"*. The official language of the Republic of Senegal shall be French. The national languages shall be Diolo, Malinke, Poular, Serer, Soninke and Wolof and any other national language which has been codified. Article 7 of the Senegalese constitution also supports Indigenous communities and states that *"the human person is sacred and is inviolable"*. Every individual has the right to life, to freedom, to security, the free development of his or her personality, to corporal integrity, and especially to protection against physical mutilation. The Senegalese people recognize the existence of sacred and inalienable human rights as the basis of any human community, of peace and of justice in Senegal and the world. All human beings shall be equal before the law. Men and women shall be

equal in law. No one in Senegal shall have any liabilities or privileges based upon places of birth, status, or family.

Other National Policies and Laws

Senegal legal and regulatory framework includes several provisions, policies and instruments that address inclusion of IPs as well as cultural issues. These include: The National Land Policy, The Decree 2008-694 implementing the Plan for the protection and development of Saint-Louis, Order 2712 establishing the National Commission for the Selection of Living Human Treasure, National Policy on Culture and Heritage etc.

Framework for Indigenous Persons (IPs)

The proposed programme and its components will be subjected to the following methodology: (i) Screening to determine the presence of IPs, (ii) Social assessment, in consultations with communities involved, (iii) Community support through a process of Free Prior Informed Consent (FPIC) (iv) preparation of Indigenous Peoples Plan (IPP) and, (v) Disclosure.

i. Screening

Screening of all the programmes components of the programme for the presence of IPs will be a mandatory requirement prior to implementation to determine if IPs are present in or have collective attachment to, the proposed programme areas. The screening will be carried out by social scientists with expertise on the social and cultural groups in the project area. Extensive consultations with the IPs if present and the executing agency will be undertaken. To ensure inclusive participation: a) Meetings may be conducted in indigenous languages b) Representatives of the IPs in collaboration with the local administration in the sub project area will select a venue that is considered by way of mutual consensus as appropriate. c) Provide adequate notice for the meetings and allow time for consensus building and communication by IPs of their views. d) Appropriate times are selected for most of the IPs to attend.

ii. Social Assessment

After conducting the screening, and IPs are found to be within the LBA pre-programme project areas or are associated with specific groups, a social assessment will be conducted to assess the potential positive and negative impacts of the project on the IPs. Additionally, alternative project options will be explored in cases where adverse effects may be substantial. The type of analysis required for the social assessment will be

proportional to the nature and scale of the proposed sub project's potential and effects on the IPs present. The social assessment will ascertain if the proposed programme involves change in use or management of land that IPs traditionally owned, or customarily occupied. The social assessment will ensure free, prior, and informed consultation (FPIC) with the IPs during project planning and implementation.

iii. Stakeholder Consultation

Engagement will be based on honest and open provision of information, and in a form that is accessible to IPs and at the earliest possible stage before any implementation activities. Engagement will be carried out through traditional authorities and structures within communities respecting traditional decision-making processes as much as possible. Consultations will strive to use indigenous languages, allowing time for consensus building, and will be held in appropriate venues to facilitate IPs to give their views and preferences.

Consultations will be based on the principle of Free, prior, informed and accessible consultation (FPIA - Consultation is a process where affected vulnerable and marginalized communities, freely have the choice, based on sufficient information concerning the benefits and disadvantages of the project and how these activities occur). Good practice in IPs community engagement will aim to ensure that:

- The target IPs understand their rights.
- They are informed about, and understand the full range (short, medium, and long-term) of social and environmental impacts that can result from the proposed programme both positive and negative.
- Any concerns that IPs have about potentially negative impacts are understood and addressed by the project.
- There is mutual understanding and respect between the Project and the IPs as well as other concerned parties.
- Traditional knowledge informs the design and implementation of mitigation strategies and is treated respectfully.
- The concerns raised in the stakeholder engagement processes are inclusive and well captured.

- IPs aspirations are considered in project planning so that people have ownership of, and participate fully in decisions about, community development programs and initiatives.
- The programme is supported fully by the IPs.

iv. Indigenous Peoples Plans (IPPs)

This framework calls for the preparation of Indigenous Peoples Plan (IPP) for each micro-project screened and found to be implemented in areas where IPs are present or have a collective attachment. The IPP will be prepared through a consultative process. All the IPPs that will be prepared will include the following elements, as needed:

- A summary of a scale appropriate to the project, of the legal and institutional framework applicable to Indigenous Peoples. Relevant baseline information on the demographic, social, cultural characteristics of the affected Indigenous Peoples' communities, and the natural resources on which they depend within project affected area.
- A summary of the social assessment findings
- Framework and results of the FPIC with affected IPs, carried out during project preparation and that led to broad community support for the project.
- An Action Plan of measures to ensure that the IPs receive social and economic benefits that are culturally appropriate, including, if necessary, measures to enhance the capacity of the project implementing agencies.
- When potential adverse effects on IPs are identified, appropriate measures are defined to avoid, minimize, mitigate, or compensate for these adverse effects.
- The cost estimates and financing plan for the IPP.
- Accessible procedures appropriate to the project to address grievances by the affected IPs arising from project implementation. When designing the grievance procedures, the borrower considers resolution of grievances at lowest levels possible, the availability of judicial recourse and customary dispute settlement mechanisms among the IPs.
- Monitoring, evaluating, and reporting mechanisms on the implementation of the IPP. These should include arrangements for FPIC with the affected IPs.

Adverse Impacts Permanent effects

Permanent effects could result in loss of use of property, vegetation, or land by the affected person because of the subproject activities. Such effects are anticipated to affect:

- Indigenous groups whose land is found suitable for these infrastructures, and this can translate into either loss of land, pasture, and crop cover or all. The mitigation is for the project to avoid the need for land acquisition and displacement of people.
- Likelihood of sites chosen for sub-projects being of cultural value/ sacred to IPs. It will be essential to have consultations to address such concerns, and ways to avoid or mitigate adverse cultural impacts.
- Increase of infectious diseases like HIV/AIDS due to new interactions of communities, specifically "foreign" workers who will be engaged in the construction activities. Sensitization and awareness about HIV/AIDs will be carried out as a mitigation measure for reducing incidence of contracting HIV/AIDs and other sexually transmitted diseases.

Exclusion of IPs from the project due to:

- Limited understanding of IPs by national and country government officers, and other stakeholders.
- Language barriers due to low literacy and competence in national language
- Cultural barriers that exclude women and youth from certain economic activities and assets
- Livelihood style like pastoralism, hunting and gathering, fishing, women on-farm and household chores.
- Logistical issues like remoteness, distance, and transport cost from and to IPs sites
- Lack of institutional frameworks
- The remoteness of IPs site might limit the market-oriented opportunities Temporal impacts - Temporal impacts will result in an interruption in the current use of property or land by the affected communities or individuals due to subproject activities.

Proposed Mitigation Measures

To avoid or minimize adverse impacts and, at the same time, ensure enhancement of benefits and full participation of the Indigenous People, the project will:

- Ensure that IPs and their organizations are informed of activities selection, design, and implementation processes to seek input and to provide clarification.
- Carry out analysis of socio-economic impacts of proposed sub projects on Indigenous People through a transparent process with the free and informed participation of the affected communities.
- Ensure that the interventions do not unnecessarily and unintentionally exacerbate factors outside the scope of planned impacts.
- Activities of subprojects will be screened to ensure understanding of the nature and magnitude of potential impacts, and explore alternatives geared to minimizing any adverse impacts.
- ESMF will guide the LBA programme spelling out the principles of mitigation measures to address any negative impacts.
- Will undertake needed appropriate mitigation measures. The most important in this respect is consultation with the IP communities, community elders/leaders, civil society organizations and others who have experience working with other Indigenous People.

Development Benefits

The Free, prior, and informed consultation (FPIC) process will be engaged to ensure active involvement of affected Indigenous Peoples (IPs) communities in the LBA programme. These opportunities should correspond to the extent of project impacts, with the goal of enhancing the living conditions and livelihoods of the communities in a culturally fitting manner. Additionally, the objective is to promote the enduring sustainability of the natural resources vital to their way of life. The identified benefits and the agreed-upon process for sharing them will be documented through the IPP. These details will be provided to indigenous peoples and communities enabling informed deliberation and decision-making.

Indigenous Peoples Development Plan

Where indigenous peoples and communities are identified in the project area through the screening process, an IPP will be prepared by subproject developers. The IPP will be

informed by a social and economic assessment, as part of the ESIA, and the consultation processes. The Plan will set out the measures through which LBA will ensure that (a) In case indigenous people are affected by the subprojects they will receive or partake in culturally appropriate social and economic benefits; and (b) if potential adverse effects on indigenous peoples are identified, those adverse effects will be avoided, minimized, mitigated, or compensated. The IPP will provide important inputs to the design and structure of subprojects.

Annex 12: Grievance Notification Form

Grievance title		Case number:
Date/Time/ Location (complaint /Received)	Date (dd-mm-yyyy): Time (24 hr):	Location:
Name		☐ You can use my name but do not use it in public. ☐ You can use my name when talking about this concern in public. ☐ I do not want to give my name.
	Gender (Optional):	Age:
Alternative contact:	I would like the following trusted individual to talk with LBA on my behalf.	
Contact details of the complainant:	☐ Mail: Address where you or your trusted contact receive mail: ☐ Telephone: ☐ E-mail: ☐ I would like to pick up responses at the LBA office. ☐ I would like to pick up responses at specify if applicable	
Location of Residence:	If we would like to talk with you in person, describe where can you normally be found?	
Supporting Documents:	☐ Written (email, invoice, contract, etc.) ☐ Photograph ☐ Other: title, ☐ Voice Recording	
Brief Description: (What happened? Who was involved? Who did it happen to?)		
Follow-up: (How would you like to see this resolved?)		
Acknowledgement of Receipt:	☐ By checking this box, I acknowledge that my grievance has been received by LBA and that I am aware of the grievance resolution process.	

Contact details for witness(es)

Received by _____

Reference No _____

Complainant's Signature _____ Date _____

Name of Witness 1 _____

Signature of Witness 1 _____ Date _____

Name of Witness 2 _____

Signature of Witness 2 _____ Date _____

Annex 13: Agrochemical management

a) Introduction

The sites where the programme will be implemented may not be adversely affected by agrochemicals as there will be promotion of climate-smart agriculture practices. However, there will be a need to have this agrochemical use framework as a cautionary measure. The uncontrolled use of certain chemical products, particularly pesticides in the control of endemic contexts or migratory pests, may, depending on their nature or mode of use, may cause permanent socio-economic and environmental damage that may be permanent thus compromising the achievement of the project's objectives.

Many of the chemical compounds used in the production of agrochemicals are persistent and prone to bioaccumulation. Arsenic, cadmium, fluorine, lead, and mercury accumulation in soil is associated with excessive use of inorganic fertilizers. Overuse of nitrogenous fertilizers results in nitrate leaching into waterbodies, causing eutrophication, and impacting aquatic life and the potability of water. Phosphate gets adsorbed onto soil particles and transported to waterbodies through soil erosion. Excess fertilizer use over prolonged periods results in acidification of soils, degrading soil productivity, health and soil conservation in the long run⁵⁹.

Herbicides like trifluralin triazines and nicotine insecticides are detrimental to biodiversity even in sublethal doses. Excess use of glyphosates—an organophosphate herbicide—has the potential to alter ecosystem functions and impact biodiversity. Agrochemicals, specifically broad-spectrum pesticides, destroy non-pests, beneficial insects, and general biodiversity, fueling crises of biodiversity loss and disturbing ecosystem functions.

Integrated Pest Management (IPM) is an ecosystem-based approach that uses a variety of tactics, including biological control, habitat modification, and cultural modification, to prevent pests and diseases and their long-term impact on agricultural productivity. IPM involves utilizing basic ecological concepts to manipulate pest populations in a way that prevents them from causing harm.

Selecting the best technique for managing pests and diseases requires careful observation and accurate pest identification in Integrated Pest Management (IPM). Monitoring entails inspecting the farm for pests and examining how they affect the vegetation. The best long-term approach to managing pests is to combine techniques that complement one

⁵⁹ Indira, P., Manjula, M., Bhavani. R.V.2022. Agrochemicals Environment and human health.

another rather than working well alone⁶⁰. IPM is a recommended method for dealing with agrochemicals within the programme to safeguard both agricultural productivity and ecosystem health.

The impacts outlined above show the importance of controlling the application of agrochemicals. The LBA Programme promotes the accessibility and application of agrochemicals to beneficiary groups thus it needs to ensure adequate training in correct application of the promoted agrochemicals for coexistence between resource users and protecting ecosystem health.

b) Training outline

To ensure safe and responsible use of fertilizers and pesticides, the following topics should be covered in the training. The table below aligns with **GCF ESS3/IFC PS 3** requirements and focuses on resource efficiency, pollution prevention, and mitigation of risks related to agrochemical use.

Fertilizer Management	Pesticide Management
Selection of Fertilizers: Use fertilizers with low environmental impact and avoid products known to contain heavy metals like arsenic, cadmium, or lead.	Pesticide Selection: Choose pesticides classified as low human toxicity, avoiding those in WHO Hazard Class Ia (extremely hazardous) or Ib (highly hazardous). Use Class II (moderately hazardous) only under stringent controls, as per IFC PS3 para 17 .
Application Regime: Consider timing, quantity, and method of fertilizer application to minimize runoff, nitrate leaching, and GHG emissions.	Storage, Transport, and Handling: Store pesticides in safe, secure locations, following labelling and handling instructions. Avoid purchase or use of highly hazardous chemicals.
Correct Timing and Rate: Apply fertilizers during optimal periods to avoid overuse and environmental degradation. Use precise calibration equipment to ensure efficient application.	Buffer Zones: Establish adequate buffer zones to protect non-target areas such as water bodies and neighboring farms. Minimize off-target spray drift through proper equipment calibration and weather monitoring during applications
Storage and Handling: Train on correct storage to prevent contamination. Ensure fertilizer storage sites are dry and protected from flooding or moisture exposure.	Personal Protective Equipment (PPE): Provide and enforce the use of PPE to minimize exposure during pesticide application. This includes gloves, masks, goggles, and protective clothing. Ensure farmers are trained on safe handling to prevent human health impacts.
Precautionary Measures: Promote the use of alternatives such as compost, mulching, and crop rotation where feasible.	Application Timing and Dosage: Follow exact label instructions and international guidelines for dilution and dosage, using calibrated equipment to ensure accurate applications. Ensure pesticide application records are kept.

⁶⁰ IFAD, 2021. Building the resilience of smallholder farmers to climate change impacts in 7 Sahelian Countries of the Great Green Wall (GGW)

Disposal: Train on proper disposal of empty containers, unused fertilizers, and fertilizers past expiration. Ensure compliance with local environmental regulations.	Disposal of Pesticides: Dispose of pesticide containers, residues, and waste according to FAO International Code of Conduct and WHO standards. Ensure correct disposal methods to avoid contamination of soil and water. Records should be kept of all pesticide disposals.
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The training should be carried out by competent trainers, under consideration of the audience's availability, previous knowledge, linguistic skills, cultural and learning habits, and others.

c) Agrochemical Management Measures within the Programme

To ensure alignment with **GCF ESS3/IFC PS 3** requirements, the following mitigation measures from the **ESMP** table will be integrated into agrochemical management:

Activity/Process	Potential Impact/Risk	Risk Level	Impact Scale	Mitigation Measure	Responsibility	Indicator	Monitoring Frequency
Use of chemical pesticides	Risks of soil contamination, water pollution from runoff, impact on non-target species, human toxicity, and accumulation of hazardous materials in ecosystems. ghg emissions from production and application.	High	National	Integrate pesticide management according to FAO code of conduct. use low-toxicity pesticides, provide training on safe storage, handling, and disposal. monitor water and soil quality regularly. avoid pesticides classified as who hazard class IA or IB.	LBA PMU	No. of farmers trained on pesticide use, no. of incidents of pesticide runoff or leaching, water and soil quality reports. ghg emissions monitored from pesticide use.	Annually

This table demonstrates how to apply the training in practice, ensuring environmental and health safety when using pesticides and other agrochemicals in programme activities.

d) Integrated Pest Management (IPM) Strategy

As part of the overall agrochemical management approach, the **Integrated Pest Management (IPM)** strategy must emphasize non-chemical methods and the safe and minimal use of pesticides. The IPM strategy will include:

- **Biological Control:** Utilizing natural predators and parasites to control pest populations.
- **Cultural Practices:** Crop rotation, planting pest-resistant varieties, and habitat modification to reduce pest attraction.
- **Mechanical Control:** Using traps or barriers to prevent pest infestations.
- **Chemical Control (Last Resort):** Only when necessary, using pesticides that comply with **GCF ESS3/IFC PS 3** and **WHO** standards, as outlined in the pesticide management guidelines.

e) Monitoring and Reporting

Monitoring of agrochemical use, environmental impacts, and health safety measures will be conducted regularly, focusing on:

- **GHG Emissions:** Tracking emissions from pesticide use, including carbon footprints from production and application.
- **Soil and Water Quality:** Monitoring soil contamination and runoff from chemical applications to ensure compliance with national standards.
- **Health and Safety:** Ensuring all involved personnel are trained in using PPE and proper handling practices to minimize health risks.

Annex 14: Occupational Health and Safety (OHS) Procedure

The main objective of the OHS procedure/plan is to maintain a good, functional, and safe workplace for every group of persons participating in the project, including contractors, farmers and service providers. The OHS procedure provides a generic description of issues that should be covered and actions to be taken to ensure that a good, functional and safe workplace is maintained for contractors, farmers and service providers.

During sub-project execution, site specific and detailed OHS procedure should be specified to ensure good, functional and safe workplace for all workers of different categories under the project. The summary of the procedure is presented below.

Issues/Risks	Proposed Actions by Contractor/ service providers	Proposed Actions by Farmers	Proposed Actions by E&S (both LBA and Baobab)
Chemicals and Pesticide Use	(1) Select, purchase, and provide and ensure that all staff handling chemicals, pesticides and other hazardous materials use personal protective equipment (PPE). (2) Ensure that staff handling chemicals, pesticides and other hazardous materials have received appropriate training and have appropriate knowledge before they handle such chemicals, pesticides, and hazardous materials.	(1) Select, purchase, and provide and use appropriate personal protective equipment (PPE). (2) Receive/provide training to staff and labourers through extension agents on storage, handling and application of pesticides and disposal of pesticide containers. (3) Report cases of overuse or accidents due to pesticides and consult medical personnel.	(1) Ensure that ESMP and/or ESIA prepared incorporated well-articulated provisions on Chemical and Pesticide Use (2) Refer to Annex 13 on other issues regarding pesticide handling and application.
Waste (animal and other wastes)	(1) Prepare a waste management plan detailing procedure for handling storage and disposal of waste generated (2) Provide different containers for separation, storage and disposal of wastes. (3) Ensure that staff properly dispose wastes generated at sites. (4) Ensure that staff are trained on appropriate storage, handling and disposal of wastes. (5) Provide PPE for staff handling wastes.	(1) Properly clean pens and animal houses as and when due to avoid waste build-up. (2) Provide containers and bags for storing and disposal of wastes. (3) Provide PPE for laborers cleaning animal houses to avoid health impacts. (4) Ensure that waste generated are properly disposed or sold to crop farmers and to others that need it. (5) Ensure that staff are trained on appropriate storage, handling and disposal of wastes.	(1) Ensure that site specific waste management plan which will cover generation, handling, storage and disposal of wastes is included in the ESMP and/or ESIA.
Machines, earth moving equipment and	(1) Provide PPE for staff handling machines and earth moving equipment.	(1) Provide PPE for staff handling machines. (2) Provide adequate and regular	(1) Provide guidelines to farmers on procedure for handling machines and hand tools.

farm equipment	(2) Provide adequate and regular training to staff handling machines and earth moving equipment. (3) Provide signs at requisite areas at project site to warn staff and visitors of dangers due to earth moving equipment, electricity and other hazards. (4) Ensure that machines are effectively maintained to reduce accidents during operations.	training to staff handling machines. (3) Ensure that machines are effectively maintained to reduce accidents during operations.	(2) Ensure guidelines are incorporated in the ESMP and/or ESIA.
Drugs and alcohol at work place	(1) To guarantee safety of workers, contractors must ensure that workers do not report to work under the influence of alcohol or drug. (2) Ensures that no worker use alcohol or drugs during work hours.	(1) Farmers should ensure that they or their workers do not report to work under the influence of alcohol or drugs. (2) Famers should ensure that they or their workers/laborers do not use alcohol or drugs during work hours.	Provide rules and sanctions regarding the use of alcohol and drugs under the Programme.
Fire Safety	(1) Contractors should take responsible measures to ensure that they do not put themselves or others at risk due to fire in their farms. (2) Conduct training for staff and laborers on emergency response plan and practice evacuation procedure. 3) Provide fire extinguishers at appropriate locations in the farm so that sudden fire outbreak can easily be handled. (4) Provide fire alarm to alert staff and laborers and assembly points in case of fire. (5) Provide visible guidelines for staff and visitors on evacuation procedure and escape routes.	(1) All farmers should take responsible measures to ensure that they do not put themselves or others at risk due to fire in their farms. (2) Conduct training for staff and laborers on emergency response plan and practice evacuation procedure. (3) Provide fire extinguishers at appropriate locations in the farm so that sudden fire outbreak can easily be handled. (4) Provide fire alarm to alert staff and laborers and assembly points in case of fire. (5) Provide visible guidelines for staff and visitors on evacuation (3) procedure and escape routes.	(1) Conduct risk assessment at sample sub-project sites. (2) Provide visible guidelines on evacuation procedure and escape routes.

Annex 15: Chance Find Procedures

World Bank's OP/BP 4.11 Policy addresses physical cultural resources, which are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic or other cultural significance. Physical cultural resources may be located in urban or rural settings, and may be above or below ground, or under water. Their cultural interest may be at the local, provincial, or national level, or within the international community

The proposed sub-projects are not expected to yield archaeological, paleontological or cultural findings of any significance. However, there remains a possibility for (as yet undiscovered) sites of local cultural significance (i.e., sacred sites, cemeteries) and archaeological sites to exist with sub-project areas.

Chance find procedures will be used as follows:

- stop construction activities in the area of the chance find;
- delineate the discovered site or area;
- secure the site to prevent any damage or loss of removable objects;
- notify the supervisory Engineer who, in turn, will notify the responsible local authorities;
- responsible local authorities would conduct a preliminary evaluation of the findings to be performed by archaeologists who will assess the significance and importance of the findings according to various criteria, including aesthetic, historic, scientific or research, social and economic values;
- decisions on how to handle the finding shall be taken by the responsible authorities which could result in changes in layout, conservation, preservation, restoration, and salvage;
- implementation for the management of the finding communicated in writing; and
- construction work could resume only after permission is given from the responsible local authority concerning safeguard of the heritage.

The aforementioned procedures need to be referred to as standard provisions in construction contracts, when applicable.

Annex 16: Addendum on biogas generation

The programme has a Biogas generation component not expected to generate hazardous waste. One by-product is bio-methane which is carbon neutral, The project will come up with an Environmental Health and Safety outline to address all possible impacts.

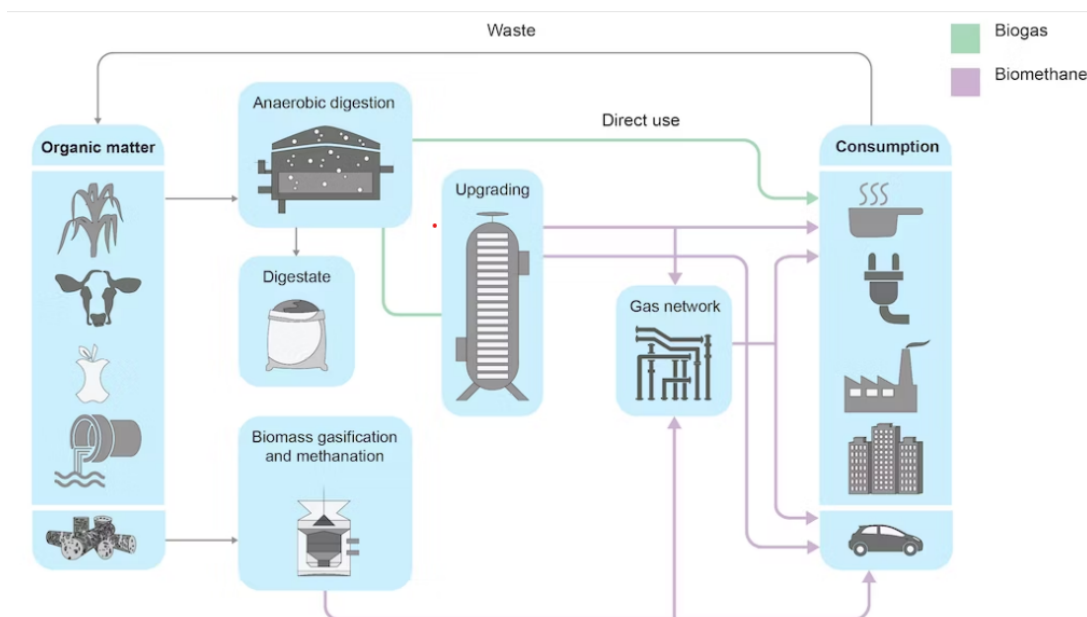


Figure A2: Schematic design of a Biogas plant⁶¹

A robust EHS framework will ensure sustainability of the biogas project and other project elements that may produce waste material. This framework will address potential environmental and social impacts throughout the project lifecycle, from planning and construction to operation and decommissioning. Key elements of the EHS framework are:

1 Planning and Design:

Site selection	Conducting comprehensive ESIA's to identify and mitigate potential impacts on sensitive ecosystems, communities, and cultural heritage.
Technology selection	Evaluate various biogas technologies considering feedstock availability, emissions profile, safety features, ease of operation and maintenance.
Project design	Integrate EHS considerations into project design including waste management plans, emergency response procedures, and community engagement strategies

⁶¹ <https://www.iea.org/reports/outlook-for-biogas-and-biomethane-prospects-for-organic-growth/an-introduction-to-biogas-and-biomethane>

2 Construction and Operation:

Permits and regulations	Obtain all necessary permits and comply with relevant environmental and safety regulations.
Waste management	Establish a comprehensive waste management plan for construction and operational waste, including hazardous materials like digestate and pre-treatment residuals.
Occupational health and safety	Implement safety protocols, training, and personal protective equipment (PPE) for workers involved in construction and operation.
Emission control	Utilize appropriate technologies and practices to minimize air, water, and soil emissions from the biogas plant, adhering to established standards.
Monitoring and reporting	Regularly monitor key environmental parameters and report findings to relevant authorities and stakeholders

3 Social Impacts

Community engagement	Proactively engage with local communities throughout the project lifecycle, addressing concerns, ensuring equitable benefits and participation.
Livelihoods and land use	Assess potential impacts on livelihoods and land use, developing mitigation measures and compensation plans if necessary.
Gender equality	Promote gender equality and equal participation in project activities and benefits.
Cultural heritage	Protect and respect cultural heritage sites and practices in the project area.

4 Monitoring and Evaluation

- Establish a monitoring and evaluation plan to track the effectiveness of EHS measures and identify areas for improvement.
- Conduct regular audits and inspections to ensure compliance with EHS standards and regulations.
- Communicate monitoring results and progress on implementing mitigation measures to stakeholders.

5 Decommissioning and Closure

- Develop a decommissioning plan outlining procedures for dismantling the biogas plant and safely managing residual materials.
- Restore the site to its pre-construction condition to the extent feasible.

Annex 17: Stakeholder Engagement Plan

Stakeholder Engagement Strategy

The stakeholder engagement strategy is designed to ensure the meaningful and effective participation of all program stakeholders in accordance with the objectives and guiding principles of the stakeholder engagement plan. The dialogues will involve all relevant stakeholders, including direct and indirect beneficiaries, local communities, businesses, NGOs, government institutions, local authorities, and marginalized groups. This process will ensure that the views and concerns of all stakeholders, including vulnerable groups, are fully considered, thus contributing to effective implementation.

Table A3: Tentative Stakeholder Engagement Plan

Stakeholder	Topics of engagement	Responsible party	Form and frequency of engagement
La Banque Agricole (LBA)	Execution of project and coordination between the implementing and executing agencies	PMU	Steering committee meetings (Quarterly, continuous)
Baobab Microfinance	Co-executing entity under Component 1	PMU	Quarterly assessment throughout Programme cycle, consultations (quarterly)
Ministry of Agriculture and Rural Equipment (MAER)	Programme facilitation	PMU	Workshops/meetings (When necessary)
Ministry of Youth	Programme inclusivity	PMU	Workshops/meetings (Bi-annual)
Ministry of Livestock and Animal Production (MEPA)	Programme components	PMU	Workshops/meetings (Bi-annual)
Ministry of Finance	Lending component	PMU	Workshops, meetings, trainings (Bi-annual)
Senegal National Meteorological Agency (ANACIM)	Climate assessments for the Programme	PMU	Technical assessments (Quarterly)
Farmer organization's	Subproject implementation	LBA	Technical training, loan administration (Continuous), consultations (quarterly)
Cooperatives	Subproject implementation	LBA	Technical training, loan administration (Continuous), consultations (quarterly)
Micro Small and Medium Enterprises (MSMEs)	Subproject implementation	LBA	Technical training, loan administration (Continuous), consultations (quarterly)
Women and youth Organizations	Subproject implementation	LBA	Technical training, loan administration (Continuous), consultations (quarterly)
Breeders/pastoralists	Subproject implementation	LBA	Technical training, loan administration (Continuous), consultations (quarterly)
Hydraulic unions	Subproject implementation	LBA	Technical training, loan administration (Continuous), consultations (quarterly)
Delegates managing rural water	Subproject implementation	LBA	Technical training, loan administration (Continuous), consultations (quarterly)

Workers	Subproject implementation	LBA	Technical training, safety briefings (Continuous), consultations (Quarterly)
Renewable Energy Operators/ Biogas	Subproject implementation	LBA	Technical training, loan administration (Continuous)
Local Financial Institutions (LFIs)	Consultations under Component 3	LBA, PMU	Round table meetings, webinars, conferences (Annual)
NGOs, CSOs, and other related agricultural organizations	Consultation, Knowledge sharing	LBA, PMU	Round table meetings, webinars, conferences (Annual)
Organization for the Development of the Senegal River (OMVS)	Knowledge sharing, creation of synergies	LBA	Protocols, meetings (Annual)
IFAD, GGGI, AFD, EIB	Knowledge sharing, creation of synergies	LBA, PMU	Round table (Annual)

The stakeholder engagement process will be extended to Baobab Microfinance and Sub-borrowers to ensure alignment and coherence throughout the implementation of the programme. Specific requirements and procedures will guide Baobab Microfinance and Sub-borrowers in stakeholder engagement activities. These include adhering to the principles outlined in the central Stakeholder Engagement Plan (SEP), ensuring regular consultations with local communities, and maintaining transparency in decision-making processes.

LBA and Baobab Microfinance will oversee sub-borrowers' compliance with the SEP requirements, while the Sub-borrowers will be directly responsible for implementing engagement activities at the local level. Both Baobab Microfinance and Sub-borrowers will report engagement outcomes to the Programme Management Unit (PMU) for review and integration into the overall monitoring and evaluation framework

Stakeholder Engagement Action Plan

A tentative Action Plan is presented in Table A4.

Table A4: Stakeholder Engagement Action Plan

Actions	Objectives	Methods and tools	Responsible	Implementation Period	Costs (FCFA)
Inclusion and participation of all stakeholders	- Ensure that all stakeholders are involved in the decision-making process	- Establishment of protocols and conventions - Creation of partnerships	PMU	Throughout the Programme	Incorporated into the Programme costs under Annex 4
Consultation and adequate disclosure of information	- Provide opportunities for all stakeholders to express their opinions and concerns.	- Workshops - Publication of brochures - Development of Programme website	LBA, PMU	Throughout the Programme	Incorporated into the Programme

	- Promote transparency in the decision-making process				costs under Annex 4
Collaboration with administrative, communal, religious, and customary authorities	- Inform the authorities - Obtain support from authorities to facilitate the implementation of Programme activities	-Field Visits -Meetings	PMU	Throughout the Programme	Incorporated into the Programme costs under Annex 4
Organizing consultations with NGOs & development partners	- Collaborate with relevant organizations to benefit from their expertise and field network	- Formal meetings - Working Groups - Document and data sharing	PMU	Throughout the Programme	Incorporated into the Programme costs under Annex 4
Build the capacity of stakeholders (including LBA officers)	- Enable stakeholders to contribute effectively to Programme planning and implementation - Strengthen the skills of LBA's agents on climate-smart agricultural practices	- Training, awareness-raising, knowledge sharing forums	PMU	Throughout the Programme	included under ESMF budget
Formal grievance resolution mechanisms	- Respond effectively to stakeholder concerns - Listen attentively and find equitable and sustainable solutions	- Interviews - Suggestion boxes - Feedback meetings	PMU	Throughout the Programme	included under ESMF budget
Monitoring and evaluation mechanisms	- Implement the Action Plan for Monitoring Programme Stakeholder Engagement (Table A5) - Regularly evaluate the effectiveness of stakeholder engagement. - Identify gaps and adjust engagement strategies. - Ensure the long-term success of the Programme	- Regular monitoring of activities, participatory evaluation, analysis of stakeholder feedback	PMU	Throughout the Programme	Included under Monitoring costs

Monitoring and reporting on stakeholder engagement.

Monitoring Stakeholder Engagement

Tracking stakeholder engagement for the Programme is crucial to ensuring its success and effectiveness. Monitoring will be carried out through a series of activities to assess the implementation of commitments made to stakeholders and adjust approaches where necessary. Overall performance will be reviewed on an ongoing basis to determine the effectiveness of the SEP, including the methods of engagement being used, their

outcomes, and the accuracy of the mapping results. The performance indicators listed in Table A5 will be used to measure the progress and implementation of the SEP components.

The Action plan below will be used to monitor the engagement of Programme stakeholders.

Table A5: Action Plan for Monitoring Programme Stakeholder Engagement

Actions	Indicators to monitor	Responsible	Implementation Period
Collect baseline data on understanding the Programme's objectives	- # of stakeholders consulted, segregated by gender, vulnerable group	PMU	Programme start
Maintain regular contact with stakeholders.	- # of meetings and exchanges - # of informed consent received	PMU	Programme duration
Evaluate results of stakeholder engagement activities	- # of stakeholders consulted, segregated by gender, vulnerable group - Engagement strategy adopted per group	PMU	Programme duration
Implement a grievance resolution mechanism.	- # of comments, grievances raised and addressed over a specified period	PMU	Programme duration
Revise the stakeholder engagement plan based on feedback	- # of engagements conducted - # of changes to the stakeholder engagement plan	PMU	At regular intervals throughout the Programme

Incorporating stakeholder feedback and inputs from engagement activities will be an ongoing process throughout the programme implementation. The feedback gathered during consultations will be systematically reviewed and integrated into the Programme's implementation strategies. These inputs will also be reflected in the refinement of the indicators used to monitor the effectiveness of the stakeholder engagement plan. This approach will ensure that stakeholder concerns and recommendations are not only documented but also operationalized as part of the Programme's adaptive management strategy.

Reporting on Stakeholder Engagement

Reporting stakeholder engagement is essential to maintaining transparency, accountability, and trust throughout the Programme. The aim is to communicate regularly and transparently the progress made, the decisions made, and the impact of stakeholders' contributions to the Programme.

Several mechanisms and tools will be used for reporting:

- **Social and Environmental Newsletters and Reports:** Regular newsletters will be published to inform stakeholders about Programme progress, upcoming events,

and opportunities for participation. In addition, social and environmental assessment reports will be produced to present the results of engagement activities and actions taken to address stakeholder concerns.

- **Monitoring and evaluation reports:** Monitoring and evaluation reports will be produced regularly to assess the effectiveness of stakeholder engagement activities. These reports will highlight results achieved, lessons learned, and possible adjustments to engagement strategies.

The reporting lines and target audience for the Stakeholder Engagement Report will be structured to ensure accountability and actionable follow-up. The results of the monitoring and evaluation reports, including lessons learned and areas for improvement, will be shared with the PMU, which is responsible for deciding on the necessary adjustments to the engagement strategies. The Programme Manager will communicate these changes to the relevant stakeholder groups and ensure that modifications are implemented accordingly. This process is designed to maintain transparency and ensure that stakeholder feedback leads to tangible outcomes.