GOVERNMENT OF THE REPUBLIC OF LIBERIA

Rural Economic Transformation Project (RETRAP)

Environmental and Social Management Framework-ESMF

Final Report

Project ID No.: P175263

April 2021

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ABBREVIATIONS AND ACRONYMS

CDA	Cooperative Development Agency
DBT	Design, Build and Transfer
ESF	Environmental and Social Framework
FBO	Farmer-Based Organization
GBV	Gender-Based Violence
GDP	Gross Domestic Product
IDA	International Development Association (of the World Bank Group)
IFAD	International Fund for Agricultural Development
LACF	Liberia Agriculture Commercialization Fund
MoA	Ministry of Agriculture
MPW	Ministry of Public Works
MoCI	Ministry of Commerce and Industry
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organization
NPK	Nitrogen, Phosphorus, and Potassium
NPV	Net Present Value
OPRC	Output- and Performance-Based Road Contracts
PAD	Project Appraisal Document
PAPD	Pro-Poor Agenda for Prosperity and Development
PDO	Project Development Objectives
PIU	Project Implementation Unit
PMU	Program Management Unit
POM	Project Operational Manual

RETRAP	Rural Economic Transformation Project
SEA	Sexual Exploitation and Abuse
SME	Small and Medium Enterprises
STAR-P	Smallholder Agriculture Transformation and Agribusiness Revitalization Project
WBG	World Bank Group

EXECUTIVE SUMMARY

The Rural Economic Transformation Project (RETRAP) is designed to create agro-marking for the promotion of efficient and effective functioning of the project targeted agricultural value chains (cassava, rubber, poultry and piggery interspersed with vegetables). The establishment of agro-poles requires full knowledge of the value chain in terms of the following: high competitiveness, high economic values, high growth potential, zone of high growth and development potential, interest of community and people, improved accessibility (easy and free movement of goods and people), availability of the basic natural resources (land, water, energy, etc.) to support industrialization. An agro-pole is industrialization of a unique environment or locality based on a specific value chain with the above attributes.

RETRAP project will address significant challenges to developing agri-food value chains in the project areas comprising Maryland, Grand Gedeh, Sinoe, Grand Cape Mount, Grand Kru, Bomi, Nimba, Montserrado, Grand Bassa, Bong and Margibi counties of Liberia. These challenges include: (i) poor organization of smallholder farmers and support institutions; (ii) low productivity due to limited access to improved technologies, and modern inputs; (iii) weak access to markets due to inadequate post-harvest, transport, market infrastructure and; (iv) limited processing capacity and value-added activities. The project's approach is based on three major considerations. The first consideration is to target value chains with high growth potential in an integrated way. The second consideration is to concentrate investments in high-potential areas within the project zone to address binding constraints, achieve greater economies of scale, and eventually crowd-in economic activities. Considering the key role women and youth play in all segments of the value chains, the third consideration ensures that the project addresses gender gaps. The overall implementation of the project will be under the guidance of the Ministry of Agriculture under the Project Management Unit (PMU) and Ministry of Public Work-Infrastructure Implementation Unit. In order to ensure successful delivery of the project, including the mitigation and improvement measures, it will be necessary for the MoA/PMU and MPW/IIU to put in place appropriate processes and mechanisms, and strengthen both its own capacity to guide the environmental and social safeguards processes as well as that of its participating agencies and the participating communities to achieve the project objectives in an efficient and sustainable manner.

It is observed that, the capacity within the MoA, MPW and other line agencies has some levels of experience in environmental and social impact management and laws and regulations in place to control/mitigate adverse impacts. However, there is a need to provide capacity building for MoA/PMU and MPW/IIU in managing environmental and social impact mitigation measures and reporting in the sectors development.

Project Development Objective (PDO)

The project development objective is to improve productivity and market access for smallholder farmers and agri-enterprises for selected value chains in project participating counties.

Project Components

The project will have the following components:

- **Component 1: Improving the Enabling Environment, Strengthening Producer Organizations and Enhancing Agribusiness Development (IDA US$6million):** This component will improve the enabling policy and regulatory environment necessary for private businesses to increase investment and commercial activities and enhancing delivery of quality support services that can foster an inclusive and competitive development of this sector. The component has three sub-components.
- **Component 2: Enhancing Competitiveness and Market Access through Productive Alliances (IDA US$12.5 million):** The objective of this component is to support smallholders and commercially oriented farmers to improve their capacity to operate competitively in selected value chains and have strengthened and more reliable linkages with buyers. It has two subcomponents.
- **Component 3: Agri-Marketing and Road Infrastructure Investments (IDA US$31.5 Million):** The objective of this component is to improve access to markets through the rehabilitation of existing roads, construction of short-span critical cross-drainage structures, and improvement of agro-logistics centers. The component is designed to improve infrastructure along major corridors to unlock productivity in the agriculture sector and provide logistics support to the private sector. The component is linked and in support of a bigger national road transportation agenda of Government of Liberia, aimed at reducing transportation costs, improve communications and making agriculture viable in Liberia. The component has two subcomponents.
- **Component 4. Project coordination and Management and Contingency Emergency Response (IDA US$5 million):** The aim of this component is twofold: (i) establishing appropriate coordination, Monitoring and Evaluation (M&E), and communication regarding Project implementation; and (ii) ensuring that GoL is better equipped to respond to crises and emergencies. It has two subcomponents.

Environmental and Social Risk and Impacts

Overall, the project will have positive impacts as it will: (a) support smallholder farmers with initial capital; (b) improve resilience of farmers to climate change impacts; (c) create jobs and improve livelihood; (d) enhance institutional capacity to support service delivery; (d) improve food security; and (e) contribute to women empowerment through prioritization of interventions and support through training and finance.

The project's risks and potential adverse impacts will range from low to substantial and are mostly associated with the proposed productive alliance interventions under Component 2 and rehabilitation of road and agri-market infrastructure under Component 3. The risk and potential adverse impacts are mostly short-lived and localized and can be easily mitigated through cost effective and tested measures. These are summarized in the table below:

Project Components/Subcomponent	Description	Proposed Menu of Investments	Potential E&S Risks and Impacts

Component 2	**<u>Productive Alliance</u>** Providing matching grants to the farmers' organizations and entrepreneurs, and businesses to develop eligible subprojects. There are about 125 subprojects in these components that will be implemented by the farmers and businesses	**Civil works** • lowland rehabilitation; • clearing of bushland; • construction of post-harvest, storage, and processing facilities; and • small-scale, efficient irrigation systems	Erosion; accidents and injuries; dust; noise; vibration; waste (solid, liquid, hazardous); loss of vegetation and natural habitat; loss of land and assets on land (crops, trees and structures); sexual exploitation abuse & harassment (SEA/H). Child labor, forced labour, prostitutions, Labour influx, COVID-19 spread etc.
		Procurement of goods • farm machinery, • processing equipment, storage units, and transport vehicles	Traffic safety; noise; dust/fumes; vibration
		Farming activities • support for production of selected value chains (cassava, rubber, vegetables, poultry/piggery)	. Pesticides and agrochemicals poisoning and contamination; biodiversity losses, slips, trips, falls, animal attacks, manual handling risks, injuries, waste generation (manure and effluents); exposure to zoonotic diseases; proliferation of flies and disease-borne vectors in poultry/piggery farming; odor; COVID-19 spread
Subcomponent 3.1	**<u>Roads</u>** Rehabilitation of road infrastructure	• Rehabilitation of a 40 km road • Rehabilitation of Road Drainage Structure	Traffic safety; slips, falls, trips; noise; dust/fumes; vibration; waste generation (solid, liquid, hazardous); loss of

			vegetation; accidents and injuries; biodiversity loss; soil and water contamination; erosion; traffic congestion, SEA/H; physical and economic displacement (e.g. temporary and permanent loss of livelihood, and assets); Child labor, forced labour, Labour influx, COVID-19 spread
Subcomponent 3.2	**Modernization of selected agri-markets**	• construction of a number of open market sheds and small storage facilities; • construction of selected infrastructure that requires specialized handling for agricultural produce; and • Construction of internal market path-ways, drainage infrastructure, and water and sanitation facilities.	Slips, falls, trips; noise; dust/fumes; vibration; waste generation (solid, liquid, hazardous); accidents and injuries; SEA/SH; physical and economic displacement (e.g. temporary and permanent loss of livelihood, and assets); Child labor, forced labour, Labour influx, COVID-19 spread, soil and water contamination, community health and safety

E&S Management and Mitigation Measures

This ESMF includes practical E&S measures to mitigate identified risks and impacts throughout the life of the project. The mitigations measures are based on the principle of hierarchical controls comprising avoidance/elimination, minimization/reduction, mitigation, compensation and offsetting. It is anticipated that adherence to the proposed mitigations will enhance social acceptability, environmental soundness and sustainability of the project.

Screening of Sub-project Activities

Environmental and social screening marks the beginning of risk management process for any planned activity. The screening shall be initiated as early as possible along with the activity planning process after the activity is conceived. The screening of sub-projects will include a detailed screening for

biodiversity impacts, to be conducted by a biodiversity specialist taking into account available studies, involving field visits and documented with supporting evidence. The extent of environmental and social assessment that might be required to be carried out in respect of a proposed activity will depend on the outcome of the screening process.

The Project Management Unit (PMU) of MoA will have designated E&S Focal Officers at the project counties who will be directly responsible for carrying out preliminary screening of all sub-projects under the guidance of the Environmental and Social Specialists of the PMU. The E&S Specialists of the PMU will validate the screening reports, recommend and seek advice from the World Bank and EPA on the site-specific E&S instruments to be prepared, if any, before commencement of the subproject activities. Based on the advice of the EPA and the World Bank, the PMU may prepare the following site-specific E&S instruments:

- Site specific Environmental and Social Management Plans (ESMPs);
- Site specific Environmental and Social Impact Assessments (ESIAs);
- Biodiversity Management Plan;
- Resettlement Action Plans (RAPs) or Abbreviated RAP (ARAPs);
- Environmental and Social Audit.

Procedures for E&S Assessment of Subprojects

Where it is determined that a subproject activity requires a site-specific instrument e.g. ESIA, the implementing agency (e.g. MoA/PMU, MPW/IIU) will register the undertaking with the EPA and publish a notice of intent to undertake the activity describing in a concise manner the information necessary for stakeholders or the public to identify their interest. Subsequently, the implementing agency will submit a project brief to the EPA and the relevant Line Ministry who will review and advise on the level of assessment required. The implementing agency will then conduct a scoping study to determine the most relevant areas or substantial matters to focus the study on and this will include the preparation of Terms of Reference (TOR) for the study. The TOR will be submitted to the World Bank for review and clearance. Following clearance of the TOR, the implementing agency may select a consult to prepare the relevant instrument(s). The preparation of the instrument will involve meaning consultations with relevant stakeholders. Once the instrument is prepared, the EPA and the World Bank will review and clear the instrument and it will be disclosed by the implementing agency in the country following which the World Bank will disclose it on its external website.

The E&S Specialists of the implementing agencies bear the responsibility of working with the Procurement Specialist to incorporate E&S clauses, provisions and mitigation measures as identified in the E&S instrument(s) in bidding documents and contracts. Subsequently, the E&S Specialists will participate in the evaluation of contractors and support selected contractors through training and coaching to effectively implement their E&S plans. Additionally, the E&S Specialist will participate in site visits as agreed with the contractor to carry out monitoring activities and provide necessary guidance.

Grievance Redress Mechanism (GRM)

A Grievance Redress Mechanism (GRM) is proposed which will provide a communication platform for hearing and addressing issues arising from project implementation within project communities. The goal is to promote a mutually constructive relationship and enhance the achievement of project development objectives. The GRM is to ensure that complaints are directed and expeditiously addressed by the relevant agencies which are to enhance responsiveness and accountability. The GRM is based on the principles of (a) fairness; (b) objectivity and independence; (c) simplicity and accessibility; (d) responsiveness and efficiency; (e) speed and proportionality; and (f) participatory and social inclusion.

CHAPTER ONE: INTRODUCTION

The Rural Economic Transformation Project (RETRAP) is designed to create agro-marking for the promotion of efficient and effective functioning of the project targeted agricultural value chains (cassava, rubber, poultry and piggery interspersed with vegetables). The establishment of agro-marking requires full knowledge of the value chain in terms of the following: high competitiveness, high economic values, high growth potential, zone of high growth and development potential, interest of community and people, improved accessibility (easy and free movement of goods and people), availability of the basic natural resources (land, water, energy, etc.) to support industrialization. An agro-pole is industrialization of a unique environment or locality based on a specific value chain with the above attributes.

RETRAP project addresses significant challenges to developing agri-food value chains within Liberia, including: (i) poor organization of smallholder farmers and support institutions; (ii) low productivity due to limited access to improved technologies, and modern inputs; (iii) weak access to markets due to inadequate post-harvest, transport, and market infrastructure; and (iv) limited processing capacity and value-added activities. The project's approach is based on three major considerations. The first consideration is to target value chains with high growth potential in an integrated way. The second consideration is to concentrate investments in high-potential areas within the project zone to address binding constraints, achieve greater economies of scale, and eventually crowd-in economic activities. Considering the key role women and youth play in all segments of the value chains, the third consideration ensures that the project addresses gender gaps.

The priority value chains to be supported under the project include cassava, rubber, and poultry/piggery: These three priority commodities are considered strategic both for food security/national supply and for their comparative advantage on the regional markets. The targeted value chains will maximize the economic returns of Project investments and their impact on rural incomes and job creation. Besides creating income-generating opportunities and improved nutrition at the national level, the Project will consciously support women and youth participation in the home gardening of vegetables to improve household nutrition and income. For each of these value chains, the Project will focus on the main production zones in each participating county.

Key environmental and social impacts and risks identified relate to water, land, health and safety, and general disturbances (noise, air, odor, waste). The proposed solutions are applicable to all small and medium scale infrastructures and will require adequate implementation of mitigation and monitoring measures. Impact can be divided into negative environmental and social impacts associated with construction and operation, which depends specifically on the size and nature of RETRAP intervention, site location, and affected areas (i.e. communities and other stakeholders).

The potential environmental and social impacts of RETRAP intervention in funding physical activities are envisaged to be largely localized in spatial extent, short in duration and can be manageable through the implementation of appropriate and cost-effective mitigation measures. However, some of the potential impacts and risks caused by the downstream activities particularly related to pollution, biodiversity

impacts, and land acquisition could be significant including risks related to labor influx and GBV. This ESMF includes a list of the environmental and social screening form for downstream impacts and risks as well as potential impacts and risks of physical interventions which will help in identification of such impacts and risks to ensure that potential adverse impacts and risks are prevented, minimized and/or mitigated appropriately, and positive impacts are enhanced.

1.1 Project Development Objective – PDO

The project development objective (PDO) is to improve productivity and markets access for smallholder farmers' and agri-enterprises for selected value chains in Project participating counties.

RETRAP focuses on addressing important challenges for developing agri-food value chains, paving the way for rural economic transformation. The specific challenges include: (i) weak institutional capacity to deliver agribusiness support services and the organizational capacity of smallholders; (ii) low agricultural productivity resulting from limited access to improved technology, modern inputs, and advisory services; (iii) weak access to markets resulting from inadequate post-harvest, road, transport, and marketing infrastructure; and (iv) limited private sector investment in production, processing capacity, and value-added activities. The project will use a multi-level approach to address those challenges and create lasting economic opportunities for actors in the selected value chains. First, it will strengthen the critical institutions that are responsible for overseeing the development of the sector and providing key services for producers and processors. Second, at various stages of the supply chain, the project will build capacity and provide support (including technical assistance) for investment subprojects geared toward the adoption of new technologies and practices that will increase the productivity of the food system and its resilience to climate change, thereby improving its capacity to meet market demands and compete in new markets. Third, the proposed project will improve rural access and agricultural marketing by upgrading roads and modernizing selected rural markets.

PDO Level Indicators Five key performance indicators are proposed to measure project outcomes: (i) Farmers reached with agricultural assets or services (CRI)[1] (number), disaggregated by gender; (ii) Increased yield of targeted agricultural produce by project-supported farmers, disaggregated by targeted commodity; (iii) Increase in marketed volume of locally produced agricultural commodities by project-supported farmer-based organizations (FBOs), disaggregated by targeted commodity (percentage); (iv) Reduction in transportation time on improved roads (percentage of time saved); and (v) Direct project beneficiaries (CRI) (number), disaggregated by gender.

1.2 Project Beneficiaries

The main beneficiaries of the proposed project will be smallholder farmers and agri-entrepreneurs (private agribusiness investors, cooperatives, and small and medium enterprises processing or providing other services to agri-food systems) who are engaged in the selected value chains. Within this group, the project will give priority to women who are heavily engaged in food crop production, processing, and marketing, as well as young people who are active in various segments of the value chain. The project is expected to reach 60,000 beneficiaries of which at least 40% are women. Other project beneficiaries will include: (i)

[1] Corporate Results Indicator.

key public institutions and their staff involved in agricultural support services, such as MoA, the Central Agricultural Research Institute - Soil and Crop Laboratory (CARI), and National Standards Laboratory of Liberia (NSL); and (ii) NGOs and service providers engaged to implement the project.

1.3 Project Components Description

The project has four (4) components as discussed below:

1.3.1 Component 1: Improving the Enabling Environment for Agribusiness Development (IDA US$ 6million)

The objective of Component 1 is to improve the enabling environment for agribusiness development in Liberia. This objective will be achieved through the following interventions: (i) building the capacity of public agribusiness services to deliver quality services to private investors, including smallholder farmers; (ii) enhancing value chain coordination and public-private dialogue; and (iii) supporting agricultural research and development (R&D) and extension. This component will finance specialized technical assistance, training, works, goods, consulting and non-consulting services, and operational expenses, as detailed below.

Subcomponent 1.1: Improving public agribusiness services

This intervention aims at enhancing the capacity of selected public services that are critical for enabling agribusiness, principally within MoA and the Cooperative Development Agency (CDA). The project will undertake a functional review of these entities and recommend/implement appropriate solutions for improving the quality of their agribusiness services. The focus will be on strategies and solutions for: (i) enhancing entrepreneurship development in agribusiness and promoting private investments in the sector (with a focus on women and youth entrepreneurship); in particular the project will support key activities towards the functioning of an Agribusiness Growth Delivery Unit (AGDU) that is being established as an agribusiness strategy incubator and strategic advisory arm of MoA; (ii) improving governance and partnerships across the selected value chains, and collaboration among agribusiness development programs/projects in the country; and (iii) enhancing the resilience of the food system through the dissemination of climate-smart practices. In addition, MoA will receive support—technical assistance, training, and equipment—to operationalize approved national acts, regulations, and strategies related to seed, food safety, pesticides, fertilizer, and national rice development, and to update and enforce agri-food standards. In implementing these activities, the project will work closely with STAR-P to develop an agriculture database to support monitoring, research, policy making, and the allocation of resources by counties. The system will ensure that farmers, allied institutions of MoA—for instance, the Central Agricultural Research Institute (CARI) and National Standards Laboratory (NSL)—and private sector partners have a shared platform for to access data, share knowledge, and to obtain advisory and financial services. This activity will also include the financing of a training program for MoA (and agencies associated in project implementation) on impacts of climate change, knowledge, and advisory support for adoption of climate smart agriculture practices and technologies.

Subcomponent 1.2: Enhancing value chain coordination and public-private dialogue

For targeted value-chains, the Project will: (i) conduct a stakeholder mapping exercise as the basis to put in place a representative and inclusive Private Public Dialogue (PPD) mechanism; this mapping will also considers climate change actors/agencies which would benefit from a focused trained on impacts of climate change on value-changes and mitigation/adaptive measures; (ii) support the establishment and operation of this mechanism, including training of main stakeholders on its effective use to improve the performance of the value-chains; and (iii) support increased consultations among the value chain stakeholders, through inter alia regular forums to discuss the various constraints of their sub-sectors, review and update the government strategies, develop a shared vision and harmonized approach to minimize potential conflict, devise mechanisms for coordinating donor assistance and creating an enabling environment for private and public investments. Under this intervention, the project will also finance capacity-building for FBOs involved in targeted value-chains. These organizations will receive general support regarding *inter alia* training in group dynamics to promote good governance (including women representation in FBOs management positions), assistance for strategic planning, business management and enterprise development, M&E and marketing intelligence. This will be achieved through provision of technical assistance (long term as well as short term specialized expertise), training support and organization of forums and exchange visits. Finally, for both the PPD and FBOs activities, training will be provided to mainstream climate change in FBOs development strategies; including on options to promote climate smart value chains through the assessment of major climate risks and their impacts on the selected value chains and the development of associated climate smart adaptation strategies.

Subcomponent 1.3: Support to agricultural R&D and extension

The Project will strengthen the capacities of the Department of Regional Development, Research and Extension (DRDRE) of the MoA to carry out its mandates. Support will be provided to: (i) facilitate linkages between extension and research system through information sharing and production of joint periodic bulletin; a main focus would be on climate-smart practices and technologies; (ii) promote the use of e-extension services; (iii) integrate the delivery of nutritional information into the extension advice package; (iv) train County Level Facilitators (CLF) on extension guidelines; these guidelines will incorporate climate change related risks and impacts on agriculture and ways to address them; (v) develop or introduce and adapt climate-smart technologies and practices to enhance resilience at county level; and (vi) strengthen seed multiplication capacity (improved and drought-resistant seeds). In addition, the project will support the Central Agricultural Research Institute - Soil and Crop Laboratory (CARI), and National Standards Laboratory of Liberia (NSL) to identify and implement specific demand-driven knowledge and innovative research and testing equipment. CARI will be supported to develop and maintain linkages with regional agricultural innovation and R&D systems to benefit from technologies developed in countries with similar agro-ecological systems (i.e., Ghana and Nigeria) under regional and country programs. For the implementation of these activities, the project will finance: (a) contracting with third parties in providing specialized services; (b) minor civil works for CARI and NSL office renovations; (c) vehicles, goods, and equipment for the CARI, NSL and DRDRE to perform their project-related

functions including external training; (d) logistics support to private advisory service providers and CLF; and (e) limited operating costs for the CARI, NSL and DRDRE.

1.3.2 Component 2: Enhancing Competitiveness and Market Access through Productive Alliances (US$16.5 Million: IDA US$12.5 million and Beneficiaries US$4.0 million)

The objective of Component 2 is to support smallholders and commercially oriented farmers to improve their capacity, operate competitively in the selected value chains, and establish more reliable linkages with buyers. In doing so, the project will adopt the Productive Alliance approach. It will also emphasize the inclusion of women and the enhancement of their role throughout the targeted value-chains from production to processing and marketing. Emphasis will be placed on facilitating their access to appropriate training and finance.

Considering the capacity constraints of financial institutions and experience with credit lines in Liberia (for example, under STAR-P – P160945), the proposed project will use matching grants as the main financing instrument for productive investment subprojects. Best practices will be applied in managing the matching grant fund, including a staged selection process adhering to strict conditions and criteria, an independent investment committee, and use of a professional fund manager to manage operations.

Subcomponent 2.1: Pre-Investment Activities (IDA US$2 million).

This subcomponent will support pre-investment activities that are designed to pave the way for the development of proposals for investment subprojects that will be considered for financing under Subcomponent 2.2. Pre-investment activities will: (i) promote the project concept and increase outreach to prospective beneficiaries (FBOs and their members, commercial partners, and private financing entities); (ii) identify opportunities for Productive Alliances among FBOs, agri-enterprises, processors, and commercial partners; (iii) identify potential business opportunities for the Productive Alliances; (iv) prepare business plans and proposals for investment subprojects reflecting the identified opportunities; (iv) build capacity among technical service providers to enhance the quality of the services provided to the Productive Alliances; and (v) support studies to evaluate the potential for investments in the selected value chains that will promote climate change mitigation, climate resilience, and the economic inclusion of marginalized groups. Examples of key climate change adaptation/mitigation measures that would be considered for inclusion in business plans include: (a) climate-resilient varieties; (b) investments in infrastructure and the adoption of practices that will prevent soil erosion and retain soil nutrients; (c) improved water management in the context of warming weather patterns; and (d) efficient methods and technologies to manage pests and diseases).

Subcomponent 2.2: Investment Subprojects Supporting Productive Alliances (US$14.5 million: IDA US$10.5 million and Beneficiaries US$4.0 million).

This subcomponent aims to enable smallholders to become more competitive producers, capable of meeting market demands, establishing sustainable linkages with buyers, and effectively integrating into the selected value chains. Under this component, the project will finance matching grants for FBOs, agribusinesses, processors, aggregators, and other participating partners to implement investment subprojects. The RETRAP matching grant resources will be handled through the Liberian Agriculture Commercialization Fund (LACF). The LACF, managed by an independent fund manager, is a special

designated account under the Project Implementation Unit of STAR-P. The Fund Advisory Committee established under STAR-P will provide appropriate governance and oversight of the use of the LACF.

The investment subprojects supported through matching grants from the LACF will be based on subproject proposals prepared by eligible beneficiaries and approved based on independent screening and evaluation of their technical, socioeconomic, financial, and environmental viability. All proposals selected for funding will focus on modernizing individual farm operations, enhancing productivity, and reducing losses (production and post-harvest losses) to meet market demands, with the goal of solidifying partnerships within a value chain. Proposals that empower women (women groups and agri-entrepreneurs) and incorporate climate mitigation and adaptation features (including intercropping and conservation agriculture (which will increase crop diversification); use of climate-resilient seeds and varieties; methods to retain soil nutrients and prevent soil erosion; improved water management; efficient pest and disease management; the use of alternative energy sources; recycling water and waste; and energy saving technologies) will receive priority. The aim is that at least 75% of the sub-projects are climate smart.

Matching grants will be provided through three dedicated windows designed to support the different types of beneficiaries participating in a single investment subproject. The matching grant will cover only part of the overall cost of implementing approved subprojects. Each beneficiary group will be required to provide counterpart funding—in cash (either their own funds or a commercial loan) or (for certain beneficiaries) in kind—to complement the matching grant. The level of counterpart financing required will depend on the type of beneficiary and the amount of the investment to be undertaken; the ranges will be defined in detail and included in the Project Operations Manual (POM). The matching grant windows are:

Window A**, **for organizations of smallholder farmers and other vulnerable groups this window provides matching grants to organizations of smallholders or other vulnerable populations to co-finance their activities in an investment subproject. Vulnerable populations include women entrepreneurs, women-led producer organizations, and youth, who will be encouraged to participate through a targeted information campaign. In areas where smallholders and other vulnerable populations are not organized into groups, the project will work with MoA, other government agencies, and NGOs active in the area to support the formation of producer and agro-based organizations.

Window B, for commercially oriented farmers who are also service providers and are acting as an anchor company in an alliance; this window will directly boost agricultural production to ensure a reliable supply of produce for a value chain. Priority will be given to commercially oriented farmers who: (i) work with smallholder farmers by transferring new technologies and providing technical assistance; (ii) adapt technologies that address binding constraints and risks in agriculture, such as climate change; (iii) create formal partnerships with a selected value chain to ensure access to markets and with research organizations to ensure the transfer of new technology; (iv) create jobs; and (v) contribute to food security.

Window C, for all other partners in an alliance that are participating in an individual investment subproject; Such partners include private businesses that provide aggregation, processing, or other services essential to the subproject's success (for instance, services facilitating compliance with a particular requirement of the final buyer, generating new investment needed for partners to perform their

role in the subproject efficiently, and introducing and integrating climate-smart initiatives and technologies). This window will also support selected financial institutions to provide financing to beneficiaries, with a view to improving the outreach of financial institutions, their product innovation (by developing suitable financing products, including savings products), and their services, and rolling out new products and services in the project counties. This activity is designed to address the major challenge of access to finance from both the demand and supply side. The matching grant will finance 60% of the total costs of the proposal developed by the financial institution, which will use its own resources to cover the remaining 40% of costs.

Under all three matching grant windows, eligible investment subproject expenditures will include: (i) civil works (for example, development of lowlands; clearing bushland; building post-harvest, storage, and processing facilities and small-scale, efficient irrigation systems); (ii) goods, such as productive equipment (for example, farm machinery, processing equipment, storage units, and transport vehicles); (iii) incremental working capital (for example, to purchase improved inputs); and (iv) technical assistance and business advisory services supporting the implementation of the subprojects and enhancing the administrative and managerial capacities of the participating producers. Investment proposals by FBOs and agribusinesses that integrate climate-smart approaches throughout the value chain will receive priority and may qualify for additional bonus financing. Climate smart approaches may include, among others: intercropping systems and conservation agriculture (which will increase crop diversification); seed and other planting material of climate-resilient varieties; approaches and structures for preventing erosion and retaining soil nutrients; improved water management to cope with extreme warm temperatures; efficient pest and disease management; the use of alternative energy sources; recycling water and waste; and saving energy by implementing approaches and digital technologies to reduce GHG emissions in agriculture. Table 1 below summarizes the main characteristics, estimated flow of funds, and number of beneficiaries for each window. The Liberia Agriculture Commercialization Fund (LACF) Grant Manual will set out the detailed eligibility criteria, matching grant amounts, and counterpart contributions for each window.

Table 1: Main characteristics of each matching grant window

Window	**Number of Sub-Projects**	**Average matching grant per subproject US$**	**IDA Contribution**		**Beneficiary contribution (in cash)**		**Total US$ million**
			%	*US$ million*	*%*	*US$ million*	
Window A: Organizations of smallholder farmers and other vulnerable groups	50	145,000	80	5.80	20	1.45	7.25
Window B: Commercially oriented farmers	25	150,000	70	2.625	30	1.125	3.75
Window C: Other partners in an alliance	50	70,000	60	2.10	40	1.4	3.5
Total	**125**			**10.50**		**3.975**	**14.50**

1.3.3 Component 3: Agri-Marketing and Road Infrastructure Investments (IDA US$31.5 Million)

The objective of this component is to improve access to markets through the rehabilitation of existing roads, construction of short-span critical cross-drainage structures, and modernization of selected agri-markets. The component is designed to improve infrastructure along a major corridor (Tappita–Zwedru road) to unlock productivity in the agricultural sector and provide logistics support to the private sector. Component 3 is integrated with the government's larger national road and transportation agenda, which is intended to reduce transportation costs, improve communications, and increase the commercial viability of agriculture. The expected outcomes of investments under Component 3 are reductions in post-harvest losses and marketing costs, closer links between producers and buyers, and increased competitiveness of domestic producers supplying food products to major consumption centers.

Subcomponent 3.1: Roads construction (IDA US$30 million).

Complementing the planned road works financed as part of the South Eastern Corridor Road Asset Management Project (SECRAMP, P149279), under which 100 km of road between Ganta and Tappita is to be rehabilitated, the proposed project will support rehabilitation of a 40-km segment of the 112-km Tappita–Zwedru road. This segment was selected for rehabilitation based on several considerations. Despite its relatively short length, it will provide a critical connection between the agricultural food basket corridor running from Ganta to Zwedru and the all-weather southeastern corridor transport network. It will facilitate the movement of agricultural goods and delivery of services (including the development of transport services), significantly improve access to the main market centers of the southeastern corridor, and foster greater interaction between farmers, businesses, traders, and agro-processors. It also complements on-going improvements elsewhere in the feeder road network, which will unlock the agricultural potential of the entire southeastern region.

For this road work, the proposed project will use Output- and Performance-Based Road Contracts (OPRCs) under a Design, Build and Transfer (DBT) arrangement and will finance the associated consultant services. The conceptual design that has been developed includes full construction of a two-lane carriageway with bituminous surfacing along the existing right-of-way, with a 20-year design life. The design reflects the fact that ordinary road rehabilitation parameters will be ineffective, given Liberia's topography and the risks related to climatic change. The design study anticipates reduced travel time, lower vehicle operating costs, and reliable year-round access, resulting in significant additional traffic. The design will incorporate modern, climate-smart infrastructure standards that increase resilience. Contractors will be incentivized to select materials and implement processes that generate less emission, and the project will enforce the use of bioengineering, which involves the use of vegetation either alone or in conjunction with other civil engineering structures.

Subcomponent 3.2: Modernization of Selected Agri-markets (IDA US$1.5 million).

Subcomponent 2 will finance the modernization of selected existing agri-markets in rural areas; including the construction of: (i) a number of open market sheds and small storage and processing facilities; and (ii) basic market infrastructure such as internal market pathways, drainage infrastructure, and water and sanitation facilities, as well as selected facilities for specialized handling of agricultural produce. All

construction work will be based on a business plan submitted by FBOs or other stakeholders in the market and would be supported by a clear management and maintenance plan, identifying the functions and responsibilities of all parties involved (private or public). The upgradation of these markets will also incorporate design standards that will ensure resilience to the main local risk factors (geophysical conditions and climate change) and reduce green gas emissions by making adopting energy efficient material for the storage facilities and renewable energy systems. The precise locations of these markets will be identified during project implementation.

1.3.4 Component 4: Project Coordination and Management and Contingency Emergency Response (IDA US$5 Million)

The aim of this component is twofold: (i) establishing appropriate coordination, monitoring and evaluation (M&E), and communication regarding project implementation; and (ii) ensuring that GoL is better equipped to respond to crises and emergencies.

Subcomponent 4.1: Project Coordination and Management (IDA US$5 million).

This subcomponent will facilitate: (i) administrative, technical, and financial management of the project; (ii) coordination among all institutional partners to ensure the efficient flow of information and support to all value-chain actors; (iii) effective contractual arrangements with key implementing partners as well as private sector operators; (iv) monitoring and evaluation (M&E) of project performance in procurement, financial management (FM), and environmental and social impacts; and (v) development of communication activities to publicize and disseminate project results, best practices, and success stories. The project will be implemented by the STAR-P Project Implementation Unit (PIU) within the Project Management Unit (PMU) of MoA, which will be strengthened with the appropriate staffing and operating resources to support the implementation of RETRAP.

Subcomponent 4.2: Contingency Emergency Response Component – CERC (zero allocation).

The purpose of this subcomponent is to enable an immediate response if an eligible crisis or emergency arises. As its name implies, the CERC is a World Bank contingent financing mechanism that provides Borrowers rapid access to resources to respond swiftly in the event of an eligible crisis or emergency (defined as “an event that has caused, or is likely to imminently cause, a major adverse economic and/or social impact associated with natural or man-made crises or disasters”). The mechanism for triggering the CERC will be included in the Credit Agreement, which will require (inter alia) preparation of a CERC Manual detailing the applicable fiduciary, environmental and social, monitoring, reporting, and any other implementation arrangements necessary. Provided the World Bank Group agrees with the emergency assessment, the CERC will allow GoL to request the World Bank to reallocate uncommitted resources from other project components to this subcomponent in to cover emergency response and recovery costs or, eventually, to channel additional financing that may become available because of the emergency.

1.3 Purpose and Rational of the ESMF

Per the requirements of the World Bank, all Bank-financed projects must be subjected to Environmental Assessment. The specific environmental assessment tool required to be used is dependent on several factors, but most importantly the project location and details specific project activities. In situations where

the specific details of the sub-project including their specific locations are unknown, an Environmental and Social Management Framework (ESMF) is the most appropriate tool to use.

The ESMF examines the risks and impacts of a project that consists of a program and/or series of sub-projects, and the risks and impacts cannot be determined until the program or sub-project details have been identified.

The ESMF sets out the principles, rules, guidelines, and procedures to meet the requirements of the environmental and social standards (ESS) as well as national laws and regulations. It contains measures and plans to reduce, mitigate and/or offset adverse risks and impacts, provisions for estimating and budgeting the costs of such measures, and information on the agency or agencies responsible for addressing project risks and impacts, including on its capacity to manage environmental and social risks and impacts. It includes adequate information on the broad area in which subprojects are expected to be sited, including any potential environmental and social vulnerabilities of the area; and on the potential impacts that may occur and mitigation measures that might be expected to be used.

1.4 Approach for the preparation of the ESMF

Environmental Assessment is multifaceted, requiring many methods and approaches. The preparation of this ESMF was based on a variety of methods as discussed subsequently. The implementation of the Smallholders Tree Crops Revitalization Support implemented between 2013 and 2018, as well the ongoing STAR-P which is scaled up implementation of MoA agricultural production, serving as a core of knowledge that is being used to prepare this documents, based on both successes and lessons learned.

The ESMF consists of:

- Identification of positive and negative environment and social impacts;
- Identification of environmental and social mitigation measures;
- Baseline data collection on social and environmental conditions of the proposed project areas;
- Screening procedures to be used while screening subproject activities;
- formulation of monitoring, and environmental and social management plans; and
- Capacity building and institutional strengthening for effective implementation of the ESMF.

Based on the information provided in the PAD, the potential environmental and social risks and impacts are likely to emerge from the following: (i) supporting agribusinesses; (ii) construction of a number of open market sheds and small storage facilities; (iii) construction of selected infrastructure that require specialized handling of agri-produce; and (iv) construction of market internal path-ways, drainage infrastructure, toilets and clean water facilities; and (iv) construction of a 40km road along the Tappita-Zwedru stretch for which standalone ESIA, ESMP and RAP, have been prepared for the project activities. The infrastructure to be rehabilitated or established under the Project would incorporate design standards ensuring their resilience to the main local risk factors (geophysical conditions and climate change) and their potential for climate co-benefits (e.g. improved energy efficiency, use of renewable energy, etc.). Detailed locations of these infrastructures and their operation and management would be identified during project implementation etc. The potential impacts are reversible, minimal and can be managed through

proposed cost-effective mitigation measures articulated in this ESMF and subsequently to be outlined in site-specific ESIAs/ESMPs, IPMPs, ARAPs, etc.

1.4.1 Literature Review

All relevant available literature on RETRAP were duly reviewed. These include: The STAR-P ESMF; The Project Appraisal Document (PAD); the STCRSP Project ESMF; RETRAP Components; and other MoA reports. Other documents consulted include: World Bank's new Environmental and Social Framework and Environmental and Social Standards guidance documents; various National Environmental Policies, Laws and Guidelines. Among the laws reviewed were: Environmental Protection Agency Act, 2003 and the (EPML Act 2003); Environmental Protection and Management Law of Liberia.

1.4.2 Consultant Judgment

Consultant judgment (including that of identified stakeholders and the consultants on RETRAP) was relied upon to predict impacts of the project components. Implementation successes and lessons documented through project implementation and research that occurred in similar project, specifically the currently implementation of STAR-P is use for predictions, analysis and trends.

1.4.3 Discussions with Stakeholders

Various consultation meetings and discussions were held with the proposed project beneficiaries, other relevant districts and sector's officials of major implementing partners of the RETRAP. The preparation of this ESMF observed the ESS 10 stakeholder consultative processes and COVID-19 prevention protocols and will continue throughout RETRAP implementation. Stakeholders were further engaged during the preparation of the SEP and RPF; and ESIA and RAP for the road construction component, which sought to identify potential environmental and social risks and impacts from RETRAP activities, and to propagate and disclose project proposed mitigation measures. Project stakeholders can be categorized into:

Primary stakeholders: Individuals, groups or local communities that may be affected by the project, positively or negatively and directly or indirectly especially those who are directly affected, including those who are disadvantaged or vulnerable. The primary stakeholders identified for this project include:

- Poor and vulnerable individuals
- Poor and vulnerable households
- Poor communities in rural and urban areas
- Community leaders and members of poor communities

Secondary stakeholders: Broader stakeholders who may be able to influence the outcome of the project because of their mandate, relationship and knowledge about the beneficiary's communities or political influence.

Discussions with stakeholders centered on experiences with other projects and RETRAP, concerns and recommendations, and community concerns and individual interests with regards to project implementation. A variety of stakeholders were consulted including beneficiaries (and potential

beneficiaries), communities, private sector entities, contractors, service providers, government agencies, and Civil Society Organizations (CSOs).

1.5 ESMF Disclosure

The EPA and World Bank policies require that environmental and social reports for projects are made available to project affected groups, local NGOs, and the public at large. Following clearance from the World Bank, counties and district disclosure sessions will be held in selected beneficiary counties and districts, particularly in areas where there will be large number of potential beneficiaries. E.g. Nimba, Bassa and Maryland counties. Additionally, copies of the ESMF will be made available in selected public places for information and comments. The notification will be done through a newspaper announcement. The notification will provide:

- a brief description of the project
- a list of venues where the ESMF report is on display and available for viewing
- duration of the display period
- contact information for comments

The ESMF will finally be disclosed on the MoA and MPW websites, and the World Bank's external website.

CHAPTER TWO: POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

This section reviews the national policies, regulations, procedures and legal provisions relating to the environment and social issues in development interventions. The reviews have been made against the World Bank Social Framework requirements as well as Liberian applicable laws/policies as summarized below:

2.1 Relevant National Policy Frameworks

National Environment Policy of Liberia 2003

The overall policy goal is to ensure long-term economic prosperity of Liberia through sustainable social and economic development which enhances environmental quality and resource productivity on a long-term basis that meets the requirements of the present generation without endangering the potential of future generations to meet their own needs. The policy recognizes the need for maintaining ecosystems and ecological processes essential for the functioning of the biosphere; ensuring sound management of the natural resources and the environment; adequately protecting human, flora, fauna, their biological communities and habitats against harmful impacts, and to preserve biological diversity; integrate environmental considerations in sector and socio-economic planning at all levels; throughout the nation; and seeking common solutions to environmental problems at regional and international levels.

The Specific Objectives of the policy are as follows:

a) To ensure a quality environment, good health, and a decent wellbeing for all residents in Liberia.
b) To use the Liberian environment in such a way that will be beneficial to the present and future generations. c) To halt and reverse the current environmental degradation, manage the ecosystems in the biosphere for the maintenance of diverse biological diversity.
c) To raise public awareness and promote understanding of the essential linkages between socio-economic development and environmental protection and to ensure that environmental knowledge becomes an integral part of the education system.
d) To encourage the participation of the civil society, NGOs, CBOs, and private sector in the proper management of the environment.
e) To foster communal management of the environment on common or customary land.
f) To enact or promulgate environmental legislation and regulatory measure, which will be complemented by social and economic incentives and institutional arrangements to influence positive environmental management.

g) To establish a resource inventory and environmental accounting for accurate monitoring of the state of the Liberian environment.

h) To ensure that the actual costs for environmental use and abuse are borne by the user under the user pays' and 'polluter pays' principles.

The Policy further call for the harmonization and enforcement of the environment protection and management law and the implementation of national plan; as well as provision of a coherent framework for the various policy interventions necessary to safeguard the environment.

The policy goal is to ensure long-term economic prosperity of Liberia through sustainable social and economic development, which enhances environmental quality and resource productivity on a long-term basis that meets the requirements of the present generation without endangering the potential of future generations to meet their own needs.

Land Rights Policy, 2013

The Policy provides a framework for the management of land in Liberia as follows:

Public Lands – lands designated for future use; managed in the public interest; and owned by a community and used/managed in accordance with customary practices of an area;

Government Lands: land owned by the Government and used for the buildings, projects, or activities of the Government;

Customary Lands - land owned by a community and used or managed in accordance with customary practices and norms. Customary Land rights, including the rights of ownership, use or management, are equally protected as Private Land rights, whether or not the community has self-identified, established a legal entity, or been issued a deed; and

Private Lands - land owned by an individual or private entity, in which management and use decisions are based solely on formal law, where the owner enjoys the full land rights, which include; use and possession, own natural resources on the land, and to transfer all or some of the rights through sale, lease, concession, gift, donation, will, or any other lawful means.

National Environmental and Occupational Health Policy, 2010

In relation to RETRAP, the main objectives of the National Environmental and Occupational Health Policy is to assess the working conditions in major work places, establish data base, plan and implement workers' wellness programs, for the purpose of protecting and promoting health in the workplace for all workers in Liberia, to provide guidelines and standards for the effective implementation and rendering of occupational health services.

2.2 Liberian Legal and Regulatory Frameworks

The Constitution of Liberia 1986

The Constitution provides that, The Republic shall, consistent with the principles of individual freedom and social justice enshrined in the Constitution, manage the national economy and the natural resources of Liberia in such manner as shall ensure the maximum feasible participation of Liberian citizens under conditions of equality as to advance the general welfare of the Liberian people and economic development of Liberia.

Environmental Protection Agency (EPA) Act, 2003

The Act creates the EPA as the principal authority in Liberia for the management of the environment and shall co-ordinate, monitor, supervise and consult with relevant stakeholders on all activities in the protection of the environment and sustainable use of natural resources. Part III of the 2003 Law establishes a fairly comprehensive framework for EIA, including procedures and substantive standards for the approval and rejection of projects. It also provides for public participation and procedures for appeals against EPA decisions.

Environmental Protection and Management law, 2003

The law forms the legal framework for the sustainable development, management and protection of the environment and natural resources by the EPA in partnership with relevant ministries, autonomous agencies and organizations as well as in a close and responsive relationship with the people of Liberia. It addresses a wide range of environmental issues including EIAs amongst others in development projects.

Liberia Land Authority Act, 2018

The Liberia Land Authority resents a framework for land administration in Liberia. It focuses on the main features of good land administration and those pertaining to the identification, ownership, use, and valuation of land, including information on all lands, as well as the identification of land and the determination of rights to the land, recording of those rights, valuation of land and the management of government and public land, coordination of land use planning, the establishment of the institutional framework at central and local government levels to carry out this mandate.

The Forestry Development Authority (FDA) Act, 1976 (as amended)

The primary objectives of the Authority are as follows:

a) Establish a permanent forest estate made up of reserved areas upon which scientific forestry will be practiced;
b) Devote all publicly owned forest lands to their most productive use for the permanent good of the whole people considering both direct and indirect values;
c) Stop needless waste and destruction of the forest and associated natural resources and bring about the profitable harvesting of all forest products while assuring that supplies of these products are perpetuated;
d) Correlate forestry to all other land use and adjust the forest economy to the overall national economy;
e) Conduct essential research in conservation of forest and pattern action programs upon the results of such research;
f) Give training in the practice of forestry; offer technical assistance to all those engaged in forestry activities; and spread knowledge of forestry and the acceptance of conservation of natural resources throughout;

g) Conserve recreational and wildlife resources of the country concurrently with the development of forestry program.

They give the FDA the power to establish Government Forest Reserves, Native Authority Forest Reserves, Communal Forests and National Parks.

2.3 Institutional Framework

Ministry of Commerce and Industry (MOCI)

The MOCI is responsible to establish and regulate commodity and trade standards, collect, evaluate publish data pertaining to commence and industry, establish and enforce standards for business practices, control quality of goods and commodity imported.

Ministry of Agriculture (MoA)

MoA's mission is to create an enabling environment for a more dynamic and vibrant agricultural sector to ensure sustainable food security and employment opportunities for all Liberians. In this role, MoA will support verification and validation of the replacement costs of economic crops that will be affected by the civil works activities of subcomponent 3.1 of the RETRAP.

Ministry of Finance and Development Planning (MFDP)

The MFDP will sign off on Grant Agreement and oversee financial management services through its Project Financial Management Unit (PFMU). The MFDP will lead on project negotiation between the Government of Liberia and the World Bank.

The MFDP leads the implementation of the National Development programs and coordinates multilateral funding support to the Government of Liberia (GoL). The ministry is the principal authority on fiscal and development planning and executing agency of GoL development programs from the fiscal standpoint.

The MFDP houses the Project Financial Management Unit (PFMU), which is responsible for fiduciary management of World Bank-supported projects. It will support RETRAP to prepare a consolidated work plan and budget for the project on an annual basis. The work plans and budgets will include planned expenditures under each component. The PMT will be expected to coordinate and monitor the implementation progress against the work plan/budget

Ministry of Public Works (MPW)

The MPW is responsible for land-use zoning and will be engaged in site selection of subprojects. The Ministry of Public Works carries out the following broad functions:

- Provision of advice, technical services, planning, design, and construction of works projects for other Government Departments and Agencies.
- Management of works and maintenance programs associated with public buildings, roads, bridges, airfields, jetties, water supplies, sewerage, and rural electricity; and
- Maintenance and operation of facilities owned by the Government.

Local Government Authorities (LGA)

The LGA oversees the operation of the local government system and implements policy in relation to local government structures, functions, human resources, and financing.

The LGAs are responsible for the local government administration, the maintenance of peace and healthy social relations and cultural heritage in the hinterland. As such, LGAs will be included on the Grievance Redress Committees at the district and county levels to help in the resolution of PAPs grievances, claims and complaints. The support of LGAs has proved critical in previous projects, and it is expected that their meaningful involvement will enhance the implementation of the project.

Environmental Protection Agency-EPA

In support of the establishment of the EPA, the EPA Act (GoL, 2003a) also established County and District Level environmental committees, responsible for the local delivery of national environmental policy and priorities. In a move towards a more bottom up approach, a key function of the committees is to articulate local level environmental issues to the EPA who in turn are charged with formulating and passing on a relevant response for local level implementation.
In addition, under Section 20 and 21 of the EPA Act (GoL, 2003a), the EPA is mandated to appoint environmental inspectors within the counties to monitor the implementation of environmental standards as established under the EPML (GoL, 2003b). The power of these inspectors is wide ranging but with specific reference to RETRAP, they are well placed to play oversight role on matters of compliance of project activities with EPA and GoL environmental and social requirements.

EPA Regulations and Procedures, 2003
The formal environmental approval and permitting processes will be guided by both the Liberia ESIA procedures as given by the EPA Act (2003) and the World Bank environmental and social standards one (ESS1); which provides guidance on the environmental assessment procedures for WB funded projects.

The Environmental Protection Agency Act (2003) provides for the establishment of an Environmental Protection Agency with functions among others, to review and approve environmental impact statements and environmental impact assessment submitted in accordance with this Act.

Part III of the Environment Protection and Management Law, 2003 provides a mechanism for balancing development and environment concerns. Annex 1 of the act provides a list of projects and activities for which an environment impact assessment license or permit shall be required prior to their commencement.

These procedures establish an EIA process among others, provide enough relevant information to enable the EPA to set an appropriate level of assessment of any proposed undertaking, investment or program for the necessary review and to facilitate the decision making process for the EIA approval. The procedures comprise activities such as project Registration, preparation of project brief, Scoping, EIS preparation, and Public hearing as described by the administrative flow chart in Annex 3.

A) Registration

The MoA being the project proponent will submit an application for an environmental impact assessment license, on a prescribed form addressed to the County Environmental Officer of the Agency in conformity with Section 36 of the Agency Act.

B) Publication of Notice of Intent

Following the submission of an application for an environmental impact assessment permit, the MoA will publish a notice of intent, which will state in concise or prescribed manner information that may be necessary to allow a stakeholder or interested party to identify its interest in the proposed project or activity.

C) Submission of Project Brief

Prior to commencing, carrying out, executing or conducting any of the projects, the MoA will submit to the Agency and the relevant Line Ministry a project brief in a concise or manner for review and approval.

The Agency, in consultation with the Line Ministry, will evaluate the project brief to determine the potential environmental impact of the proposed project or activity and shall make the followings determination:

If a project may have a significant impact on the environment, the Agency shall require the proponent or applicant to prepare an environmental review in accordance with section 13 of this Law; b) If the project or activity will have or is likely to have a significant impact on the environment and the project brief discloses no sufficient mitigation measures, the Agency shall require the proponent or application to prepare an environmental impact study in accordance with section 14 of this Law;;

If the project or activity will not have, or is unlikely to have a significant impact on the environment or that the project discloses sufficient mitigating measures, the Agency may issue: i.) A finding of no significant impact, a "FONSI", and a notice published and placed on the notice board of the registry of the Agency at its head office and the office of the County Environmental Committee for the information of the public;

ii. A certificate of approval; unless the Agency determines that the scope, size and/or sensitivity or the project warrants public consultation prior to the issuance of the certificate of approval.

D) Environmental Reviews

1) The MoA will prepare an environmental review for project or activities that may have a significant impact on the environment, and will contain sufficient information to enable the Agency to determine whether a full environmental impact study should be required for the project;

2) The Agency will promulgate guidelines describing the contents and format of environmental reviews, and specifying the procedures to be followed by the Agency in evaluating environmental reviews.

E) Scoping Process

The scoping process includes extensive stakeholder consultations to:

a) Identify, inform and receive input from the effected stakeholders and interested parties;

b) Determine and narrow the scope of the issues to be addressed in the environmental impact assessment;

c) Identify and define, at an early stage of the EIA process, the significant environmental issues, problems and alternatives related to the different phases of the proposed project or activity;

d) Ensure public participation early in the EIA process;

e) Ensure that all relevant issues and alternatives are adequately addressed in the environmental impact study;

f) Provide the applicant with the information necessary for formulating the terms of reference for the environmental impact study and impact statement; and

g) Guide the applicant's consultants in preparing the environmental impact statement.

The MoA will, in a prescribed manner, submit to the Agency a written scoping report.

Environmental Impact Study and Report If required, an environmental impact study shall be prepared in accordance with the Terms of Reference developed by the MoA based on the results of the scoping activities and in consultation with the Agency and Line Ministry for review by the review committee to be set up by the Agency.

F) Public consultation on the EIS

The Agency will**:**

a) By notice published for the consecutive days, invite comments from the public;

b) The public notice shall state the particulars of the project as set out in section (14) above;

c) The comments under sub-section (a) shall be received by the agency within 30 days of the publication of the notice or within such extended period as the Agency may grant by published notice.

G) Public Hearing

Upon receiving the comments of the public and the Line Ministry or other agencies to which a copy of the environmental impact statement was sent, or upon the expiry of the period stipulated for receipt of comments, and on considering the opinion from the comments, the Agency shall decide whether to hold a public hearing.

H) Approval or Rejection of the Project or Activity

The Agency may.- 1) Approve the project or activity unconditionally if it is satisfied that the project or activity shall not result in significant damage to the environment; 2) Approve the application conditionally by requiring the developer to redesign the project or do such other thing as the Agency considers necessary, taking into consideration the suggestions or comments made and all environmental factors; or 3) Refer the application back to the applicant for further study or submission of additional information; 4) Reject the application where it is of the opinion that the project may cause significant or irreversible damage to the environment.

For subproject requiring ESIA, the ESIA will identify and evaluate potential environmental impacts for the proposed activities, compare alternatives, and design mitigation measures. The preparation of the ESIA will be done in consultation with stakeholders, including people who may be affected. Community consultations are critical in preparing a proposal for the activities likely to have impacts on the environment and communities. The community consultations should identify key issues and determine how the concerns of all parties will be addressed in the ESIA. When an ESIA is necessary, the administrative process enacted by the EPA will be followed and executed.

Procedures for projects requiring an ESIA are as follows:

First stage: Preparation of Terms of Reference

The results of identification, and extent of the ESIA (scoping), the terms of reference will be prepared by the Project's Environmental and Social Specialists.

Second stage: Selection of consultant

Third stage: Preparation of the ESIA with community consultation the report will follow but not limited to the following format:

Description of the study area

Description of the subproject

Discussion and evaluation of alternatives

Environment description

Legal and regulatory

Identifying potential impacts of proposed sub-projects

Process of public consultations

Development of mitigation measures and a monitoring plan, including estimates of costs and responsibility for implementation of surveillance and monitoring

2.4 Relevant International Conventions

The United Nations Convention on Biological Diversity

Liberia ratified the United Nations Convention on Biological Diversity on 8 November 2000 with the realization that it is the best international instrument to address conservation of biological diversity and sustainable use of its components.

The Convention on Biological Diversity provides a comprehensive framework for stopping biodiversity loss. It is a carefully balanced, legally binding international treaty that commits Parties to the triple objective outlined below: a) The conservation of biological diversity; b) The sustainable use of its components; and c) The fair and equitable sharing of benefits arising from the utilization of genetic resources.

2.5 The United Nations Framework Convention on Climate Change (UNFCCC), 1992

The United Nations Framework Convention on Climate Change (UNFCCC) is an international environmental treaty negotiated at the United Nations Conference on Environment and Development (UNCED), informally known as the Earth Summit, held in Rio de Janeiro from 3 to 14 June 1992. The objective of the treaty is to "stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system". With respect to national resource conservation, Article 4(1.d) of the convention requires all Parties to the conventions, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, to "Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems".

Liberia ratified the United Nations Framework Convention on Climate Change (UNFCCC) in November 2002 and implemented an 18-month National Adaptation Programme of Action (NAPA) project in 2004. The national greenhouse gas (GHG) inventory report of Liberia has been prepared as part of Liberia's Initial National Communication (INC), fulfilling its mandatory obligation as a non-Annex I party to the UNFCCC in accordance with Article 4, paragraph 1(a), and Article 12, paragraph 1(a) of the Convention.

2.6 The Ramsar Convention, 1971

The Convention's mission is the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world. The Convention uses a broad definition of wetlands including all lakes and rivers, underground aquifers, swamps and marshes, wet grasslands, peatlands, oases, estuaries, deltas and tidal flats, mangroves and other coastal areas, coral reefs, and all human-made sites such as fish ponds, rice paddies, reservoirs and salt pans. Under the "three pillars" of the Convention, the Contracting Parties commit to:

- work towards the wise use of all their wetlands;
- designate suitable wetlands for the list of Wetlands of International Importance (the "Ramsar List") and ensure their effective management;
- cooperate internationally on transboundary wetlands, shared wetland systems and shared species.

The Convention entered into force in Liberia in 2003 and the country currently has 5 Ramsar Sites designated as Wetlands of International Importance, with a surface area of 95,879 hectares distributed in five counties: Montserrado County (Mesurado Wetlands); Nimba County (Gbedin Wetlands); Bong

County (Kpatawee Wetlands); Grand Cape Mount County (Lake Piso) and Margibi County (Marshall Wetlands).

2.7 World Bank Environmental and Social Framework (ESF)

Projects financed by WB are required to comply with its environmental and social framework. The Bank will, during its supervision missions assess compliance of activities with agreed measures as in the Environmental and Social Commitment Plan (ESCP).

Table 2: The World Bank Environmental and Social Framework (ESF) and relevant Environmental and Social Standards (ESS) to the RETRAP Project

World Bank ESS	Relevance to the Project		Explanation
	YES	NO	
ESS 1. Assessment and Management of Environmental and Social Risks and Impacts	√		ESS1 is applicable to the entire project where social environmental impacts and risks are expected. Specifically, Components 2 and 3will provide financing to support farming activities and civil works such as rehabilitation of existing roads and improvement of agro-marketing infrastructure, which may cause Environmental and Social risks and impact in targeted communities.
ESS 2. Labor and Working Conditions	√		The ESS2 among others promotes safety and health at work as well as fair treatment, nondiscrimination and equal opportunity of project workers. The standard prohibits all forms of forced and child labor and it protects workers including the vulnerable workers such as women, persons with disability, migrant workers etc. The RETRAP will involve direct workers, contracted workers and primary supply workers who must be managed in accordance with the requirements of this standard. The project, among others, is required to institute appropriate occupational health and safety measures to safeguard employees and prepare a written Labor Management Procedures (LMP). The RETRAP has prepared a standalone LMP specifying how the project workers will be managed in accordance with the national laws and the ESS2.
ESS 3. Resource Efficiency and Pollution Prevention and Management	√		This standard promotes sustainable use of resources, including energy, water and raw materials. It also avoids or minimizes pollution including short and long-lived climate pollutants. The project will entail the use of water, raw materials and energy which must be sustainably

World Bank ESS	Relevance to the Project		Explanation
	YES	NO	
			managed. The agriculture component will largely use rainwater for irrigation but may be supported with drip irrigation system to improve on water use efficiency. The agri-processing centers will require energy which may be sourced from renewable sources. Also, project activities must use technologies that do not openly discharge fumes, obnoxious gases, liquid and solid effluents which may be deleterious to the health and safety of communities or contribute to climate change. Water and electric energy are scarce in many parts of Liberia. The agriculture sector, and more specifically the operation of the agri-processing will require important volumes of water which must be sourced sustainably, avoid over-abstraction and water depletion.
ESS 4. Community Health and Safety	√		The ESS4 is relevant as the Project activities are expected to cause health and safety risks and impacts to local communities. Construction heavy machinery and transportation vehicles are likely to increase traffic and cause accidents and other road safety issues. The influx of labor could also expose local communities to public health risks and communicable diseases, such as HIV/AIDS, EBOLA and COVID-19 transmission. The project activities can also cause Sexual Exploitation and Abuse (SEA). These projects and the possible chemicals they might be using could also pollute the drinking water sources of the relevant communities and can pollute the air in the communities.
ESS 5. Land Acquisition, Restriction on Land Use and Involuntary Resettlement	√		The ESS 5 is relevant because the proposed activities under components 2 and 3 are likely to result in land acquisition and resettlement impacts. Component 2 supports rubber replanting and rehabilitation, civil works to support productive alliances (for example, lowland rehabilitation; clearing of bushland; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems), home gardening among others while component 3 will support 40km of road rehabilitation works.

World Bank ESS	Relevance to the Project		Explanation
	YES	NO	
ESS 6. Biodiversity Conservation and Sustainable Management of Living Natural Resources	√		Agriculture activities are dealing with farmers and community resources, transportation of agriculture materials, labors, agri-machinery etc. and thus might damage vegetation, wild life, forests, natural habitats, terrestrial and aquatic life in the project area as well as in its area of influence that could be downstream and upstream.
ESS 7. Indigenous Peoples/Sub-Saharan Historically Underserved Traditional Local Communities		X	This is not relevant as no groups that meet the definition of indigenous peoples in ESS7 have been identified in the project area.
ESS 8. Cultural Heritage	√		This ESS8 is relevant as the construction activities are likely to have risks and impacts on cultural heritage. There is a possibility that the construction activities may result in damage to cultural heritage site such as burial ground and historical sites that could be affected, particularly by Right of Way (RoW)
ESS 9. Financial Intermediaries		X	Not relevant at this stage
ESS 10. Stakeholder Engagement and Information Disclosure	√		The project involves many stakeholders (project affected parties and other interested parties). These parties have the power and the interest on the project implementation and attainment of its PDO. They must be continuously engaged throughout the life of the project. A standalone SEP (including grievance redress mechanism) has been developed as part of the due diligence process which provides a comprehensive approach for engaging different set of stakeholders.

2.8 World Bank Group (WBG) General Environmental, Health and Safety Guidelines

The WBG General Environmental Health and Safety (EHS) Guidelines[2] is a technical reference document containing information on cross-cutting environmental, health and safety issues potentially applicable to all industrial sectors. For this project, the preparation of site-specific instruments e.g. ESIA, ESMP etc. and in particular, the mitigation measures are expected to be formulated in line with

[2] http://documents1.worldbank.org/curated/zh/157871484635724258/pdf/112110-WP-Final-General-EHS-Guidelines.pdf

the guidance provided in these guidelines. The General guidelines applicable to potential development projects are:

- Environmental;
- Occupational Health and Safety;
- Community Health and Safety; and
- Construction and Decommissioning.

CHAPTER THREE: ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS

The RETRAP will target eleven (11) project counties: Maryland, Grand Gedeh, Sinoe, Grand Cape Mount, Grand Kru, Bomi, Nimba, Montserrado, Grand Bassa, Bong and Margibi within Liberia. The environmental and socio-economic conditions in these counties are discussed and will, in many areas, provide a basis for predicting impacts of the project.

3.1 Location

The Republic of Liberia is located at latitudes 4°21' N and 8°33' N of the equator and longitudes 11°28'W and 7°32'W. Liberia covers 111,369km^2, and is located entirely within the humid Upper Guinean Forest Ecosystem in West Africa on the Atlantic Coast. The area of Liberia's Exclusive Economic Zone (EEZ) is 229,700 km^2, extending 370.4 km (200 nautical mi) seaward from shore.

Liberia is located along the Atlantic Coast of West Africa, between Sierra Leone, Cote d'Ivoire and Guinea. The territory is divided into 15 administrative counties. The capital, and by far the largest town, is Monrovia, located in Montserrado County, with a population of one million. The rest of the country is mainly agricultural or forested, with other major towns having only around 50,000 inhabitants, namely the port town of Buchanan (Grand Bassa County) and the inland town of Gbarnga (Bong County).

3.2 Administrative and Political Subdivisions

Liberia is divided into a hierarchical arrangement of 15 political subdivisions of which the eleven (11) targeted counties are part of, (each with a designated county seat). In terms of land areas, the largest project counties are: Nimba County--11,551 km^2; Sinoe County-- 9,764 km^2; Bong County--8,754.0 km^2; and Grand Bassa County--7,813.7 km^2. The remaining project counties range between 1,880 km^2 to 5,663 km^2.

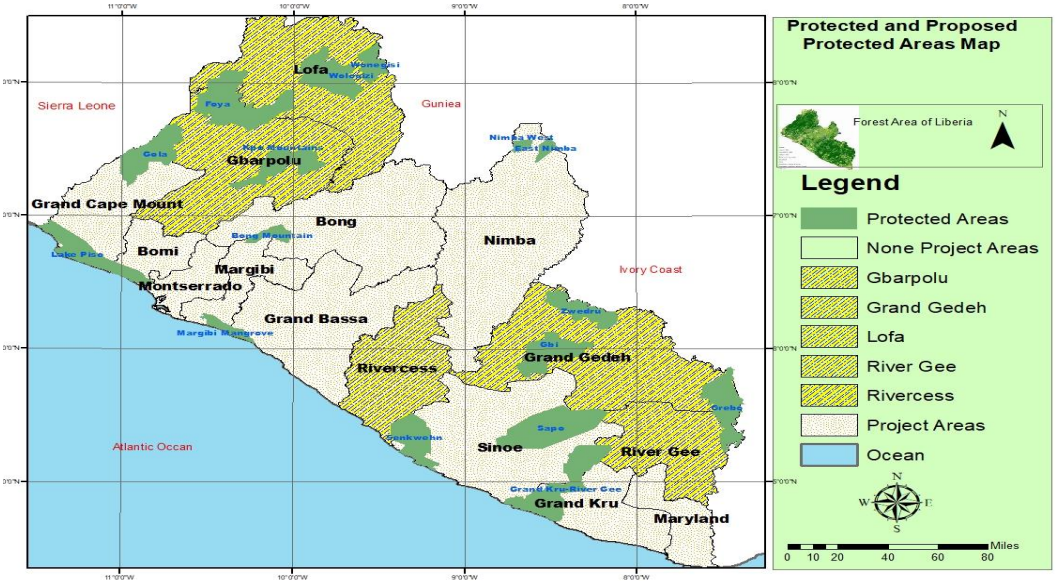

Figure 1: Map of RETRAP Counties
Source: MoA (2021)

3.4 Climate

Liberia's climate consists of two separate climate regimes: the equatorial climate regime restricted to the southernmost part of Liberia; Montserrado, Grand Bassa, Maryland, Maryland, Grand Kru and Sinoe, where rainfall occurs throughout the year and the tropical regime dominated by the interaction of the Inter-tropical convergence zone (ITCZ) and the West African Monsoon, which include Nimba, Bong, Bomi, Margibi and Grand Cape Mount counties. Because of Liberia's coastal location, the southwesterly flow of the monsoon prevails most of the year, maintaining a thin layer of moist marine air near the surface, although the Harmattan Wind typically intrudes for brief periods during the winter in coastal areas. This interaction of the ITCZ with the monsoon flow produces the summer wet season-winter dry season characteristic of a tropical climate.

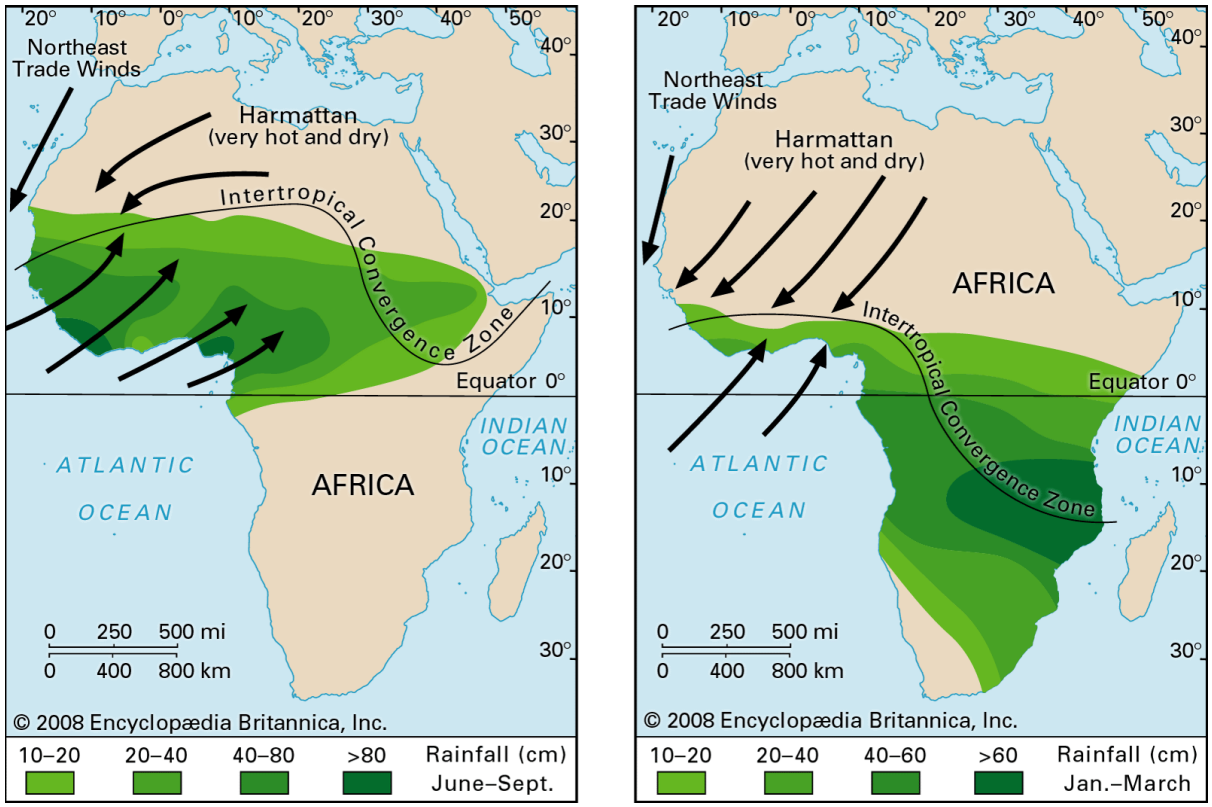

Figure 2: West African monsoon
Source: Encyclopedia Britannica Online (Accessed 19 April 2015)

3.5 Land Cover and Vegetation

Liberia is situated within the Upper Guinean Forest that extends from Guinea at the north-western extreme to the eastern limit in Cameroon. The Upper Guinean Forest is fragmented and Liberia is estimated to account for more than half of West Africa‘s remaining Upper Guinean tropical forest. The climax vegetation over most of Liberia is forest, which covers about 4.39 million hectares or 45% of Liberia’s land area (FDA, 2006). The most recent forest classification (2006) included 2.42 million hectares of closed dense forest in Maryland, Grand Gedeh, Grand Kru and Sinoe. Further, 1.02 million hectares of open dense forest and 0.95 million hectares of agriculture/degraded forest are in Nimba, Margibi, Bomi, Grand Bassa, Bong, Montserrado and Grand Cape Mount.

3.6 Physiography

Liberia has four topographical regions at different altitudes, each with distinct physical features. Along the sea coast is the coastal plain of 560km covering Montserrado and Grand Bassa. Next to the coastal plain is the belt of inundated plateau followed by the belt of high land and rolling hills in the north and northwest respectively. Most mountains are located in the northern part of Liberia which include Bong and Nimba.

3.7 Soil

There are four 4 main Liberian soil types. The soils range from weakly developed muds and hydromorphic clays along the coast in areas such as Montserrado, Grand Bassa, Grand Kru, Sinoe and Maryland. There are inland swamps, to shallow soils on the plateaus and mountains and lateritic hills and terraces in the north area such as Nimba. The soil patterns are determined by differences in age, parent material, physiography, and present and past climatic conditions. Latosols are the most widespread soil type, followed by lithosols, regosols and alluvial or swamp soils in that can be found in Grand Cape Mount, Margibi, Bong and Bomi.

3.8 Hydrography

Freshwater bodies cover 15,050 km² (14%) of the total area of Liberia. These include rivers, lakes, lagoons, creeks and streams that drain to the Atlantic coast in a general northeast–southwest direction (Montserrado and Grand Bassa).

3.8.1 Rivers

There are six major rivers, the Mano, Lofa, St. Paul, St. John, Cestos and Cavalla. Combined, these rivers account for 66% of the country's water resources, draining about 3% (UNEP, 2004). The Cavalla River is the longest river and is shared between Liberia and Côte d'Ivoire.

3.8.2 Lakes

There are only two major lakes in Liberia: Lake Shepherd (7,284 ha) located in Maryland County; and, Lake Piso, which can be more accurately described as an open coastal lagoon, in Grand Cape Mount County. Both lakes are situated adjacent to the Atlantic Ocean.

3.8.3 Wetland

Liberia is party to the Convention on Wetlands of International Importance and has five designated Ramsar Wetland Sites covering a surface area of 95,879 ha. Liberia has numerous brackish wetlands, three of which have been declared Ramsar sites (wetlands designated as internationally important under the Convention of Wetlands): Lake Piso (Grand Cape Mount); Marshall Wetlands; and, Mesurado Wetlands. Other identified coastal wetlands include the Bassa Bwa Lagoon in Grand Bassa and the mouths of the Mano, Lofa, St. Paul, St John, Cestos, Sehnkwehn and Cavalla rivers (Ramsar.Wetlands.org, 2013). Liberia does not support extensive freshwater wetlands because the terrain slopes fairly constantly from the high northern border to the sea. Two small freshwater wetlands have been designated as Ramsar sites: Gbedin Wetlands in Nimba and Kpatawee Wetlands in Bong.

3.8.4 Coast

The coastline of Liberia is 579 km in length, extending from the western border with Sierra Leone to the eastern border with Côte d'Ivoire. Approximately 90% of the coastline consists of sandy beach that vary from 20-25 meters wide at the narrowest, to 60-80 meters at the widest beaches along the south-eastern

extent. The coastline is punctuated with lagoons, estuaries, bays and brackish wetlands covering areas such as Montserrado, Grand Bassa, Sinoe, Grand Kru and Maryland.

3.9 Protected Areas

The protected areas (PAs) are the existing Sapo National Park in Sinoe and Lake Piso Multiple Use Reserve in Grand Cape Mount and proposed Gola National Park in Grand Cape Mount, and the proposed Grebo- Krahn National Park in Grand Gedeh

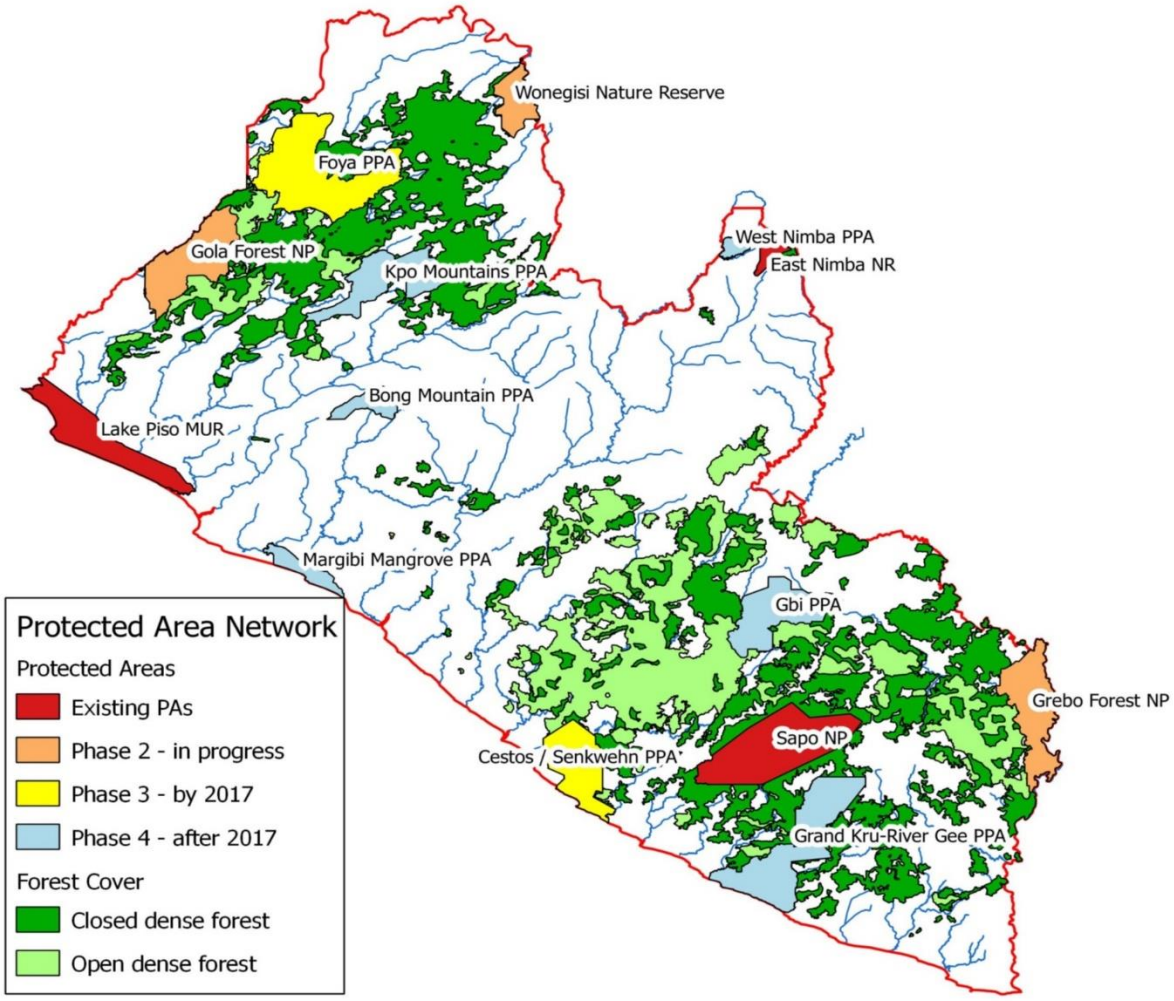

Figure 3: Protected Areas Map
Source: FDA (2021)

Socio-economic Environment

3.10 Population

In 2019, the World Bank pegged the Liberia population at approximately 4.9million with about 50.2% are males while the remaining 49.7% females. The population is growing rapidly with a fertility rate of 4.4 children per woman in 2020. More than two-thirds of the population is under the age of 35 and nearly one half of the population lives in urban areas. There are acute disparities in income, health and education

outcomes between rural and urban populations, exacerbated by poor infrastructure and limited domestic investments. Severe malnutrition is also prevalent with almost one-third (32 percent) of children under five years old being stunted. The composition of the population in the eleven (11) targeted counties is presented in the table below:

Table 3: Population and Sex Ratio for the Targeted eleven (11) counties

	County	**Total**		**Male**		**Female**		**Sex ratio [3] (males to females)**
#		Number	%	Number	%	Number	%	
1	Montserrado	1,364,902	32.2	647,803	47.5	717,099	52.5	90.3
2	Bomi	102,674	2.4	51,078	49.7	51,596	50.3	99
3	Bong	407,041	9.6	200,841	49.3	206,199	50.7	97.4
4	Grand Bassa	270,594	6.4	137,792	50.9	132,802	49.1	103.8
5	Grand Cape Mount	155,106	3.7	77,850	50.2	77,256	49.8	100.8
6	Grand Kru	70,687	1.7	35,070	49.6	35,618	50.4	98.5
7	Margibi	256,228	6	121,870	47.6	134,358	52.4	90.7
8	Maryland	165,923	3.9	79,915	48.2	86,008	51.8	92.9
9	Nimba	563,939	13.3	282,347	50.1	281,592	49.9	100.3
10	Sinoe	124,976	2.9	61,731	49.4	63,245	50.6	97.6
11	Grand Gedeh	152,887	3.6	76,375	50	76,512	50	99.8

Source Liberia HIES (2016)

[3] *The sex ratio is the ratio of males to females in a population. A balanced ratio of one male to one female would be 100:100. In Liberia, there are approximately 96 males to every 100 females (i.e. sex ratio of 95.6).*

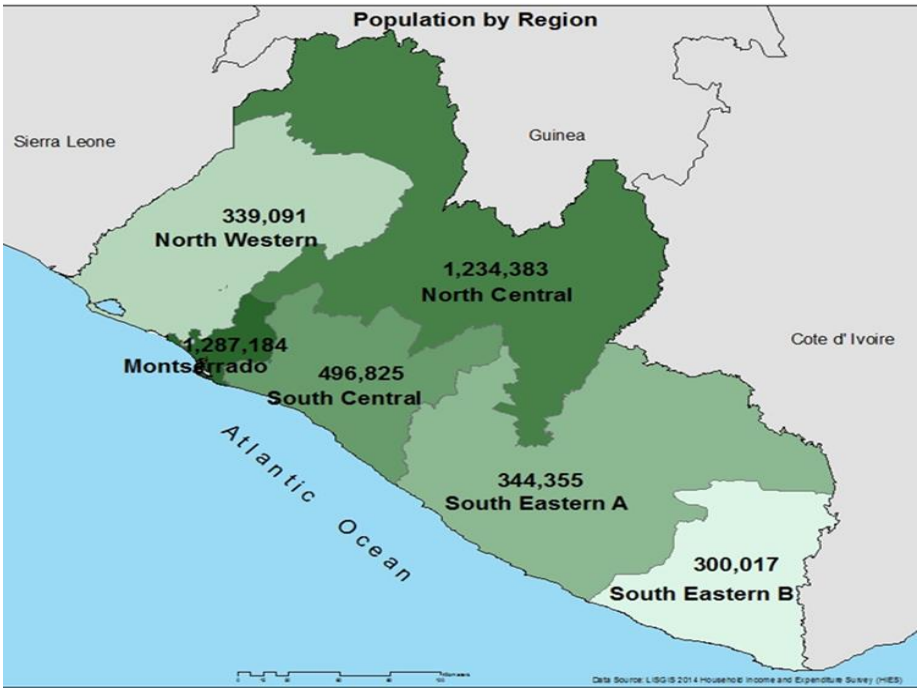

Figure 4: Population by Region Map
Source: LISGIS (2016)

3.10.1 Population Density

In 2019, Liberia population density was about 50 people /km^2. The highest concentration of population occurs in and around coastally located Monrovia, the capital and largest city in the country. As of 2013, Montserrado County had 595 individuals/km^2, and nearby Margibi County had 78 individuals/ km^2, Bomi County, 44 individuals/ km^2, Bong County, 38 individuals/ km^2, and Grand Bassa County, 28 individuals/ km^2, which includes the seaport Buchanan. Other counties with moderate to high relative densities include Maryland County (59 individuals/ km^2, which includes the coastal city of Harper in the extreme southeast, bordering Côte d'Ivoire; north central Nimba County (40 individuals per km$^{2)}$, bordering Guinea and Côte d'Ivoire; and Grand Cape Mount County 27 individuals per km$^{2)}$ in the Northwest, which includes the coastal city of Robertsport bordering Sierra Leone and Guinea. The remaining three (3) project counties have densities ≤15 individual/km^2.

3.11 Poverty

According to the 2016 HIES survey, the national poverty headcount for Liberia is 50.9 percent meaning that slightly more than a half of the Liberian population is poor. This also means that 50.9 percent of Liberians could not achieve the minimum expenditure to acquire basic food and non-food items. Poverty is higher in rural areas compared to urban areas. Rural poverty is 71.6 percent compared to urban poverty at 31.5 percent. Regional poverty was lower in Montserrado, 20.3 percent, followed by 57.2 percent in South Central, 58.4 percent in South Eastern A, 58.6 percent in North Western, and 68.5 percent in the North Central region. The region with the highest poverty level was South Eastern B at 81.3 percent.

At the county level, poverty was lower in Montserrado which includes Monrovia at 20.3 percent, followed 46.3 percent in Sinoe, and by Margibi and Grand Cape Mount at 52.2 and 53.7 percent respectively. The absolute poverty numbers for the remaining project counties can be seen in figure 5 below.

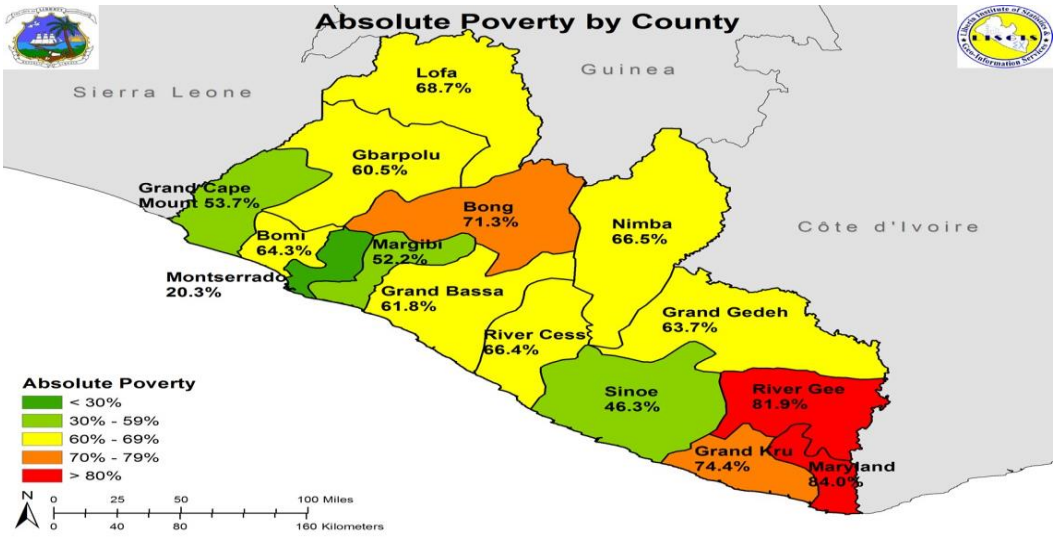

Figure 5: Absolute Poverty by County
Source: LISGIS (2016)

3.11.1 Food Poverty

The food poverty level was 39.1 percent for Liberia. Like absolute poverty, food poverty was higher in rural areas, 50.9 percent, compared to urban areas, 28.1 percent. The level of food poverty in rural areas, however, was significantly lower than the absolute poverty headcount (71.6 percent vs. 50.9 percent), while the levels were nearly the same in urban areas (31.5 percent vs. 28.1 percent). This indicates that in rural areas some households can meet their food needs even though they had relatively little non-food consumption. This is likely the result of subsistence farming in rural areas raising sufficient food to eat regularly, but having little access to income generating activities.

Table 4: Poverty levels by geographic characteristics

#	County	Absolute Poverty	Food Poverty	Extreme Poverty
1	Monrovia/Montserrado	20.3	20.2	2.7
2	Bomi	64.3	44.8	22.2
3	Bong	71.3	55.9	24.7
4	Grand Bassa	61.8	45.0	21.9
5	Grand Cape Mount	53.7	35.3	19.5
6	Grand Kru	74.4	50.1	26.8
7	Margibi	52.2	39.6	14.1
8	Maryland	84.0	71.5	47.5
9	Nimba	66.5	45.2	20.6
10	Sinoe	46.3	19.4	7.6
11	Grand Gedeh	63.7	47.8	17.5

Source: Liberia HIES (2016)

3.12 Distribution of Household Sizes in Project Counties

Regional analysis in Table 6 below shows that Maryland holds the largest average household size at 4.9 people amongst the project counties, with Margibi County in the lowest position at 4.0 household sizes.

Table 5: Distribution of Household Sizes in Project Counties

	Number	Mean Household Size	Mean Adult Equivalent*
County			
Montserrado	330,456	4.1	3.2
Bomi	25,046	4.1	3.1
Bong	96,241	4.2	3.2
Grand Bassa	66,879	4.1	3.1
Grand Cape Mount	38,104	4.1	3.1
Grand Kru	15,000	4.7	3.6
Margibi	63,367	4	3.1
Maryland	33,865	4.9	3.8
Nimba	119,173	4.7	3.6
Sinoe	28,264	4.4	3.4
Grand Gedeh	35,314	4.3	3.4

Source: Liberia HIES (2016)

3.13 Poverty by Gender and Characteristics

Farming households represent 35 percent of Liberian households in 2016. Table 7 reports basic summary statistics for some key characteristics of farming households. These households consist on average of 5 members. However, there are some differences across regions in households' human capital endowment. Farming households in Liberia's South Eastern B, Montserrado, South Eastern A, North Central and North Western regions have much higher levels of dependency ratio[4] than households in the South Central region. The household size per adult equivalent[5] ranges from 3.3 in North western to 4.1 in South Eastern B region. The vast majority of farming households in Liberia are male-headed. One fifth of household heads are female. Households in the South East B are larger and more likely to be headed by a woman.

[4] The dependency ratio per household is the number of dependents (household members who are less than 14 or more than 65 years old) per household members of working age (14-65 years olds).

[5] The adult equivalent measures used are based the standard FAO adult equivalent scales developed in Guinea in 2004, and are therefore considered more relevant to the West African context.

Table 6: Poverty levels by characteristics of household head

Sex of household head	Share	Absolute Poverty	Food Poverty	Extreme Poverty
Female	27.7	46.3	34.2	15.4
Male	72.3	52.3	40.7	16.8
Age of household head				
15 - 19	0.5	41.8	23.4	10.2
20 - 29	13.6	43.0	28.0	12.0
30 - 39	30.3	47.5	35.4	15.2
40 - 49	28.3	53.4	42.7	18.0
50 - 59	16.5	53.0	43.7	16.2
60+	10.8	60.2	47.6	22.2
Highest education level attained of household head				
None	35.8	66.0	48.9	25.6
Primary	13.6	58.7	41.7	19.8
Secondary	41.1	43.8	34.6	10.9
Post-secondary	9.5	15.9	19.7	2.4
Employment sector of household head				
Paid employee	33.0	34.5	29.5	7.1
Self-employed (non-agriculture)	31.1	40.1	30.3	10.2
Self-employed (agriculture)	28.0	79.6	58.0	32.5
Not working / Unpaid employment	0.4	51.2	41.5	19.3

Source: Liberia HIES (2016)

The highest levels of poverty are found in households in which the head has no formal education, 66 percent, compared to 58.7 percent for heads with at least some primary education, 43.8 percent for heads with at least some secondary education, and 15.9 percent for heads with post-secondary education. In terms of food poverty, a larger percent of those with post-secondary education are in food poverty than in poverty overall, which is consistent with most individuals with post-secondary education are residing in Montserrado.

The difference, however, is more extreme than was found between Montserrado and other areas, indicating that in particular those with higher education are more likely to forego food consumption in favor of non-food spending. The trend however is still consistent in that those with post-secondary education have lower food poverty at 19.7 percent compared to 48.9 percent for those with no education, 41.7 percent for those with at least some primary education, and 34.6 percent for those with at least some secondary education. For the extreme poverty, similar trend is reported. Highest levels of extreme poverty are found in households in which the head has no formal education, 25.6 percent, compared to 19.8 percent for heads with at least some primary education, 10.9 percent for heads with at least some secondary education, and 2.4 percent for heads with postsecondary education.

Considering the employment categories of the household head, people living in households in which the head whose primary activity is self-employed agriculture have substantially higher poverty rates, 79.6 percent, compared to those heads working in paid employment, at 34.5 percent; non-agricultural self-

employment, at 40.1 percent; and heads not currently working or are in unpaid employment at, 51.2 percent. About 58 percent of those in agriculture are also in food poverty and more than one-third are in extreme poverty.

3.14 Electricity source

The Household Income and Expenditure Survey (HIES) of 2016 revealed that 82.3% household had no access to electricity in their homes whilst in rural areas the proportion of households without access to electricity is even higher at 96.9%. The Liberian Electricity Corporation electrifies 15.5% of urban households. In urban areas, approximately 14.2% of households obtain electricity from generators (both owned and community sources), while only 1.8% of rural households have access to these options (community and owned generators).

Sources of electricity such as owned generator and community generators are used more by houses headed by female Liberians than male headed households (8.5% versus 8.1% respectively). Likewise, female headed households use more of the LEC supplies (8.6%) than male headed households (7.9%).

Table 7: Percent distribution of main source of electricity for the household by location and gender

	Liberia	Urban	Rural	Male	Female
None	82.3	68.8	96.9	82.4	82.1
Community Generator	5.5	9.9	0.6	4.9	6.8
Own Generator	2.8	4.3	1.2	3.2	1.7
Electricity from Power Supplier (LEC)	8.1	15.5	0.1	7.9	8.6
Other Source	1.4	1.5	1.3	1.6	0.7

*Other source includes Solar panels, Car/motorcycle battery, etc.
Source: Liberia HIES (2016)

3.15 Education

Education is defined as attending a primary school, secondary school or university. Table 7 presents the distribution of the population with at least some formal education. In comparison to the literacy rate, the percent of the population attending formal education is lower (62.7%). Formal education rates are significantly higher in urban areas, between males and within the richest population group.

Table 8: Percent distribution of the literacy rate by location and consumption quintiles

Characteristic	
Liberia	
Area of residence	
Urban	
Rural	
Gender	
Males	
Females	

Quintile	
Poorest Quintile	
Second Quintile	
Third Quintile	
Fourth Quintile	
Richest Quintile	

County	%
Bomi	54.2
Bong	48.8
Grand Bassa	50.7
Grand Cape Mount	41.9
Grand Kru	52.2
Margibi	62.0
Maryland	60.0
Montserrado	82.1
Nimba	59.8
Sinoe	56.5
Grand Gedeh	68.5

Source: LISGIS (2016)

While access to formal education is often correlated with gender, location, and income, age range may be a more important determinant. The youngest group (age 15-19) in the poorest quintile has approximately double the formal education rate of the eldest group (age 65 and above) in the richest quintile.

3.16 Primary health care visits and hospitalizations

This section presents the percentage of Liberians who visited a primary health care provider (PHCP) over the last 30 days and the percentage of Liberians who were hospitalized over the last 12 months prior to the Liberia HIES in 2016. The differentiation between these measures is made by hospitalization being defined once a person stays overnight at the PHCP. Primary health care providers are defined as formal healthcare centers, including hospital and clinics and excluding traditional and faith healers.

Table 9: Percent distribution of people who visited a PHCP and stayed hospitalized by age groups

	Primary health care provider			Overnight hospitalization		
	Liberia	Urban	Rural	Liberia	Urban	Rural
0-4	33.4	31.6	35.0	2.9	3.2	2.6
5-9	16.7	15.8	17.5	2.3	2.9	1.8
10-14	10.3	10.4	10.3	1.1	1.2	1.0
15-19	13.2	12.1	14.8	1.9	2.3	1.1
20-24	21.8	20.1	24.6	4.8	4.7	5.0
25-29	22.3	20.2	25.3	5.9	6.0	5.9

30-34	24.2	24.8	23.5	5.7	6.1	5.2
35-39	21.9	21.4	22.5	4.8	4.3	5.3
40-44	20.3	15.4	25.3	5.1	4.7	5.4
45-49	23.6	23.0	24.2	3.5	3.2	3.7
50-54	22.5	20.2	24.4	4.6	5.0	4.3
55-59	20.2	21.8	18.8	3.8	5.1	2.7
60-64	26.2	28.9	23.8	5.5	6.7	4.3
65+	26.0	26.7	25.7	6.0	5.5	6.4
All ages	20.7	19.3	22.3	3.4	3.6	3.2

Source: Liberia HIES (2016)

3.17 Primary health care provider

It is important to disaggregate the frequency of visits by the type of primary health care provider visited.

At the national level, it is estimated that 63.2% of all the visits made by Liberians in the last 30 days were made to a government facility (be it a government hospital or a government clinic). This is significantly higher than the 23.6% Liberians that visited private non-religious providers (both clinics and hospitals).

Table 10: Percent distribution of primary health care provider by stratum and consumption quintile

	Liberia	**Urban**	**Rural**	**Poorest Quintile**	**3rd Quintile**	**Richest Quintile**
Government hospital	19.0	25.4	13.1	20.5	15.8	17.1
Private hospital	6.0	10.2	2.1	1.6	5.6	15.5
Religious hospital	1.4	1.9	0.9	1.7	1.4	1.4
Government clinic	44.2	20.0	66.7	62.5	46.9	18.4
Private clinic	17.6	28.2	7.7	7.1	18.1	34.3
Religious clinic	1.3	1.7	1.0	1.0	2.0	1.2
Drug dispensary	7.5	10.4	4.8	3.2	6.5	8.0
TTM/NGO	1.1	0.3	1.7	0.8	2.2	0.6
Private doctor/dentist	1.3	1.6	1.0	1.0	0.7	3.0
Other	0.7	0.3	1.0	0.7	0.9	0.5
Total Government	63.2	45.3	79.8	82.9	62.7	35.4
Private non-religious providers	23.6	38.5	9.8	8.7	23.6	49.8

Source: Liberia HIES (2016)

However, urban and rural classification in Table 12 shows that the government providers play a bigger role in primary health care provision in rural areas as compared to urban areas (79.8% versus 45.3% respectively). Inversely visits to private non-religious establishments are higher in urban areas (38.5%) than in rural areas (9.8%). Furthermore, within government providers, hospitals are more frequently visited in urban areas and clinics play a vital role in rural areas.

A further categorization is done by disaggregation of PHCP visits by consumption quintile. From Table 12, it is clear that, as poverty decreases (i.e. higher consumption quintile), the dependency on government facilities as the primary health care provider decreases. The inverse is true for private health care providers, as poverty decreases the percentage points of Liberians that visit private non-religious provider increases (both hospitals and clinics). Private non-religious providers see 49.8% of cases of the group in the richest quintile while only 8.7% in the poorest quintile.

However, the South Central region stands out from the rest as having a relatively high rate of visits to private non-religious providers (32.3%). The South Central region consists of Margibi and Grand Bassa, both of which have private health care providers of considerable quality, including the Firestone hospital in Margibi and the Arcelor Mittal Clinic in Grand Bassa. Similarly, Montserrado holds a greater percent of visitors in private non-religious providers than government hospitals and clinics. It is also noteworthy the importance of drug dispensaries (e.g. pharmacies, drug store e.tc.) in the South Eastern regions such as Sinoe, Grand Kru, Maryland and Grand Gedeh.

Table 11: Percent distribution of primary health care provider by region

	Montserrado	North Central	North Western	South Central	South Eastern A	South Eastern B
Government hospital	15.6	19.3	15.8	16.8	23.3	29.1
Private hospital	13.5	2.4	1.5	10.1	1.8	2.5
Religious hospital	1.4	1.8	0.3	1.5	0.4	1.7
Government clinic	16.3	55.9	67.0	34.5	57.9	54.0
Private clinic	39.6	8.4	9.2	22.2	4.9	5.5
Religious clinic	1.5	1.7	0.1	1.6	1.2	0.4
Drug dispensary	9.8	8.3	2.8	5.8	7.5	5.1
TTM/NGO	0.0	1.1	1.8	2.8	1.6	0.5
Private doctor/dentist	2.4	0.5	0.6	2.4	0.8	0.6
Other	0.0	0.7	1.0	2.3	0.6	0.5
Total Government	31.9	75.1	82.8	51.3	81.2	83.2
Private non-religious providers	53.1	10.8	10.7	32.3	6.8	7.9

Source: Liberia HIES (2016)

3.18 Life Expectancy

Other health indicators are also poor: average life expectancy at birth is 58 years (2013); infant mortality is 70 deaths per 1,000 live births (2013); and, maternal mortality rate is 770 deaths per 100,000 live births (2010). HIV prevalence among adults aged 15-49 years is 1.5% (2009). Adult literacy rates average 61% (2010). Poverty and underdevelopment are not the only challenges. Liberia emerged from its protracted civil war as a deeply divided country, its social fabric torn by ethnicity, religion, geography, and history. There are 16 ethnic groups, and Christianity (85%), Islam (12%), and others (3%) religions are practiced.

3.19 Ethnicity

Maryland, Grand Gedeh, Sinoe and Grand Kru counties are part of the project beneficiary counties, located in the Southeastern region and consist of Grebo, Kru, and Krahn social groups, while the central region consist of the Kpelle and Mandingos social groups of Bong, Bassa of Grand Bassa County and Margibi, which is a mix of the 16 social groups in Liberia with pre-dormant kpelle social group follow by Bassa and Northern Liberia, Manos, Gios, Mandingos of Nimba, and Northwestern Liberia, the Vai social group of Cape Mount and Mandingos, also the Gola social group of Bomi and Montserrado of which all of the 16 social groups are found. All these social groups or tribes have a long history of peaceful coexistence and inter marriage despite the Civil Conflict that had affected the entire Liberia.

CHAPTER FOUR: POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

The assessment of the E&S risks and impacts focused on the potential significant issues that may be associated with the implementation of the project. Based on the sensitivities of the receiving environment, the scale and types of interventions, and the capacity of the implementing agencies to manage the E&S risks, the project's Environmental and Social Risk Classification (ESRC) is rated Substantial. Potential positive and adverse risks and impacts are discussed below.

4.1 RETRAP Positive Impacts

Support smallholder farmers with initial capital: Under the matching grant windows, the project will provide support to civil works (for example, development of lowlands; clearing bushland; building post-harvest, storage, and processing facilities and small-scale, efficient irrigation systems); goods, such as productive equipment (for example, farm machinery, processing equipment, storage units, and transport vehicles); (iii) incremental working capital (for example, to purchase improved inputs); and (iv) technical assistance and business advisory services supporting the implementation of the subprojects and enhancing the administrative and managerial capacities of the participating producers. These interventions will greatly contribute towards removing farming constraints among smallholders and commercially oriented farmers to improve on their capacity and operate competitively in the selected value chains.

Improved resilience of farmers to climate change: The project will provide support to FBOs and agribusinesses that integrate climate-smart approaches throughout the value chains. Climate smart approaches may include, among others: intercropping systems and conservation agriculture (which will increase crop diversification); seed and other planting material of climate-resilient varieties; approaches and structures for preventing erosion and retaining soil nutrients; improved water management to cope with extreme warm temperatures; efficient pest and disease management; the use of alternative energy sources; recycling water and waste; and saving energy by implementing approaches and digital technologies to reduce GHG emissions in agriculture.

Job Creation and improved livelihood: The project will support farming activities and rehabilitation of roads and agro-logistic centers. People especially those form the local communities will be employed directly as laborers, drivers, engineers etc. Women from the local communities will sell food and provide other services for the work force at various sites. The opportunity to farm twice or thrice annually as a result of improved irrigation technologies and climate smart agricultural interventions such as soil and water conservation measures will all contribute to improving the livelihood of project communities. Improvement in livelihood will contribute to reducing poverty in project counties and communities.

Enhanced institutional capacity to support service delivery: The project will strengthen the capacities of the Department of Regional Development, Research and Extension (DRDRE) of the MoA to carry out its mandates In addition, the project will support the Central Agricultural Research Institute - Soil and Crop Laboratory (CARI), and National Standards Laboratory of Liberia (NSL) to identify and implement specific demand-driven knowledge and innovative research and testing equipment. These interventions will immensely contribute to creating robust institutions that will champion agricultural transformation in Liberia.

Improved Food Security: The project will support production of cassava, rubber, poultry/piggery value chains as well as support home-gardening of vegetables. These will contribute to improving food security

and nutrition in the beneficiary project counties. The proposed investments in agro-logistic infrastructure such as processing and storage facilities will contribute to a reduction in post-harvest losses and contribute to stabilizing market fluctuations and availability of the selected commodities.

Gender Empowerment. Under RETRAP, female beneficiaries will be given priority at various project locations, especially female head of household. The project emphasizes on the inclusion of women and the enhancement of their role throughout the targeted value-chains from production to processing and marketing. The project will additionally facilitate women's access to appropriate training and finance. These will contribute to their financial independence, reduces their vulnerability and empower them.

4.2 Potential Adverse Environmental and Social Risks and Impacts of RETRAP Implementation

Project activities with potential adverse environmental and social (E&S) risks and impacts are summarized in the table below:

Table 12: Project Activities with Potential E&S Risks and Impacts

Project Components/Subcomponent	**Description**	**Proposed Menu of Investments**	**Potential E&S Risks and Impacts**
Component 2	**<u>Productive Alliance</u>** Providing matching grants to the farmers' organizations and entrepreneurs, and businesses to develop eligible subprojects. There are about 125 subprojects in these components that will be implemented by the farmers and businesses	**Civil works** • lowland rehabilitation; • clearing of bushland; • construction of post-harvest, storage, and processing facilities; and • small-scale, efficient irrigation systems	Erosion; accidents and injuries; dust; noise; vibration; waste (solid, liquid, hazardous); loss of vegetation and natural habitat; loss of land and assets on land (crops, trees and structures); sexual exploitation abuse & harassment (SEA/H). Child labor, forced labour, prostitutions, Labour influx, COVID-19 spread etc.
		Procurement of goods • farm machinery, • processing equipment, storage units, and transport vehicles	Traffic safety; noise; dust/fumes; vibration

		Farming activities • support for production of selected value chains (cassava, rubber, vegetables, poultry/piggery)	. Pesticides and agrochemicals poisoning and contamination; biodiversity losses, slips, trips, falls, animal attacks, manual handling risks, injuries, waste generation (manure and effluents); exposure to zoonotic diseases; proliferation of flies and disease-borne vectors in poultry/piggery farming; odor; COVID-19 spread
Subcomponent 3.1	**<u>Roads</u>** Rehabilitation of road infrastructure	• Rehabilitation of a 40 km road • Rehabilitation of Road Drainage Structure	Traffic safety; slips, falls, trips; noise; dust/fumes; vibration; waste generation (solid, liquid, hazardous); loss of vegetation; accidents and injuries; biodiversity loss; soil and water contamination; erosion; traffic congestion, SEA/H; physical and economic displacement (e.g. temporary and permanent loss of livelihood, and assets); Child labor, forced labour, Labor influx, COVID-19 spread
Subcomponent 3.2	**Modernization of selected agri-markets**	• construction of a number of open market sheds and small storage facilities; • construction of selected infrastructure that requires	Slips, falls, trips; noise; dust/fumes; vibration; waste generation (solid, liquid, hazardous); accidents and injuries; SEA/SH; physical and economic displacement (e.g. temporary and

		specialized handling for agricultural produce; and • Construction of internal market path-ways, drainage infrastructure, and water and sanitation facilities.	permanent loss of livelihood, and assets); Child labor, forced labour, Labour influx, COVID-19 spread, soil and water contamination, community health and safety

4.2.1 Productive Alliance Adverse Environmental and Social Risks and Impacts

A) Environmental Risks and Impacts

Soil Erosion: During construction of post-harvest infrastructures and processing facilities, vegetation clearance and excavation of soil material could expose the ground to agents of erosion, mostly water. Also, clearing of bush for the production of targeted commodities could expose farmlands to agents of erosion. The project design incorporates soil and water management measures as climate-smart interventions which could mitigate the potential risks of erosion. This impact will be moderate in magnitude and localized at the point of occurrence.

Dust Emission and Noise Pollution: During construction of prost-harvest and processing facilities, there will be movement of construction equipment and labor force at the project site. Dust, exhaust fumes and noise may be emitted from earth moving excavators and trucks and other machinery such as concrete mixers, dumpers, etc. Also, bush clearing to allow for production of targeted commodities may contribute to dust, fumes and noise emissions. These could cause nuisance to workers and fringe communities and may contribute to upper respiratory disorders.

Accidents and Injuries: Project infrastructure works will be associated with different types of accidents at various sites. Injuries may be caused by handling of construction equipment, spills and leakage of hazardous materials, injuries from stepping on or using sharp objects, fires, and accidents by vehicles, motorcycles and bicycles, etc. Construction work entails manual handling risks which could lead to development of work-related upper limb disorders (WRULD).

Waste Generation: Solid and liquid waste including hazardous waste may be generated at the construction site during site preparation and construction and operational phases of agro-logistic centers. Construction waste may consist of timber or metal cuttings, excavated materials, paper/cement bags, empty paint and solvent containers among others. Further, liquid waste will be generated from mobile toilets at various site locations during the construction phases of civil works. Processing facilities may produce a range of waste including chaff, husks from vegetables and cassava peelings which if not well managed can turn into a public health risks to the communities. Effluents from processing facilities are

usually rich in nutrients and may be carried into water bodies causing eutrophication and death of aquatic life. Processing facilities may be a source of hazardous waste from fossil fuel and spent oil used in combustion engines. Land clearing and harvesting of farm produce will generate organic waste which could be used as feed for livestock or composted and incorporated into the soil. Construction and farm workers generally respectively litter around construction and farmlands. The impacts of waste generation could be major but easily managed through readily available mitigations.

Natural Habitat and Vegetation Loss: Some crops and trees established in the site selected for post-harvest infrastructure will have to be cleared before construction. The project affected people (PAPs) will be compensated for home, food consumption, and produce for sale and fodder for livestock. The risks of introduction of invasive species into the area through construction machines or labor force are also anticipated. The scope of impact will be localized and felt in the construction area. The impact will also be long term in terms of duration on construction sites because the crops and land will be lost for as long as the project is implemented.

Water Pollution: Clearing of the land for planting is expected to expose the soil directly to the erosive effects of water and wind. Where water bodies exist near the project sites, clearing activities may result in the deposition of eroded soil material into the water bodies. This could result in siltation. Erosion is expected to be immense if clearing activities are undertaken during the rainy season when run-off is expected to be high. Wind erosion can also occur at the initial stages where large areas of the land are cleared of vegetation. Siltation can lead to reduced capacity especially of the seasonal streams that are found on the project sites causing eutrophication and consequent change in the hydrological regime in the area.

Risk of Exposure to Agrochemicals: Pesticide infestation in farming interventions may require the use of agro-chemicals. Pesticide poisoning to workers due to poor handling, inhalation, and the likely usage of empty pesticide containers for storing water or food may occur. Overexposure to these agrochemicals may result in irritations, nausea, headache, and stomach disturbances.

Risks of Animal Attacks: Project beneficiaries may be exposed to the risk of snake bites and stings from insects e.g. bees during land clearing. Besides, sheds provided for the seedlings may create a congenial environment for most snakes especially in the savanna regions during the hot dry season.

Odor: Odor emissions are caused by a large number of contributing compounds including ammonia (NH_3), volatile organic compounds (VOCs), and hydrogen sulphide (H_2S), from poultry and piggery farms which can affect the life of people living in the vicinity. The health effect on hydrogen sulphide depends on how much (H_2S) a worker breathes and for how long. However, many effects are seen at low concentrations. Effects range from mild headaches or eye irritation, to a very serious unconsciousness or death.

Risks of Vectors Nuisance: Flies are of concern for residents living near poultry and piggery facilities. There are reports that, residences in close proximity to poultry and piggery facilities equally suffer health impacts arising from nuisance by flies and mosquitoes emanating from such enterprises because dampness due to poor handling of water and poor drainage.

Risks of Exposure to Zoonotic Diseased and Dead Animal Carcasses: Operations of poultry and piggery enterprises can expose workers to sick or dead pigs and poultry. Some of these diseases are zoonotic that could cause ill-health among workers and fringe communities.

Wastewater from Poultry and Piggery Farms: Significant environmental issue relating to poultry and piggery farms result from slaughterhouse operations and discharge of wastewater into the environment. Like many other food-processing activities, the necessity for hygiene and quality control in meat processing results in high water usage and consequently high levels of wastewater generation, having high biochemical and chemical oxygen demand (BOD and COD) due to the presence of organic materials.

B) Social Risks and Impacts

Loss of Land and Assets on Land (crops, trees, and structures): The loss of land and assets on land (crops, trees and structures) due to civil works associated with the Productive Alliance is anticipated during RETRAP implementation; hence resulting in potential economic displacement and asset losses. Specific civil works associated with Productive Alliance include lowland rehabilitation; clearing of bushland; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems.

Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH): Considering the country context, social sensitivities, and the concentration of project activities in rural areas with men and women working in unsupervised conditions, Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) is possible even though the risk is anticipated to be low.

Risk of COVID-19 Infections: The highly contagious COVID-19 infection could readily spread among all group of people during the implementation of the project once an infected worker is present at the workplace. It is, however, known to be most contagious, spreading extremely fast in confined areas, and usually in cold conditions. An infected worker could also readily transmit the virus to family members and any others coming into contact.

Risk of Child Labor: For poorer households, use of child labor for agriculture and industry activities is rife. Poor households, contractors and suppliers may tend to use children for economic reasons and convenience. The risk of child labor in the project is low as no person under the age of eighteen (18) years shall be employed or allowed to work under this project as indicated in the standalone Labor Management Procedures (LMP).

4.2.3 Road and Agri-market Infrastructure Adverse Environmental and Social Risks and Impacts

A) Environmental Risks and Impacts

Dust, Fumes and Noise Pollution: The rehabilitation of the 40km road between Ganta and toe-town as well the construction of open market sheds and small storage facilities, drains, water and sanitation facilities will involve movement and use of heavy the use of machinery. Also, construction activities will involve cutting of concrete with cutters, breaking of stones and fabrication of structures. These activities are associated with dust, fumes and noise pollution. The impact could be major, but temporary and localised.

Waste Generation: Waste in the form of solid and liquid will include broken and obsolete construction materials, packaging materials, food and domestic waste from workers, sanitary waste and hazardous

waste from petroleum products e,g, paints and spent oil. Machine and equipment repair and maintenance may discharge hazardous spent oil which could contaminate the soil or water bodies when washed through run-offs. The impacts of waste could be major but will be limited to the immediate vicinity of the construction work.

Soil Erosion and Water Contamination: Land clearing during construction of road and agri-market facilities could loosen up the soil texture and render it vulnerable to erosion. Run-offs may carry soil sediments into water bodies leading to sedimentation and poor water quality. The proposed Ganta to Toe-town road crosses 3 major watercourses (Cestos River, Alogashi River and Gwehn Creek) and a number of small creeks and streams, any of which may be affected. The risk of erosion could be exacerbated during the rainy season.

Accidents and Injuries: The use of construction machinery and equipment may present risks of cutting, entanglement, crushing, impacting etc. to construction workers and passers-by. Manual handling associated with construction activities could cause musculoskeletal disorders to workers especially when repetitive activities such as block/brick laying are involved. Uneven construction ground and surfaces may present risks of falls, trips and slips to construction workers. Unguarded pits may present risk of fall to workers and machinery.

Community Health and Safety Risks: The extraction of construction materials from borrow sites will render the place highly dangerous to the public and project communities. Excavations may be filled with water which may increase the risk of drowning especially among children of fringe communities. Water filled pits may also serve as breeding ground for disease-causing vectors which may proliferate the communities. The road construction activities will entail route planning and diversions which may cause traffic congestion. This coupled with poor road markings, poor lighting, poor signage, poor fencing and poor segregation of vehicles and pedestrians may present road safety risk to project communities. Also, construction trucks, vehicles and machinery could increase traffic-related accidents on certain road due to the increment in fleet.

Loss of vegetation/Biodiversity and Habitat: While the project will maintain the existing road layout and thereby reduce the need for vegetation clearance, there may be instances where the right of way (RoW) may be cleared to allow for proper road alignment. These may contribute to a minimum loss of vegetation. Borrow pit areas may also loss vegetation that may take many years to regrow due to loss of the top soil. The location of the proposed road is rich in biodiversity. Wildlife are expected to cross from one end of the road to the other. The operational stage of the road may witness knockdowns of wildlife if safe passage corridors or routes are not included in the road designs.

B) <u>Social Risks and Impacts</u>

Potential adverse social risks and impacts could include the following:

Physical and Economic Displacement: Civil work activities under subcomponent 3.1 are expected to be carried out within an existing ROW. However, the activities could result in permanent and temporary physical or economic displacement of people and businesses along the road corridor. The expected impacts include loss of residential properties, temporary structures, farms, economic trees, loss of business

leading to income losses, loss of communal properties such as graves in the ROW of the road corridor, and other impacts associated with detours required for road diversions. Activities under subcomponent 3.2 could result in temporary and permanent loss of livelihood, and people and communal assets.

Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH): Considering the country context, social sensitivities, and the concentration of project activities in rural areas with men and women working in unsupervised conditions, Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) is possible even though the risk is anticipated to be low.

Risk of COVID-19 and other Transmittable Infections: Since the proposed project activities will be implemented in areas where there have been reported cases of COVID-19, the spread of this highly contagious disease could be possible once project workers get exposed. HIV/AIDS and other communicable diseases could spread among workers and communities once workers get infected.

Potential conflict in the use of public facilities: The use of public sanitary facilities, in particular, public toilets by project workers can lead to conflict when such facilities are inadequate in project areas.

Risk of Child Labor: Contractors and suppliers may tend to use children for economic reasons and convenience. The risk of child labor for the subproject activities is considered low as no child under the age of eighteen (18) years shall be employed or allowed to work under this project.

Risk of use of Forced Labor: Civil work activities under subcomponent 3.1 and 3.2 are expected to use skilled workers and unskilled workers. Workers could be compelled to work for extended hours without adequate compensation and to the detriment of their health in order to remain employed.

Labor influx and Social Conflict: The scale of work under subcomponent 3.1 and 3.2 are not expected to result in large scale labor influx as there is availability of labor in the project counties. However, the construction activities may bring some migrant workers from other counties who may have diverse backgrounds, different cultures and behaviors that may not be acceptable in the project communities. They may not integrate well with the local cultures and values and could risk the local social harmony. All these could lead into conflict between locals and migrant workers. Labor influx could also increase the risk of Gender Based Violence (GBV) and spread of sexually transmitted diseases.

Labor disputes over terms and conditions of employment: Likely causes for labor disputes include demand for limited employment opportunities; labor wages rates and delays of payment; disagreement over working conditions; and health and safety concerns in work environment. In turn, there is also a risk that employers such as contractors/subcontractors may retaliate against workers for demanding legitimate working conditions, or raising concerns regarding unsafe or unhealthy work situations, or any grievances raised, and such situations could lead to labor unrest.

Discrimination and exclusion of vulnerable/disadvantaged groups: Due to widespread unemployment and underemployment in project counties, vulnerable/disadvantaged groups of people may be subject to increased risk of exclusion from employment opportunities the civil work activities. Such groups will include women, and persons with disabilities.

Nonpayment of construction materials*:* Time and again there are reports of contractors completing civil works activities in rural areas and escaping without paying the suppliers.

CHAPTER FIVE: ENVIRONMENTAL AND SOCIAL MITIGATION GUIDELINES

The environment and social mitigation guidelines are designed with the aim to outline actions necessary to prevent, minimize, mitigate and control possible negative impacts during project implementation. Table 15 below summarizes some identified potential environmental and social impacts and their proposed mitigation measures at the various phases of the project.

Table 13: Environmental and Social Mitigations

Potential E&S Risks and Impacts	Source of impact	Project Phase and Activities	Mitigations
Erosion	• Bush clearing • Excavations	• Construction phase of civil works of productive alliance (lowland rehabilitation; clearing of bushland; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Only clear areas earmarked for construction • Site clearance must be supervised by a competent person • Dispose of the excavated soils immediately after excavation completion • Construct retention ditches below the construction area to control erosion risks
Dust emission	• Excavations • Site clearance • Movement of machinery (trucks, bulldozers, excavators etc.) • Demolition works	• Construction phase of civil works of productive alliance (lowland rehabilitation; clearing of bushland; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• The Contractors will spray water regularly when clearing land to reduce dust. • Workers must be provided with nose covers and usage must be enforced at construction sites

Potential E&S Risks and Impacts	Source of impact	Project Phase and Activities	Mitigations
Noise pollution	• Drilling • Cutting • Excavation • Movement and operations of machinery • Generators	• Construction phase of civil works of productive alliance (lowland rehabilitation; clearing of bushland; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Activities that create lots of noise or irritations, such as heavy equipment moving earth, excavations, drilling etc. shall be restricted to normal working hours to prevent noise for neighbors at night • The contractor is required to use equipment and automobiles that have certification of good working conditions to avoid or reduce noise • Generators for use at the site shall have silencers to reduce noise emissions. • Sites for noisiest processing or production activities should as much as possible be sited away from residential places.
Waste generation	• Packaging materials • Workers' food and kitchen waste • Spent oil • Machine parts • Broken or spoiled construction materials • Cleared vegetation • Debris	• Construction phase of civil works of productive alliance (lowland rehabilitation; clearing of bushland; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Provide suitable labelled waste bins at construction sites and educate workers on proper waste handling, storage and disposal • Engage the services of a waste management company certified by the Environmental Protection Agency (EPA) to collect and dispose of construction waste including hazardous waste in accordance with WB's E&S standards and EPA's regulations • Require contractors to submit a waste management plan either as a standalone report or as part of the contractor's waste management plan • Include contractual provisions in works contract demanding contractors to appropriately manage waste (solid, liquid, hazardous)

Potential E&S Risks and Impacts	Source of impact	Project Phase and Activities	Mitigations
Loss of vegetation, biodiversity and natural habitat	• Vegetation removal/bush clearing • Excavation works • Workers hunting of wildlife	• Construction phase of civil works of productive alliance (lowland rehabilitation; clearing of bushland; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Vegetation clearing should only be limited to construction site • Felled trees must be replaced in four folds at appropriate locations • Avoid construction at biodiversity hotspots • Vegetation clearance should be done in piecemeal to allow fauna to escape to adjacent undisturbed vegetation • Work equipment, machinery and vehicles must be well inspected to avoid accidental introduction of non-native species in the course of operations. Similarly, workers must be educated to avoid introduction of non-native plant species • Workers must be prohibited from harvesting or hunting bush meat and this provision must be included in their employment contract. • The preparation of Biodiversity Management Plans (BMP) may be required if the screening process indicates the presence of natural habitats and/or key biodiversity areas that may be adversely impacted by the sub-projects
Water pollution/contamination	• Runoffs from construction site to water bodies • Leaked machinery oil • Washing of vehicles and machinery close to water bodies • Workers dumping of waste into water bodies	• Construction phase of civil works of productive alliance (lowland rehabilitation; clearing of bushland; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Construction of retention ditches downstream the construction area to control water pollution by surplus soil • Prevent dumping of solid wastes into runoffs • Suitable storm water retention and treatment systems should be available at construction sites • Avoid washing of construction vehicles and machinery close to water bodies • Avoid oil leaks and spills to prevent being washed to water bodies

Potential E&S Risks and Impacts	Source of impact	Project Phase and Activities	Mitigations
Occupational accidents, injuries and ill-health	Poor housekeeping at construction site, unguarded dangerous machine parts, unguarded/unfenced pits, manual handling, burns from hot work, puncturing from sharp objects, COVID-19/HIV/AIDs infections, poor sanitation facilities, dust, fumes, vibrations, noise	• Construction phase of civil works of productive alliance (lowland rehabilitation; clearing of bushland; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Employ competent and qualified workers • Regularly train workers in occupational health and safety • Provide personal protective equipment (PPE) e.g. helmets, boots, masks, etc. to workers and enforce usage • Proper sanitation, waste disposal facilities, awareness campaigns for the prevention of COVID-19, AIDS/HIV, sexually transmitted diseases and other communicable diseases, sensitization for health insurance will be needed at the project site. National Health Protocol with respect to COVID-19 should be observed during public consultation and other stakeholder meetings. • The integrity of workplace structures, workspace and exit, fire precautions, potable water supply, clean eating area, lighting, safe access, toilets and showers, first aid, etc. should be incorporated in the designs. • Ensure proper housekeeping at construction sites • Require contractors to prepare and implement health and safety plans as a standalone document or be incorporated in the C-ESMP • Barricade or fence around excavations and pits and provide adequate signage • Segregate pedestrians from vehicular routes and provide appropriate markings • Provide adequate lighting at constructions site • Ensure equipment and machinery are regularly serviced to avoid or reduce mechanical failures

Potential E&S Risks and Impacts	Source of impact	Project Phase and Activities	Mitigations
Poor community health and safety	• Water stagnation at burrow pits serving as breeding grounds for mosquitoes • Risks of drowning at water-filled pits • Unguarded excavations presenting risks of falls and injuries	• Construction/rehabilitation phase of 40km roads	• Include in contractor's contract provisions to adhere to health and safety standards and restore burrow pits • Ensure that burrow pits and excavations are well fenced with standard signage • Avoid water stagnation at borrow pits which could breed mosquitoes and other disease-borne vectors • Regularly control disease-causing organisms at construction sites and communities using integrated pest management approaches and use only pesticides approved by a national competent authority • The project will also ensure that the EPA, Ministry of Mines and Energy provide licenses or permits for the operation of such burrow sites.
Pesticide poisoning and contamination	Pesticide application in farms	• Production of selected value chains – cassava, rubber, poultry/piggery	• Use IPMP practices to control pests • Monitor the weather when applying pesticides and avoid very hot or windy days • Follow label directions and safety data sheet when using pesticides • Consider staying inside with doors and windows closed when pesticides are being applied outside near houses/ settlements • Wear adequate personal protective equipment when applying pesticides or nearby application zones of pesticides. • Train farmers in techniques and agrochemical application (handling, labelling and application of agro- chemical under field condition. The training should be incorporated in a farmer's field school (FFS)

Potential E&S Risks and Impacts	Source of impact	Project Phase and Activities	Mitigations
			• Create awareness on the amounts and conditions for applying fertilizers and pesticides to prevent water pollution
Odor	• Poultry and piggery manure • Carcasses	Production of poultry and piggery	• Regularly remove poultry and piggery manure and dispose them at approved dumping site or recycle into compost for use as organic fertilzers • Ensure adequate ventilation in poultry coop and piggery sty • Promptly remove dead animals and appropriate dispose them through burying at designated sites
	• Effluents from processing facilities and agro-logistic facilities	Operational phase of processing facilities	• Provide holding ponds and appropriate wastewater treatment facility to treat effluents before being discharged to the environment
Infestation of flies and disease-borne vectors in communities	• Poor management of poultry and piggery manure • Carcasses	Production of poultry and piggery	• Regularly remove poultry and piggery manure and dispose them at approved dumping site or recycle into compost for use as organic fertilizers
Waste generation – solid and liquid waste	• By-products of processed commodities • Food wrappers and packaging materials	Processing of targeted commodities	• Engage the services of an accredited waste management firm to collect and dispose waste at approved sites
	• Poultry and piggery manure • Carcasses • Effluents from slaughterhouse	Production of poultry and piggery	• Poultry and piggery beneficiary farmers of RETRAP should engage the services of a waste management firm to regularly collect and dispose waste at approved dumping sites

Potential E&S Risks and Impacts	Source of impact	Project Phase and Activities	Mitigations
			• Provide appropriate wastewater treatment facility at slaughterhouses to treat effluents before being discharged to the environment
Exposure to zoonotic diseases	• Sick animals (poultry and pigs) • carcasses	Production of poultry and piggery	• Sick/diseased animals should be quickly isolated from the rest of the stock into well-constructed isolation units in the farms where such animals can continue receiving treatment from trained personnel • Dead animals should be subjected to post-mortem examination to ascertain cause of death before their disposal • Dead animals should be buried, and such sites properly backfilled to avoid dogs and scavengers exhuming such carcasses and spreading disease germs to the environment; and • All workers in the farms to have changing rooms where they thoroughly clean up before and after work to avoid carrying disease agent to animals and, to the communities.
Physical displacement and loss of livelihood	• Permanent and Temporary displacement of people properties, farms and businesses to allow construction activities	• Construction works under productive alliance (lowland rehabilitation; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Prepare a Resettlement Action Plan (RAP) and pay appropriate compensation to affected people before commencement of works

Potential E&S Risks and Impacts	Source of impact	Project Phase and Activities	Mitigations
Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH):	• men and women to work in unsupervised conditions in rural areas	• Construction works under productive alliance (lowland rehabilitation; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Contractor Workers to sign code of conduct • Contractor ESMP to include measures to mitigate the risks of sexual exploitation and abuse (SEA)/sexual harassment (SH).
Potential conflict in the use of public facilities:.	• Lack of or sanitary facilities for use by workers.	• Construction works under productive alliance (lowland rehabilitation; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Contractor to provide sanitary facilities at project sites/camps for use by contractor workers
Risk of Child Labor:	• Lack of age verification procedure for workers	• Construction works under productive alliance (lowland rehabilitation; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Contractor to establish age verification process as part of the Labour Management Plans based on the LMP prepared for the project • prohibition of child labor to be enshrined in the contractor's contract

Potential E&S Risks and Impacts	Source of impact	Project Phase and Activities	Mitigations
Risk of use of Forced Labor	Working for extended hours to complete task without adequate compensation	• Construction works under productive alliance (lowland rehabilitation; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• prohibition of forced labor to be part of the contractors' contract
Labor influx and Social Conflict	• Unacceptable workers behaviours in project communities	• Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Contractor Workers to sign code of conduct • Contractor ESMP to include measures to sensitize workers to abide by the cultural norms of the project communities
Labor disputes over terms and conditions of employment	• labor disputes • non-payment or delays in payment of wages; • disagreement over working conditions	• Construction works under productive alliance (lowland rehabilitation; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads • Construction phase of agro-logistic facilities	• Workers grievance redress mechanism to be established by the contractor and maintained throughout the construction period.
Discrimination and exclusion of vulnerable/disadvantaged groups	• widespread unemployment and underemployment in project counties	• Construction works under productive alliance (lowland rehabilitation; construction of post-harvest, storage, and processing facilities; and small-scale, efficient irrigation systems) • Construction/rehabilitation phase of 40km roads	• Contractor to adopt non-discriminatory employment measures as indicated in the project LPM

Potential E&S Risks and Impacts	Source of impact	Project Phase and Activities	Mitigations
		Construction phase of agro-logistic facilities	

CHAPTER SIX: PROCEDURES FOR ENVIRONMENTAL AND SOCIAL RISKS ASSESSMENT UNDER RETRAP

This Chapter describes the environmental and social procedures that will be followed to ensure the project complies with the World Bank ESSs and statutory requirements which apply to the project. The World Bank ESS1 provides guidance on the environmental assessment procedures for World Bank funded projects while the Liberia EPA Act (2003) also establishes a process to screen and evaluate all developments, undertakings, and activities which have the potential to give rise to significant environmental impacts. The following procedures and steps will be followed:

Step 1: Screening

Environmental and social screening marks the beginning of risk and impact management for all sub-project activities. The project's Focal Persons at the county levels will first screen sub-project activities once the activities are confirmed using the E&S screening tool in Annex 3. The screening of sub-projects will include a detailed screening for biodiversity impacts, to be conducted by a biodiversity specialist taking into account available studies, involving field visits and documented with supporting evidence. The Focal Persons will submit screening reports to the Environmental and Social Specialists of the PMU who will validate the findings and undertake the following exercises:

i. Determine whether proposed activities are likely to have (i) *no or low impacts*, (ii) *minimal or not likely to be significant Impact*, (iii) *significant negative environmental and social impacts*; and identify appropriate mitigation measures for activities with adverse impacts;

ii. Assign initial E&S risks classification for the proposed activity and identify the type and depth of environmental and social assessment or instrument (i.e. ESIA, ESMP, RAP, E&S audits etc.) to be carried out for the subproject activity;

iii. Determine the need for EPA environmental permit and other statutory permits for the proposed activity.

No or Low Impacts:

- When there are no or low impacts, the E&S Specialists at the PMU must consult internally and confirm with the World Bank if no further E&S instrument will be required. Once an agreement is reached, the activity may commence, and the E&S Specialists may proceed with the minimum regular reporting requirements as established in the Environmental and Social Commitment Plan (ESCP)

Minimal or not likely to be significant Impact:

- When there are minimal or not likely to be significant impacts and there is low probability of serious adverse effects, the E&S Specialists will submit a screening report to the Bank and the World Bank may require the project to prepare an **Environmental and Social Management Plan (ESMP)** or any other instrument deemed fit**.** The E&S Specialists will consult with the EPA on the need register the sub-project activity or prepare any report e.g. Preliminary Environmental Report, if necessary.

Significant Adverse E&S Risks and Impact:

- When there are likely to be significant E&S risks and impacts, the E&S Specialists will submit a screening report to the World Bank who will advise on the suitable E&S instrument(s) to be

prepared. The PMU's E&S Specialists will follow the EPA due processes as discussed below to ensure statutory compliance:

Step 2: Environmental Registration of the Project

- The E&S Specialists will register the subproject activity with the county Environmental Officer of the EPA in conformity with Section 36 of the EPA Act.

Step 3: Publication of Notice of Intent

- Following the submission of an application for an environmental impact assessment permit, the Ministry of Agriculture (MoA) through the PMU will publish a notice of intent, which will state in concise or prescribed manner information that may be necessary to allow a stakeholder or interested party to identify its interest in the proposed project or activity.

Step 4: Submission of Project Brief

- Prior to commencing, carrying out, executing or conducting any of the subproject activities, the MoA through the PMU will submit to the EPA and the relevant Line Ministry a project brief in a concise manner for review and approval.
- The EPA, in consultation with the Line Ministry, will evaluate the project brief to determine the potential environmental impact of the proposed project or activity and shall make the followings determination:
    - i If a project may have a significant impact on the environment, the EPA shall require the MoA to prepare an environmental review in accordance with section 13 of the EPA Act;
    - ii If the project or activity will have or is likely to have a significant impact on the environment and the project brief discloses no sufficient mitigation measures, the EPA shall require the proponent or application to prepare an Environmental Impact Study in accordance with section 14 of the EPA Act.
    - iii If the project or activity will not have, or is unlikely to have a significant impact on the environment or that the project discloses sufficient mitigating measures, the EPA may issue: (a) a finding of no significant impact, a "FONSI", and a notice published and placed on the notice board of the registry of the Agency at its head office and the office of the County Environmental Committee for the information of the public; (b) a certificate of approval; unless the Agency determines that the scope, size and/or sensitivity or the project warrants public consultation prior to the issuance of the certificate of approval.

Step 5: Environmental Reviews

- The MoA will prepare an environmental review for project or activities that may have a significant impact on the environment, and will contain sufficient information to enable the EPA to determine whether a full environmental impact study should be required for the project;
- The Agency will promulgate guidelines describing the contents and format of environmental reviews, and specifying the procedures to be followed by the Agency in evaluating environmental reviews.

Step 6: Scoping Process

- Following the declaration of EPA for subprojects to develop an ESIA, the MoA through the PMU will prepare and submit to the EPA a scoping report which will involve extensive stakeholder consultations to:

  a) Identify, inform and receive input from the effected stakeholders and interested parties;

  b) Determine and narrow the scope of the issues to be addressed in the environmental impact assessment;

  c) Identify and define, at an early stage of the EIA process, the significant environmental issues, problems and alternatives related to the different phases of the proposed project or activity;

  d) Ensure public participation early in the EIA process;

  e) Ensure that all relevant issues and alternatives are adequately addressed in the environmental impact study;

  f) Provide the applicant with the information necessary for formulating the Terms of Reference (TOR) for the environmental impact study and impact statement; and

  g) Guide the applicant's consultants in preparing the environmental impact statement.

Step 7: Clearance of TOR

- The PMU will submit the TOR for the ESIA/ESMP/RAP studies to the World Bank for review and clearance.

Step 8: Selection of Consultant and Preparation of ESIA, ESMP and RAP

- The PMU shall select a consultant for the preparation of ESIA/ESMP following the provisions of the procurement policies and procedures of the World Bank Group and the Liberian applicable procurement legislation and policies. The ESIA report shall also include an ESMP which must address potential direct, indirect, residual and cumulative impacts of the subproject activity on the environment and social setting at the pre-construction, construction, operation and decommissioning phases.

Step 9: Submission of ESIA to EPA and World Bank

- The PMU shall submit the ESIA to the EPA and the World Bank for review and clearance. Until the World Bank clears such instruments, the PMU cannot commence implementation of the subproject activity.

Step 10: Public consultation on the EIS

As part of preparation of the ESIA, the consultant with support from the PMU is expected to undertake in-depth stakeholder consultations on the instruments. Upon submission of the instrument to the EPA, the Agency will:

a) By notice published for consecutive days, invite comments from the public;

b) The public notice shall state the particulars of the project as set out in section (14) of the EPA Act;

c) The comments under sub-section (i) shall be received by the agency within 30 days of the publication of the notice or within such extended period as the Agency may grant by published notice.

Step 11: Public Hearing

- Upon receiving the comments of the public and the Line Ministry or other agencies to which a copy of the environmental impact statement was sent, or upon the expiry of the period stipulated for receipt of comments, and on considering the opinion from the comments, the Agency shall decide whether to hold a public hearing.

Step 12: Approval or Rejection of the Project or Activity

- The EPA may a) approve the project or activity unconditionally if it is satisfied that the project or activity shall not result in significant damage to the environment; b) approve the application conditionally by requiring the MoA to redesign the project or do such other thing as the Agency considers necessary, taking into consideration the suggestions or comments made and all environmental factors; or c) refer the application back to the applicant for further study or submission of additional information; d) reject the application where the Agency is of the opinion that the project may cause significant or irreversible damage to the environment.

Step 13: Disclosure

- Once the EPA and the World Bank clear the ESIA, the PMU shall disclose the report in country using appropriate media. The PMU shall notify the World Bank of the disclosure which will enable the Bank to disclose the report on its external website.
- As part of the process the PMU must engage relevant stakeholders and project affected persons.

Step 14: Inclusion of ESMPs in the Bidding Documents

- For project interventions involving civil works or those in which contractors will be needed to execute the tasks e.g. the construction of agro-logistic infrastructure and the road works, the E&S Specialists will ensure that site specific instruments (ESIAs, ESMPs etc.), as may be applicable, are ready before commencement of the bidding process;
- The E&S Specialists will work with other relevant specialists e.g. the Procurement Specialist to incorporate relevant clauses, provisions, mitigation measures, E&S reporting requirements etc. as contained in the ESMP in the bidding document and contracts.
- At pre-bid meetings with prospective contractors, the E&S Specialists will avail themselves to clarify and respond to environmental and social issues the prospective bidders may have and also use the opportunity to highlight potential risky and impactful activities.

Step 15: Selection of Contractors

- The evaluation of bids for works will be undertaken by a panel (team) comprising the E&S Specialists.
- The E&S Specialists will assess and evaluate bidders' responsiveness to the E&S issues including their ESHS Management Strategy and Implementation Plan (ESHS-MSIP), Code of Conduct and having qualified and competent E&S Officers among their proposed staff.
- The E&S Specialist will advise the panel appropriately.

Step 16: Implementation of ESMPs by Contractors

- The E&S Specialists working with the Procurement Specialist and/or Contract Management Specialist will include relevant documents/plans that the Contractor has to prepare and implement e.g. Contractor's ESMP (C-ESMP), Health and Safety Management Plan, Waste Management Plan, Emergency Preparedness and Response Plan etc.
- The E&S Specialists will ensure that work contracts contain adequate resources for effective implementation of E&S instruments;
- The E&S Specialists will provide necessary support to the contractor e.g. training, mentoring, coaching, sharing of relevant information and documents etc. to enable the contractor deliver on E&S issues.
- The supervising consultant/engineer, if any, will directly supervise contractors' implementation of applicable plans and safeguard documents on the field.
- The supervising consultant/engineer will advise the PMU (MoA) and Infrastructure Implementation Unit – IIU (MPW) on issues of E&S non-compliance or infringements on the part of the contractor and advise on necessary contractual sanctions and reliefs available to the Ministries.

Step 17: Monitoring of ESMPs Implementation and Reporting

- The PMU and IIU will undertake scheduled field visits to the construction sites to inspect work progress and get updates from both the supervising consultant/engineer and the contractor on work progress. Such field visits will be agreed among parties and be made a part of the contract. The E&S Specialists will use the visits to undertake a comprehensive field inspection and monitoring and communicate any findings (positives and negatives) to the supervising consultant and contractor.
- The supervising consultant/engineer at their discretion will organize scheduled and ad hoc E&S monitoring at construction sites and prescribe appropriate corrective actions to the contractor. Such monitoring will be communicated to the PMU/IUU through the consultant's regular reports.
- Where necessary, the E&S Specialists may organize ad hoc field monitoring in instances where it will enhance positive outcomes on E&S compliance.
- Both the supervising consultant/engineer and the contractor will contractually be required to submit monthly and ad hoc reports which will include E&S implementation and related issues.

Table 14: Summary of Environmental and Social Screening Procedure and Responsibility

No.	Stage	Institutional responsibility	Implementation responsibility
1.	Screening of sub-projects including screening for biodiversity in project sites to assist in determining level of environmental and social assessment required	MoA, MPW	Focal Points at Counties E&S Specialists of PMU and IIU
2	Statutory Registration of projects with EPA	MoA, MPW	E&S Specialists of PMU and IIU
3.	Determination of appropriate environmental and social assessment level/ category	EPA, MoA/MPW	E&S Specialists of PMU and IIU
4	E&S Risks categorization validation	World Bank	E&S Specialists of World Bank

5.	If ESIA is necessary		
5.1	Preparation of Terms of Reference (TOR)	MoA, MPW	E&S Specialists of PMU and IIU
5.2	Selection of Consultant	MoA/MPW Procurement Unit	Procurement Specialist, E&S Specialists of PMU and IIU
5.3	Realization of the ESIA, Public consultation and participation, integration of environmental and social issues and mitigations into project designs, and in tendering/bidding documents	ESIA Consultant/	E&S Specialists of PMU and IIU, Procurement Specialist
6.	Review and Approval	EPA/ World Bank	-
7.	Participatory public consultation and disclosure	MoA/MPW, EPA	E&S Specialists of PMU and IIU, ESIA Consultant
8.	Implementation of environmental and social assessment and management plan	Sub-project beneficiaries/contractors	E&S Specialists of PMU and IIU
9.	Development of participatory monitoring indicators	MoA/MPW,	E&S Specialists of PMU and IIU; M&E Specialist
10.	Surveillance and participatory monitoring	MoA/MPW, EPA	E&S Specialists of PMU and IIU; M&E Specialist

CHAPTER SEVEN: STAKEHOLDER CONSULTATIONS

The consultant through the MoA prepared and agreed on a consultation plan and placed appointments with the stakeholders in the counties where the project activities are to be implemented in the areas of Maryland, Grand Gedeh, Nimba, Margibi, Bomi, Bassa, Bong, Montserrado, Grand Cape Mount, Grand Kru and Sinoe Counties. While at the counties, it provided opportunities for the consultant to meet and discuss with town chiefs, clan chiefs, women leaders, youth leaders, vulnerable groups, specifically widow, rural farmers that are involved with rubber, cassava and vegetables and piggery and also the settings in which value addition is to be undertaken including the Booker Washington Institute (BWI). In Montserrado, the meetings were held with the Environmental Protection Agency (EPA), Cooperative Development Authority, Ministry of Gender, Children and Social Protection (MoGCSP), Ministry of Agriculture (MoA), National Association of Agro-inputs Dealers (NAIDAL), and Liberia Land Authority (LLA).

Project stakeholders are defined as individuals, groups or other entities who:

a) are impacted or likely to be impacted directly or indirectly, positively or adversely, by the Project (also known as "affected parties"); and
b) may have an interest in the Project (known as "interested parties). They include individuals or groups whose interests may be affected by the Project and who have the potential to influence the Project outcomes in any way.

RETRAP stakeholders can be grouped into:

c) **Primary stakeholders**: Individuals, groups or local communities that may be affected by the project, positively or negatively and directly or indirectly especially those who are directly affected, including those who are disadvantaged or vulnerable.
d) **Secondary stakeholders**: Broader stakeholders who may be able to influence the outcome of the project because of their mandate, relationship and knowledge about the project, affected communities or political influence.

Cooperation and negotiation with the stakeholders throughout the Project development often also require the identification of persons within the groups who act as legitimate representatives of their respective stakeholder group, i.e. the individuals who have been entrusted by their fellow group members with advocating the groups' interests in the process of consultation with the Project. Community representatives may provide helpful insight into the local settings and act as main conduits for dissemination of the Project-related information and as a primary communication/liaison link between the Project and targeted communities and their established networks. Verification of stakeholder representatives (i.e. the process of confirming that they are legitimate and genuine advocates of the community they represent) is an important task in establishing contact with the community stakeholders. Legitimacy of the community representatives can be verified by talking informally to a random sample of community members and heeding their views on who can be representing their interests in the most effective way.

7.1 Methodology

In order to meet best practice approaches, the project will apply the following principles for stakeholder engagement:

- **Openness and life-cycle approach**: public consultations for the project(s) will be arranged during the whole lifecycle, carried out in an open manner, free of external manipulation, interference, coercion or intimidation;
- **Informed participation and feedback**: information will be provided to and widely distributed among all stakeholders in an appropriate format; opportunities will be provided for communicating stakeholders' feedback, for analysing and addressing comments and concerns;
- **Inclusiveness and sensitivity**: stakeholder identification will be undertaken to support better communications and build effective relationships. The participation process for the projects will be inclusive. All stakeholders at all times will be encouraged to be involved in the consultation process. Equal access to information will be provided to all stakeholders. Sensitivity to stakeholders' needs will be the key principle underlying the selection of engagement methods. Special attention will be given to vulnerable groups, in particular single women, persons with disabilities, youth, and elderly those living in remote or inaccessible areas. For the purposes of effective and tailored engagement, the project stakeholders can be divided into the following core categories:

Affected Parties – persons, groups and other entities within the Project Area of Influence (PAI) that are directly influenced (actually or potentially) by the project and/or have been identified as most susceptible to change associated with the project, and who need to be closely engaged in identifying impacts and their significance, as well as in decision-making on mitigation and management measures. The stakeholders in this category identified for this project include:

- Members of poor communities
- Farmers male and female
- Project Affected Persons
- Community Development Authority
- Smallholder Farmers Association (SFA),
- Communities and villagers in the area of the project's planned activities who will be the recipients/beneficiries of the project.

Other Interested Parties – individuals/groups/entities that may not experience direct impacts from the Project but who consider or perceive their interests as being affected by the project and/or who could affect the project and the process of its implementation in some way.
The stakeholders in this category identified for this project include:

The local population who can benefit indirectly from the project

- Public in targeted urban and rural areas as well as key social institutions such as village councils, women's groups (Public Awareness Campaign), academia/ universities, and etc
- Ministry of Finance and other government agencies including the Ministry of Health, Ministry of Education and local government institutions.
- Provincial government institutions at regional level involved with the project stakeholders and playing key role in preparation and implementation of the project. This include Paramount Chiefs, superintendent, Town Chief Cline Chief and local authorities
- Residents and labors, contractors and sub-contractors, and individual in the area of the project;

- Local, regional and national level civil societies and non-governmental organizations (NGOs) with an interest in areas of agriculture irrigation schemes, watershed and may have in-depth knowledge about the environmental and social characteristics of the project area and the nearby populations, and can help play a role in identifying risks, potential impacts, and opportunities for consider and address in the assessment process.
- Media and other interest groups, including social media

Vulnerable Groups – persons who may be disproportionately impacted or further disadvantaged by the project(s) as compared with any other groups due to their vulnerable status and that may require special engagement efforts to ensure their equal representation in the consultation and decision-making process associated with the project. The stakeholders in this category identified for this project include:

- Elderly/ Aged farmers
- Persons with disabilities and their caregivers
- Low-income families/extreme poor and especially female headed households
- Nomadic communities/farmers
- Women farmers, particularly women-headed households or single mothers with underage children with low mobility and living in hard to reach communities;
- Youth;
- Farmers with low or no education;
- Daily wage earners in the agricultural value chain

Special efforts will be taken to disseminate project information to these groups and to ensure their inclusion in the stakeholder engagement process. Vulnerable groups and individuals will be updated and consulted through dedicated means, as appropriate throughout the project life cycle.

7.2 Stakeholder Analysis

This section identifies key stakeholders, including individuals, groups, or communities who will be affected or who may have an interest, and who will be informed and consulted about the project. It also identifies and assesses the needs of some disadvantaged or vulnerable individuals or groups, who may have limitations in participating and/ or in understanding the project information or in participating in the consultation process. Based on this assessment and considering other aspects including stakeholder requirements/ needs and interests, the stakeholder list below is categorised as (i) affected parties; (ii) actors; (iii) other interested parties; and (iv) disadvantaged/ vulnerable individuals or groups. The stakeholder list is a 'living document' which will be updated regularly throughout the project life as appropriate.

Table 15: Summary of stakeholder consultation during project preparation (including SEP, ESMF, RPF, ESIA and RAP preparation)

Stakeholder Group	Institutions/Group	Topic of Consultation	Method of Engagement	Responsibility
Government agencies (Ministry of Commence, Ministry of Agriculture	Ministry of Finance Implementing partners, Ministry of Public Works Ministry of Commence, Ministry of Agriculture,	Design of the project including Project objectives, scope, preparation timelines, costing and budgeting,	Project preparation and Technical Review Meetings through Video Conference (VC)/Webex meetings	MoA/PCU/Ministry Public Work

,Ministry of Finances Development Planning, Forestry Development Authority Ministry of Internal Affair and Environmental Protection Agency	Ministry of Finances Development Planning, Forestry Development Authority, Ministry of Internal Affair and Environmental Protection Agency	Sectoral and Institutional context, Project implementation arrangement		
	Environmental Protection Agency	Discussion on the implementation and monitoring of the following environmental tools ESMF,SEP,RAP,EIA,GBV Action Plan	Face to Face interview with the Director for Compliance at the EPA Along with the Manager for MEA	MoA/IIU
	LLA	Discussion on the implementation and monitoring of the following environmental tools ESMF,SEP,RAP,EIA,GBV Action Plan	Face to Face interview with the Director for Compliance at the EPA Along with the Manager for MEA	MoA/IIU
County Level Stakeholder	Chiefs, farmers, women groups, PAPs	Project activities and environment and social risks and impacts and mitigation measures, project Implementation & Arrangement; COVID-19 prevention measures under the project	Discussion/ presentation/information sharing	Consultant/MA/IIU of MPW
Private sector Actors	J-Palm, Civil Society Organizations, NGOs BRAC Liberia, grow green Ma Bendu Farm InC.	activities and environment and social risks and impacts and mitigation measures, project Implementation & Arrangement; COVID-19 prevention measures under the project	Discussion/ presentation/information sharing	Consultant/MoA/IIU of MPW, MOH
Development Partners	World Bank	Design of the project including Project objectives, scope, preparation timelines, costing and budgeting, Sectoral and Institutional context, Project implementation arrangement		

Academia/ Research Institutions	CARI, NSL, MoA Reference Lab	Project implementation arrangement ,presenting project documentation such as ESMF,SEP,RAP,EIA,GBV Action Plan	Discussion/ presentation/information sharing	Consultant/MoA/IIU of MPW ,MOH
CSOs/ NGOs	BRAC Liberia, Grow green	COVID-19 prevention		

Table 16: Outcomes of Stakeholder Consultative Meeting in county

Key outcomes of Stakeholder Consultative Meetings	
Issues Raised	Response Provided
Beneficiaries asked if the RETRAP will provide storage facilities vegetables, to enhance and preserved these food for market	The RETRAP will provide storage facilities for vegetables, to enhance and preservation of product for market used
Beneficiaries asked if the RETRAP will provide financial support to women groupings to enhance their economic abilities	The project will provide access to finance gaps for small & medium size agribusiness individuals/units, women, youth
Beneficiaries asked if the RETRAP will provide financial support to small holder's farmers to enhance their economic abilities	The project will provide micro loan to small holder's farmers to improve their economic abilities
Beneficiaries asked if the RETRAP will provide road and financial support to small holder's farmers to enhance their economic abilities	As part of the government Pro-poor agenda for development and prosperity (PAPD) the project will support for the rehabilitation roads connected market places for the transportation of farm products.
Some of the existing challenges farmers fixed are: access to finance, marketing, and access to markets, food safety and equipment.	The project will provide micro loan to small holders farmers, constructing roads and building storage facility for market products
Beneficiaries asked if the RETRAP will provide capacity development and infrastructural support of CMAs	The Project will provide routine training for stakeholders and selected project sites.
Beneficiaries asked how is the project going to address environmental issues like climate change and risk associated with farming and other risk such as gender and social issues	Knowing that the issues of climate change will negatively impact agriculture growth, the RETRAP will train project beneficiaries on climate adaptation measures and substantiality approach. As it relate to gender issues the project is developing a framework for GBV action plan that will address all gender related issues and the GRM will be establish to address complaint from project affected persons.
Beneficiaries asked if the RETRAP will provide capacity to support institutions for delivery of agribusiness services	

Beneficiaries asked if the RETRAP will provide access to improved technologies, modern inputs, and advisory services to farmers	Strengthened human and institutional capacities with the thrust to establish effective and efficient public sector frameworks in agricultural planning and coordination; reduce risks and improve coping mechanisms; mainstream gender and youth in agriculture and rural development and ensure sustainable use of natural resources

Table 17: List of Affected Stakeholders and Level of Impact

Level of Impact			
Type of Stakeholder	High Impact	Medium impact	Low Impact
Affected	Single Women, Small & medium scale farmers, Agri-business investors, cooperative & micro, Youth group	MoA, Commence MPW, CARI Agriculture National reference Lab, National Standard Lab	• Civil Society Organizations (CSOs) • Non-Governmental Organizations (NGOs) • Contracted Third Parties • Service Provider
Other Actors	• J-Palm Liberia, • BRAC Liberia, • Grow Green • Religious Organization • Educational Sector		
Other Interested	Environmental Protection Agency (EPA) Development Partners Office of the President Financial Institutions Community Based Organisations (CBOs) Sector Working Group (development partners, CSOs, private sector and academia) FOA	• Parliament/ House of Assembly • Media Group	• Civil Society Organizations (CSOs) • Non-Governmental Organizations (NGOs) • Contracted Third Parties
Vulnerable	• Persons with Disabilities (PWDs) • Aged/elderly • Women • Youth • Persons living in poor farming communities Homeless/displaced persons		

7.3 Purpose and Timing of Stakeholder Engagement Program

This Stakeholder Engagement Plan (SEP) is designed to establish an effective platform for productive interaction with the potentially affected parties and others with interest in the implementation outcome of RETRAP. Meaningful stakeholder engagement throughout the project cycle will:

- Solicit feedback to inform project design, implementation, monitoring and evaluation
- Clarify project objectives, scope and manage expectations
- Assess and mitigate project environmental and social risks
- Enhance project outcomes and benefits
- Build constituencies and collaboration
- Disseminate project information/ materials
- Address project grievances

Adequate stakeholder consultations will require effective timing and advanced planning. To ensure information is readily accessible to affected stakeholders, and adequate representation and participation of the different groups in the process, the Project will adopt different methods and techniques based on an assessment of stakeholder needs

Summary of Project Stakeholders Needs and Methods, tools and techniques for stakeholder engagement

An extra ordinary precautionary approached were duly considered during the consultation process with relevant stakeholders to prevent spread of COVID-19 diseases given the highly infectious nature of the virus. The project will continue to adhere to the precautions as may prevail at the time of consultation and through the following:

- Avoid public gatherings (taking into account national restrictions or advisories), including public hearings, workshops and community meetings;
- If smaller meetings are permitted/advised, conduct consultations in small-group sessions, such as focus group meetings. If not permitted or advised, make all reasonable efforts to conduct meetings through online channels;
- Diversify means of communication and rely more on social media and online channels. Where possible and appropriate, create dedicated online platforms and chat groups appropriate for the purpose, based on the type and category of stakeholders;
- Employ traditional channels of communications (TV, newspaper, radio, dedicated phone-lines, and mail) when stakeholders to do not have access to online channels or do not use them frequently. Traditional channels can also be highly effective in conveying relevant information to stakeholders, and allow them to provide their feedback and suggestions;
- Where direct engagement with project affected people or beneficiaries is necessary, identify channels for direct communication with each affected household via a context specific combination of email messages, mail, online platforms, dedicated phone lines with knowledgeable operators; other traditional means of communication should be deployed such as dialects and local vernacular messages.
- Each of the proposed channels of engagement would clearly specify how feedback and suggestions can be provided by stakeholders.

The strategy for stakeholder engagement takes into consideration the limitation posed by the COVID-19 crisis and will rely extensively on online and virtual tools (TV, radio, phone, and websites, local vernaculars messages) to accommodate the need for social distancing. This will be revised to include other methods of engagement as the situation improve during implementation. The methods of engagement are listed in Table 19 below:

Table 18: RETRAP Stakeholder Methods

Engagement Technique	Description and use	Target audience
Websites	The Project PAD and PIM, as well as the ESMF, RPF, ESCP, and SEP, ESIA and RAP, procurement, ender Action Plan GAP / Implementation progress and other relevant project documentation will be published on the official websites of MoA, MPW and other relevant implementing agencies	All stakeholders
Media announcements	Advance announcements of commencement of major project activities, project Grievance Redress Mechanism, and other outreach needs of the project e.g. sensitization on beneficiary selection criteria and enrolment processes	All implementing actors at national, and county levels; Project-affected stakeholders and communities
Information Boards	Use of public notice boards in project communities for announcement of commencement and progress for major project activities. IEC materials on COVID-19 will also be displayed on these Boards.	Project-affected communities IA County Offices
Sensitization on beneficiary selection criteria and enrolment meetings	These meetings will be held at the community level whilst observing COVID-19 social distancing protocols to orient potential beneficiaries on the project's eligibility criteria and planned activities. These community sensitization meetings and consultations will include discussions around potential environmental risks and impacts of project activities and proposed mitigation measures, as well as compliance with COVID-19 protocols should the pandemic persist.	Project -affected communities
Community durbars/ public meetings	These interactive platforms will be used to convey general information on the Project to to a large group of stakeholders, especially communities e.g. project environmental and social risks and mitigation measures, grievance redress mechanisms available for affected and interested parties to submit complaints and to obtain information, make enquiries, or provide their views and feedback on the project; and to provide regular updates on implementation progress to county and national level stakeholders in order to build relationship with the communities, especially with vulnerable people and to distribute non-technical information (as required). . These meetings will also be used to create more awareness and education on COVID-19 protocols and compliance.	Project-affected communities and any other stakeholders and interested parties County Actors

Engagement Technique	Description and use	Target audience
Correspondence by phone/ email/ written letters	Distribute project information to government officials, organizations, agencies and companies and invite stakeholders to meetings	Government officials, NGOs, CSOs, CBOs, trade associations, Development Partners
Printed media advertisement	This will be used to disseminate and disclose project documents intended for general readers and audience (e.g. ESMF, RPF, ESCP, SEP, ESIA, RAP) Advertise project procurements, as applicable	General public
Distribution of printed public materials: Project information leaflets, brochures, fact sheets and other IEC materials	This will be used to convey general information on the Project and to provide regular updates on its progress to county and national stakeholders. IEC materials on COVID-19 will be distributed to create more awareness about the global pandemic.	General public
Internet/ Digital Media	The official websites of MoA and MPW and related implementing agencies will be used to promote various information and updates on the overall Project, impact assessment and impact management process, procurement, as well as the Project's engagement activities with the public.	Project stakeholders and other interested parties that have access to the internet resources.
One-on-one interviews/meetings	This will be used to solicit views and opinions on project activities, challenges, solutions and impacts as appropriate whilst observing the prevailing COVID-19 social distancing protocols. This is to enable stakeholder to speak freely about sensitive issues and build trust in the project.	Project beneficiaries and non-beneficiaries, other vulnerable individuals, CSOs, NGOs, DPs etc.
Workshops/ formal technical meetings	This channel will be used to: (i) Present project information to stakeholders; (ii) Allow stakeholders to provide their views and opinions; (iii) Design participatory exercises to facilitate group discussions, brainstorm issues, analyze information, and develop recommendations and strategies; and (iv) Record and share results of recommendations and actions to be taken.	Government, NGOs, CSOs, DPs, Private Sector organizations, Disability Associations
Focus group meetings	This will be used to present project information to stakeholders and to facilitate discussions and to obtain feedback on specific issues such as SEA/SH, disability inclusion, displaced persons resulting from natural disaster, that merit collective examination with various groups of stakeholders in order to build trust in the project.	Vulnerable groups
Surveys/ Independent evaluations	Surveys will be used to gather beneficiary opinions and views about project interventions.	Project beneficiaries

Engagement Technique	Description and use	Target audience
	CSOs would also be engaged to support citizen feedback surveys and E&S audits for the project.	

Table 19: Summary of stakeholder need and communication method

Stakeholder Group	Characteristic of stakeholders	Language needs	Preferred Communication method	Specific needs (Accessibility larger print, daytime meeting)
Affected Parties				
Individual small and marginalized farmers, existing CBOs of farmers, joint forest management, agriculture and animal husbandry	Direct Beneficiaries and affected farmers and head of households	English local dialect	Through phones & Engagement Meetings & consultation	Meetings held in large conference hall OHS measures, hand hygiene and PPE, extra safety measures, such as social distancing were adhere to
Todee Rubber Farmers and Multipurpose Cooperation Society (TRFMCS)	Have an acquired land of 16,000 acers of land with the total of 513 members of the organization in which women constitute 200 on its membership	English local dialects	Through phones & Engagement Meetings & consultation	conference hall OHS measures, hand hygiene and PPE, extra safety measures, such as social distancing were adhere to
Kokotona,	Acquired the total of 2,400 acers of land for farming	English local dialects	Through phones & Engagement Meetings & consultation	conference hall OHS measures, hand hygiene and PPE, extra safety measures, such as social distancing were adhere to
Dokodam Farmers' Cooperative Society (DFCS),	Group of farmers organization who are direct beneficiaries of project activities	English local dialects	Through phones & Engagement Meetings & consultation	conference hall OHS measures, hand hygiene and PPE, extra safety measures, such as social distancing were adhere to
Other Interested Parties				
Civil society groups and NGOs that pursue environmental and socio-economic interests and may become partners of the project	Non-for-profit organizations on County, national and local levels that pursue environmental and socio-economic interests and may become partners of the project	Local Languages or dialect, English	Emails. Social media Platform, website,	Donor funding to contribute to emergency response procedures

County Level Institution	County authority, local leaders,	Local language	Official channels of communication	Coordination, information dissemination and engagement at county level
The Media, & Social media platforms	Users of Facebook, Instagram etc., active internet users	Official language		Reliable information sources, timely updates on distribution of good and legibility of households
Departments of Forests, Agriculture, Fisheries, Environment, EPA Public Works, Conservation , Ministry of Finance UNICEF,	Other interested parties that might either directly or indirectly be affected by the project	General and official English	Emails, telephone calls, social media, the media, news papers	Reliable information sources, timely updates on distribution of good and legibility of households
Vulnerable and Disadvantages Person				
Women farmers and women headed households, Single Mother	Vulnerable groups	English and local tribal language	Through self-help groups, community coordinators, local & county Authority	Meetings aligned with meeting schedule of self-help groups, village leaders and other CBOs; within their habitations
Disadvantaged and Vulnerable Households, including landless and disabled households.	Vulnerable and Disable	Local dialect, English	Through self-help groups, community, representative and local NGOs, CBOs	Special Meetings organized with advance notice organized at suitable timings and in accessible places;

7.4 Proposed Strategy for Information Disclosure and Engagement Method

Unlike traditional types of engagement – Communication and Consultation, Citizen Engagement is an interactive two-way process that encourages participation, exchange of ideas and flow of conversation. It reflects the willingness to share information and make citizens a partner in decision making. Active engagement gives the right to hold others accountable, and accountability is the process of engaging in participation. It seeks greater accountability from the service providers through increased dialogue, consultation and monitoring and assessing performance externally and mutually.

Table 20: Information Dissemination and Mode of Disclosure and Engagement for Consultation

Project Stage	Targeted Group	List of Information to be disclosed	Tools of Engagement , Modes of Disclosure	Frequency	Responsibility
Project Preparation	Government Agencies, Local Community, NGOs CBOs, International Partners, CSOs	Project Appraisal Document (PAD), E&S documents (SEP, ESMF, ESCP, GRM, LMP, GBV/SEA/SH, RFP, ESIA, ESMP, RAP)	Dissemination of Information on dedicated project website, distribution of hard copies with relevant agencies and at designated project locations Publication of disclosure notice once in 2 national daily newspapers with wider coverage	Information dissemination & sharing on need basis	PCU/MoA/MPW/IIU & Partners
Implementation and supervision Phase	Project beneficiary communities, project affected parties, public at large, vulnerable groups, public and community workers, farmers, project staff and implementing agencies, other government entities/ public authorities	Update on project design and implementation Awareness/sensitization of project direct beneficiaries about the Project interventions, selection criteria, awareness on agricultural policies and regulations	Community meetings with chiefs and town authority observing social distancing, Dissemination of hard copies of reports at designated public locations; Press releases in the local media; Information leaflets and brochures; audio-visual materials, focus group meetings	County level meetings, village level meetings, workshops and explosive visit should be initiated Bi-Annually	PCU/MoA/MPW/IIU & Partners World Bank
	Project beneficiary communities, project affected persons; neighbouring communities; project and community workers, Public authorities; county & government authority (Land commissioners,	ESIA, ESMP, LMP, RAP, updated SEP, GRM procedures and SEA/SH prevention plan, workers code of conduct, regular updates on Project implementation.	Public notices; Electronic publications and press releases on the Project website & via social media; Publication of disclosure notice of E&S instruments once in at least 2 national daily newspapers with wider coverage;	Mid and end of year consultative meetings with relevant stakeholders (e.g. district officials, project affected persons, community stakeholders),	Project Coordination Unit (PCU)/MoA/MPW/IIU

	EPA, Public works etc): civil society organizations, Religious Institutions/bodies, CSOs/NGOs and the general public		Distribution of hard copies to relevant institutions (e.g. community libraries) and publication of disclosure notices at public locations/notice boards in project communities; Consultation meetings, focus group meetings xxx Publication of disclosure notice once in 2 national daily newspapers with wider coverage	Workshops for capacity building to be conducted as needed.	
	Local farmers neighbouring communities, Towns Local NGOs, direct project Beneficiaries, Vulnerable people, Youth Group, Single women farmers, community workers, farmers, government entities	Relevant E&S Implementation of project documents specially ESMF, SEP, ESIA, RAP GRM, Performance of subprojects, grants, awareness on SEA/SH, Environmental and Social Risk management performance reports, updates on project implementation	Public notices; publications and press releases on the Project web-site & via social media; Dissemination of hard copies at designated public locations; Press releases in the local media; Consultation meetings, separate focus group meetings with vulnerable groups, while making appropriate adjustments to consultation formats in order to take into account the need for social distancing Participatory & integrated Consultative meetings, workshops	Throughout the life cycle of the project implementation	Project Coordination Unit (PCU)/MoA/MPW/IIU
Project Completion Stage	All relevant Stakeholders	Achievement of project implementation, affected project beneficiaries	Through media, consultative meeting,	At the end of project implementation	Project Coordination Unit of Ministry of Agriculture

		awareness and participation and information sharing.	village meetings, counties meetings, press release		

CHAPTER EIGHT: GRIEVANCE REDRESS MECHANISM

The Grievance Redress Mechanism (GRM) will provide a way to provide an effective avenue for expressing concerns and achieving remedies for communities. The goal is to promote a mutually constructive relationship and enhance the achievement of project development objectives. The GRM is to ensure that complaints are directed and expeditiously addressed by the relevant agencies which are to enhance responsiveness and accountability. While a project-specific feedback and complaints mechanism is set up, the project will incorporate the existing grievance mechanism that uses the chiefdom-based approach in areas of the project table 22 Typical Grievances under RETRAP

- disagreement on land or property boundaries;
- disputed ownership of a given land or asset (two or more people claiming ownership of same land or property);
- disagreement on resettlement package (e.g., location of resettlement site not being suitable to them, proposed housing or resettlement plot characteristics/agricultural potential not adequate or suitable);
- complaint about adverse impacts of a particular activity thereby creating health hazards, environmental pollution or nuisance;
- exclusion from project activities
- non-response to complaints; and;
- disagreement over siting/location of subproject activities;

Other potential sources of grievance could be corruption and elite capture which can expose the project to undue social risks and possible legal challenges during implementation.

At project level, each Implementing Partner is expected as an operational institution to have in place, its mechanisms of handling feedback and complaints which the RETRAP project will essentially build on. Such a mechanism will be checked to ascertain its effectiveness, accessible and transparent procedures to receive and resolve complaints and where need be and for purposes of delivering this project, it shall then be reviewed and modified accordingly.

Feedback/ complaints shall be encouraged among all workers and community members throughout the project and resolved without undue delay. This will also be closely monitored and reported. It is important that, concerns are raised on project level before they are brought to the PMU level.

8.1 Principles of Good GRM

The core principles of the RETRAP's GRM are as follows:

- **Fairness**: Grievances are treated confidentially, assessed impartially, and handled transparently.
- **Objectiveness and Independence**: In each case, the GRM operates independently of all interested parties to guarantee fair, objective, and impartial treatment. GRM officials have adequate means and powers to investigate grievances (e.g., interview witnesses, access records).
- **Simplicity and Accessibility**: Procedures to file grievances and seek action are simple enough that Project beneficiaries can easily understand them. Project beneficiaries have a range of contact options including, at a minimum, a telephone number (preferably toll-free), an e-mail address, and a postal address. The GRM is accessible to all stakeholders, irrespective of the remoteness of the area in which they live, the language they speak, or their level of education or income. The GRM

does not use complex processes that create confusion or anxiety (for example only accepting grievances on official-looking, standard forms or through grievance boxes in government offices).

- **Responsiveness and Efficiency:** The GRM is designed to be responsive to the needs of all complainants. Accordingly, officials handling grievances are trained to take effective action upon, and respond quickly to, grievances and suggestions.
- **Speed and Proportionality**: All grievances, simple or complex, are addressed and resolved in a timely fashion. The action taken on the grievance is swift, decisive, and constructive.
- **Participatory and Social Inclusion**: A wide range of Project-affected people — community members, members of vulnerable groups, Project implementers, civil society, and the media — are encouraged to bring grievances and comments to the attention of Project authorities. Special attention is given to ensure that marginalized groups, including those with special needs, can access the GRM.

8.2 Steps of Grievance Redress

A verbal or a written complaint from aggrieved person will be received by the Project PIU or the person assigned in the project as the Grievance Officer (GO) and recorded in a grievance log (electronically if possible). Grievances can be lodged at any time, either directly to the Contractor, county/District Office or via the grievance committee member.

The process for lodging a complaint is outlined below:

a. The GO will receive a complaint from the complainant.
b. The GO will ask the claimant questions in their local language and enter them in English onto the Grievance Form.
c. A representative of the community shall witness translation of the grievance into English.
d. The GO reads the complaint in English and translates it into the complainant`s local language as appeared on the Grievance Form.
e. The local leader and the complainant both sign the Grievance Form after they both confirm the accuracy of the grievance.
f. The GO lodges the complaint in the Grievance Log.

8.3 Redress Mechanism under RETRAP

Local Grievance Redress Committees (LGRC) will be initiated at the village level, to record grievances and also help in mediation. This committee will comprise of the followings; local chief, a trusted village elder, a religious representative, and specific vulnerable group representatives of relevance to the village i.e. women and the disabled. Disputes will be resolved at the village level as far as possible. The GRC at the district and county levels will be resolved under a County/District GRM constituted by the project. At the County Level; the Grievance Redress Committee will be established to deal with any grievances unsettled at the village level. More serious grievances must immediately be referred to the police. It is important to note that, not all conflicts and grievances in the project are to be concluded under RETRAP GRM. More serious cases that involve assault, gender-based violence, rape and “serious” theft will not be resolved under this framework but are instead referred to the police for appropriate prosecution process.

8.4 Recommended Grievance Redress Timeframe

The table below presents recommended timeframes for addressing grievance or disputes related to livelihood restoration and compensation. It is envisaged that such disputes could be resolved at the community or county levels.

Table 21: Recommended Grievance Redress Timeframe

Step	Process	Time frame
1	Receive and register grievance	within 24 hours
2	Investigate complaint or dispute, acknowledge, assess grievance and assign responsibility	Within 5 Days
3	Consultation and development of response	Within 5 Days
4	Implementation of response if agreement is reached	Within 1 weeks
5	Close grievance	Within 5 Days
6	Initiate grievance referral or review process if no agreement is reached at the lower level	within 1 weeks
7	Implement agreement/recommendation reached at higher or review stage.	within 2weeks
8	Grievance taken to court by complainant after unsuccessful higher lever consultation or review.	

CHAPTER NINE: INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENT AND CAPACITY BUILDING

Overall responsibility for implementing the project will rest with MoA. The ministry will collaborate closely with other relevant ministries and their respective departments and agencies, including with the Ministry of Public Works (MPW) on road works. The Infrastructure Implementation Unit (IIU) of MPW, which is currently implementing IDA-financed transport projects, will be responsible for implementing civil works under RETRAP including the rehabilitation of the 40km road between Tapitta and Toe-town. The IIU will have both Environmental Specialist and Social Specialist as part of their project implementation team. An inter-ministerial Project Steering Committee headed by MoA will provide strategic oversight for the project. The Steering Committee will include representatives of all relevant ministries and agencies, the private sector, non-governmental entities (such as the National Chamber of Commerce), and representatives of youth and women's organizations. The Steering Committee will meet at least twice per year and will be chaired by the MoA or its designated representative.

The MoA will execute the project through its Project Management Unit (PMU), which is charged with the preparation and management of externally funded programs. The PMU will ensure compliance with all the legal and mandatory procedures stipulated in the financing agreement for RETRAP, including regular reports, audits, and safeguard compliance. The PMU will delegate the functions and responsibilities of day-to-day project coordination and management, including M&E to a strengthened unit within its structure which is the Project Implementation Unit (PIU) for STAR-P. This PIU will be further strengthened with additional staff including international expertise to enhance project implementation and delivery. Administratively, the PIU will report to the supervising ministry through the PMU. The RETRAP's PIU will be headed by a Deputy Coordinator and will include a Procurement Specialist, Project Accountant, Environmental Specialist, Social Development Specialist, M&E Specialist, MIS Specialist, Agribusiness Specialist, Infrastructure Specialist, Advisory Services Specialist, and a support staff. Additionally, the PMU will appoint County-level Focal Persons who will be responsible for preliminary E&S screening of subproject activities and ensure general E&S compliance at the county levels.

A robust M&E system will be built within the PIU to effectively monitor and evaluate the project. The PIU will have the overall responsibility for the project M&E system and will work closely with CLFs to monitor project results, including output and outcome indicators. The M&E Specialist will be a well-qualified person with appropriate technical knowledge and experience to manage the day-to-day activities of the project M&E system. Data will be collected primarily by CLFs in each participating county, under the supervision of the M&E Specialist. CLFs will also work with relevant stakeholders and appropriately trained project actors to facilitate additional data collection. The PMU will liaise and coordinate with the relevant ministries, departments, agencies, and other government institutions (including research institutes), the private sector, and other projects to support monitoring and reporting.

The M&E system will employ an MIS to manage data and provide real-time information to project managers, which will increase overall efficiency and performance by facilitating the identification of problems and analysis of trends. The MIS will incorporate outcome and output indicators for each project component and subcomponent, performance indicators for all key project activities, a gender tracker, and safeguard indicators. For all indicators, the MIS will provide clear guidance on units of measure, frequency of data collection, data collection responsibilities, data source and methodology, definitions, and formulae. Reporting templates will also be available through the MIS where appropriate.

The project will collect both qualitative and quantitative data. Data will be collected at the beginning of the project to establish a baseline, against which subsequent data will be measured. Farmer field books, surveys, project completion reports, training logbooks, grant proposals, and other data sources will be employed to regularly inform key performance indicators, gauge dynamics of the agri-business linkages, and monitor implementation progress. At mid-term, a rapid survey will be conducted to assess whether the project is on course to achieve its objectives. An end-of-project survey will be conducted to assess the achievement of project targets and inform government project completion reports.

9.1 Capacity Building Needs

Both the MoA and MPW have respectively been implementing the STAR-P(P160945) and IDA financed transport projects (e.g. South Eastern Corridor Road Asset Management Project (SECRAMP - P149279) with some level of safeguards management experience in World Bank-funded projects. However, these Ministries have no experience working under the new Environmental and Social Framework (ESF) of the World Bank, therefore their capacity would have to be built to improve on the management of project environmental and social risks and impacts and to ensure effective coordination of the national and subnational level implementation of environmental and social risk mitigation measures. For effective implementation of this ESMF, there will be a need for technical capacity building for the staff of implementing agencies and other stakeholders including members of the national steering committee. .

The PIU's E&S Specialists will be responsible for organizing and assisting in training of personnel of the project stakeholder agencies in all aspects of the ESMF including creating a general awareness of environmental and social management issues. They will also be responsible for identifying and selecting suitable resources persons and for preparing ESF/ESSs training modules and materials including E&S manuals to guide project beneficiaries in project implementation.

For the steering committee, there will be a need to build their capacity in areas of mainstreaming environmental and social issues in development projects and the following topics/areas are proposed:

a. Introduction to World Bank's Environmental and Social Framework (ESF);
b. Environmental and social instruments requirements in development projects;
c. Environmental and social screening and;
d. Environmental and social reporting

This training can be delivered in form of half-day seminars.

On the other hand, there will be a need to support the capacity of County Environmental Inspectors and County Agricultural Officers, PIU/PMU Environmental and Social Specialists, County-level Focal Officers, IIU staff, EPA staff, and other staff in the PCU/PIU. These categories will be trained in areas such as:

a. World Bank Environmental and Social Standards;
b. Liberia EPA Environmental Assessment Regulations;
c. Preparation and review of screening reports;
d. Introduction to ESMF/RPF;
e. Preparation of ToRs for Subject Area Specialist (ESIA, Pest Management, Resettlement);
f. Preparation of Environmental Briefs and the ESIAs, RAPs, etc.;
g. Technical training to support implementation of the ESMF;
h. Training on mainstreaming social and gender-related issues (OHS and HIV/AIDS);
i. Monitoring and Evaluation of RETRAP;
j. Climate Change;
k. Climate Smart Agriculture-CSA; Etc.

9.2 Capacity Building for Collaboration Institutions

It is anticipated that, there will be a range of collaborating institutions under the project. These will include FBOs and NGOs such as CHAP, and the private sector players (NAIDAL) and participating farmers. Each of these categories will require responsive capacity enhancement on aspects of safeguards issues based largely on their levels of involvement in RETRAP project activities. Capacity building will be in form of training on safeguards mainstreaming, monitoring and reporting.

Table 22: ESMF Training Programme

Training required	Target participant to train	When to do the training	Training to be conducted by who	Institutional responsibility to organize the training	Training type	Estimated training logistics cost (USD)
Training on RETRAP ESMF, roles and responsibilities; **Completion of** screening forms; environmental assessment permits registration forms with the EPA; **Introductory training on** preparation of TORs for carrying out ESIA, SEP & ESMPs& RAP/ARAP.	20 Facilitators EPA County Environmental Inspectors: 11 and MPW Resident Engineers: 11	During project design and implementation stage	MoA and MPW-ESS & SSS	MoA and MPW	Workshop	42x1,500= 63,000.00
Grievance Redress Procedures; **Disclosure of** the safeguards instruments;	RETRAP Safeguards Officers, Stakeholders: 11 & EPA Environmental Inspectors 11:	During project design and implementation stage	MoA& MPW-ESS &SSS	MoA and MPW	Workshop (Training of Trainers)	24x1000= 24,000.00

Training required	Target participant to train	When to do the training	Training to be conducted by who	Institutional responsibility to organize the training	Training type	Estimated training logistics cost (USD)
Environmental and social impacts mitigation measures implementation and monitoring; Training in occupational health and safety	RETRAP Safeguards Officers, Engineers: 11& EPA Environmental Inspectors 11	During project implementation	MoA&MPW-ESS &SSS	MoA and MPW	Workshop	24x100=24,000.00
Totals						**111,000.00**

9.3 Monitoring, Evaluation & Reporting

Monitoring is required to ensure that all the required environmental and social mitigation measures, set out in this ESMF (and also in the SEP, RAP and RPF) for the project are implemented satisfactorily. The objective of monitoring is to ascertain that, the proposed mitigation measures are being implemented and that, there is compliance to the terms and conditions for approval.

The purpose of the environmental and social safeguards monitoring includes:

a. Ensure that proper appraisals on the effects of sub-projects takes place and that proper measures are put in place to mitigate the effects;

b. Set out the basis for compliance and enforcement of terms and conditions for approval; Design compliance strategies;

c. Assess compliance with management of the environment and social safeguards; and
d. Ensure that all stakeholders participate in the sub-project processes

The environmental and social safeguards monitoring will be carried out by the staff of PMU alongside the County Environmental Officers (CEO) and the EPA.

The ESMU staff verifies the application of mitigation measures as contained in the field reports submitted to the Unit. In this case, the ESMU staff will undertake regular visits to project sites to provide technical support and document progress in implementing mitigation measures. Where feasible, the CEOs will support monitoring in line with mandates which is to oversee compliance of development project in the districts with environmental provisions. The reporting on environmental monitoring will be included in the overall project progress reports, which will be shared with the World Bank, EPA and other line stakeholders as necessary.

9.4 ESMF Budget

To ensure effective implementation of the ESMF, several key activities have been identified with cost attached, including public awareness and sensitization for farmers and other stakeholders; capacity building for staff of the PIU and other relevant stakeholders, including County Agricultural Officers; and

activities related to mitigation of environmental and social impacts including preparation of ESMPs for sub-projects as required.

A summary of the ESMF estimated budget for implementation is provided below in Table 24. The main activities to be undertaken have been itemized and costed.

Table 23: ESMF Implementation Budget

Nº.	**Item/Activity**	**Cost in USD**
1	Awareness and sensitization campaigns for farmers and communities including E&S manuals to guide farmers.	130,000
2	Capacity building for County Agricultural and Environmental Officers and Safeguards focal persons	111,000 ***(From the training program above)***
3	Environmental and Social Audits	120,000
4	Equipment and Facilitation of Environmental and Social Unit (vehicles, desks, computers)	200,000
5	Mitigation of environmental and social impacts in the projects (including subsequent Environmental and Social Assessments for sub-projects)	350,000
6	Grievance Redress	50,000
7	Environmental monitoring and follow up	50,000
Total Budget Estimate for ESMF Implementation		**1,011,000.00**

9.5 ESMF Disclosure

The disclosure is a requirement of the World Bank Environmental and Social Framework as well as the national environmental assessment procedures; hence the report will be available to project beneficiaries groups, local NGOs, and the public at large. The PMU will make copies of the ESMF available in selected public places as required by law for information and comments as well as in the media. The ESMF will be announced and published on an official Government website. EPA and PMU/MoA will upload the ESMF and other safeguards documents for RETRAP onto its website https://www.MoA.gov.lr and invite the public to access and review the documents. The ESMF will also be interpreted in local dallies which are wildly spoken in the 11 project counties. The PMU will also provide copies of the ESMF documents to the public for any comments. The ESMF documents will be disclosed at the World Bank's external website and made available to any interested persons, for public access and for public information and comments/feedback as will be necessary.

9.6 Conclusion and Recommendations

a. Smallholder farmers (rubber cassava and vegetable) are involved in farming on existing plantations and where expansion is deemed necessary, that should involve use of previously cultivated lands or fallow fields, not closed to natural forest;
b. The effective implementation of the ESMF (and RPF) hinges on having in place, institutions that are staffed, equipped and facilitated. However, with reference to the PIU/PMU, a number of related projects are being implemented and are being funded by AfDB, IFAD or World Bank. For instance, other projects, which are being prepared share a number of capacity building requirements with the RETRAP. It is suggested that the PIU/PMU in consultations with MoA and the Bank will harmonize on how funds can be committed towards certain costs such as the hiring of additional environmental and social safeguards staff;
c. Smallholder agricultural enterprises to a large extent have a big involvement of women in terms of cropping, harvesting, transportation and processing though at the end, it is clear, they in many cases do not fully benefit. The deliberate effort in RETRAP to mainstream gender dimension into all aspects of the project offers a window of opportunity for gender empowerment which should be keenly be implemented.

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ANNEXES

Annex 1: STAKEHOLDER ATTENDANCE LIST

STAKEHOLDER ENGAGEMENT RECORD

Project Name					
Date					
Purpose of Consultant (tick appropriate box)	Scoping Sanitation RPF			IPMP SEP ESMF	✓
Proponent					
Name of person met	Designation	Organization/community	Contact	Sign	
SEI F. TUCKER	GBEDIN	DOKODAN	0886875099		
EMM SUAH	GBEDIN	DOKODAN	0776330515	E.S	
N4a – Qee	GBEDIN	DOKODAN	0880570035	N4a – Qee	
Bahn A. Duo	Gbedin	DOKODAN	0775878044		
Saye Conteh	Gbedin	DOKODAN	0778563444	S G	
Amstrongsonpo	Gbedin	DOKODAN			
KOU GOKPEH	Gbedin	DOKODAN	0881421772	K. G	
Cecelia Meanor	Gbedin	Mehngwangeh		Cecelia. M	
Sarah Wehee	GBEDIN	Mehngwangeh		S. W	
NUNPLOMO	Gbedin	Mehngwangeh		N. F	

Consultation Meeting *Date:* Feb. 10, 2021.

Attendance				
No.	Name of Participant	Institution/Town	Position	Signature
1.	Ambrose ABC Jamina	EPA/LOFA	Inspector	
2.	VICTOR MERNOSHE VOOR	IFAD/LOFA	TREE CROP OFFICER	
3.	Mitchell Nampelt	IFAD / LOFA	Young Professional	
4.	Musa Kamara	Marvinkonedu	Farmer	
5.	Mulbah V. Tarwelleh	Marvinkonedu	Farmer	M.V.T
6.	Jusufu Kromah	Marvinkonedu	Farmer	JMO
7.	Mariatu Sesay	Marvinkonedu	Farmer	
8.	Mamadee Sesay	Marvinkonedu	Farmer	
9.	Karlee M Sesay	maventionedu	Farmer	
10.	Mamadee S. Kamara	Marvinkonedu	"	
11.	Sieh V. Kromah	Marvinkonedu	Farmer	
12.	Mohammed V. Kamara	Marvinkonedu	"	
13.	Jusufu S. Sesay	Marvinkonedu	"	
14.	Blama A. Saryon	Marvinkonedu	"	
15.	Blama Konneh	"	"	
16.	Musa Kamara	"	"	
17.	Samah Konneh	"	"	
18.	Bsaka Sesay	"	"	
19.	mohammed V kromah	"	"	
20.	Mamadee Kamara	"	"	
21.	Mariseh V Kromah	Marvinkonedu		

Annex 2: Summary Generic ESMP indicating Environmental and Social Impacts and Risks encompassing Mitigation Measures for RETRAP based on project activities

No.	Environmental/Social Impact	Mitigation Measures	Monitoring Indicators	Agency Responsible for Monitoring	Unit Cost
	Impacts of poultry and piggery development-based enterprises				
Impacts 1.	Impacts relating to odors	The poultry and piggery farms need to operate under acceptable standards for such enterprises. All potential sources of odors need to be regularly cleaned. The units housing poultry should be leak proof.	Farmers	County Agricultural Officers; and County Environmental Inspectors	Part of their operational role.
2.	Risks of vectors nuisance due to unhygienic operations of the units.	The poultry and piggery units need to be kept and operated under hygienic conditions. The deep liter and the pens need to be routinely changed and cleaned routinely changed and the older one dumped as organic manure under guide of extension workers. The units should be well fenced to keep off vermin and snakes.	State of cleanliness of the poultry enterprises. Poultry unit with secure fence and adequate lighting.	Extension workers.	Part of their operational role.

No.	Environmental/Social Impact	Mitigation Measures	Monitoring Indicators	Agency Responsible for Monitoring	Unit Cost
3.	Water pollution risks from agro-chemicals used in poultry and pig farms.	Treatment of poultry and pigs is done by qualified staff that should ensure safe disposal of used agro-chemicals containers.	Checking in and around the farm for any used containers of agro-chemicals.	Extension staff	Part of their operational role.
4.	Management of wastes from piggery and poultry enterprises	All waste should be routinely removed and disposed as manure.	Regular checking of a public health status of the units.	Extension staff	Part of their operational role.
5.	Disposal of diseased or dead animals (birds and pigs)	Dead animals should be quickly buried after post-mortem by qualified veterinary person to ascertain the cause of such death. Sick animals are isolated from the rest.	Site in place for disposal of dead animals in place and well set up, Isolation sections for diseased animals in place.	Extension staff	Part of their operational role.
B.	**Impacts of commodities value addition and processing**				
1.	Production/value addition-based wastes	Operations of the processing facilities need to be under standard operations standards for such facilities. Separate ESIAs/ESMPs be done for such enterprises to come up with	Industries with operations guidelines in place. ESIAs/ESMPs reports in place.	EPA	Costs in budget under RETRAP.

No.	Environmental/Social Impact	Mitigation Measures	Monitoring Indicators	Agency Responsible for Monitoring	Unit Cost
		responsive mitigation measures.			
2.	Generation of crop-based wastes	Mainly rice husks are used for oil, energy and other products. Wastes are composed to manure. Cassava waste is used for piggery feed.	Plans for transforming rice into industrial products in place. Waste composting.	CARI MoA County Agricultural and Environmental Inspectors	Part of RETRAP investment budget.
3.	Risks of household food insecurity	Households to dedicate portions of produce for food at the household. Sensitization	Households portioned for food and commercial needs. Seminars on food security held.	MoA Extension staff at the counties and districts.	
C.	**Impacts of improvements/rehabilitation of storages facilitates**				
	Safety of the public from construction works	Hoarding and sealing of the work areas. Speed limits for construction fleet. Signs guiding the public in place.	Work site hoarded and with signs in place.	MoA/MPW & Contractor, Supervising engineer CEOs	Part of works budgets.
	OSH of workers	Provide PPEs	PPEs purchased PPEs worn by workers	Contractor, Supervising Engineer	Part of works budgets.

No.	Environmental/Social Impact	Mitigation Measures	Monitoring Indicators	Agency Responsible for Monitoring	Unit Cost
		Conduct safety and health trainings. Provide occupational health services.	Training records		
	Traffic accidents	Speed limits set Traffic guides. Train drivers	Speed limits furniture in place (15km/h)	Contractor, Supervising Engineer	Part of works budgets.
	Management of construction waste	Routine removal of construction and demolition debris. Dumper trucks to have tarpaulins to cover the rubble.	Rubble readily and routinely transported outside the site. Dumper trucks with tarpaulins on.	Contractor, Supervising Engineer	Part of works budgets.
	Dust nuisance	Hoarding of the sites. Sprinkling of water on access routes in community sensitive areas.	Sites hoarded Schedule for water sprinkling in place.	Contractor, Supervising Engineer	Part of works budgets.
	Damage to vegetation	Areas for construction materials be cleaned up and restored fully after works.	No. of trees planted and caged	Contractor, Supervising Engineer	Embedded in contract for works sums.
	Management of hazardous equipment	Obsolete ones will be disposed of through Public Assets disposal procedures as by the Act on assets.	Records of such equipment in place.	MoA/MPW &Contractor	No costs for such activity.

No.	Environmental/Social Impact	Mitigation Measures	Monitoring Indicators	Agency Responsible for Monitoring	Unit Cost
	Risks of fires	Have in place, routinely serviced fire extinguishers. Training of staff in First Aid aspects. Laboratory Standard Operation Procedures (LSOPs) be followed to ensure issues of fires are checked.	LSOPs in place Fire extinguishers in place. First Aid kits in place in the laboratories.	MoA/MPW & Contractor	Budget/costs are part of Contractor's operations.
	Issues of waste management	Improper storage and management of litter, construction waste and liquid wastes prior to disposal; Effluent from construction workers' temporary amenities leaching into groundwater, carrying nutrients and micro-organisms; and negative; and Contamination of the storm water from litter and construction wastes and untreated effluent from temporary workers' amenities.	Waste management measures in place for campsites; Pit latrines in place in the campsite.	MoA/MPW & Contractor	No costs for such activity.
	Risks of accidents and injuries on workers and the public.	Delivery trucks to use defined routes not, unnecessary de-tours in the communities.	PPEs in place and worn by workers Road signs are required	MoA/MPW & Contractor	Budget/costs are part of Contractor's operations
	Injuries on workers and the public.	stocks of medicines on the site;	PPEs in place and worn by workers	MoA/MPW & Contractor	No costs for such activity.

		Provide PPEs to the workers; Ensure workers do not work under exhausting conditions continuously without a rest. Basic First Aid training to be offered to the workers as part of induction process. Institute regular drills on safety to the workers	Schedule of work in place		

Annex 3: Environmental and Social Screening Form

Please type or print clearly, completing this form in its entirety. You may provide additional information on a separate sheet of paper if necessary. This will guide in the identification and categorization of the project accordingly.

Component under RETRAP	
Name of Subproject	
Project Objective	
Expected Commencement Date	
Proposed Main Project Activities	
Location (District, Parish, Village)	
Name of Evaluator	

BRIEF DESCRIPTION OF THE PROPOSED PROJECT

EMPLOYEES AND LABORERS

Number of people to be employed: Employees and Laborers	During Construction	During Routine Operation
FULL-TIME		
PART-TIME		

DESCRIPTION OF PROCESS THAT COULD BE IMPLEMENTED

Briefly describe the type and nature or type of the project at the site.

List the type and quantity of raw materials to be used in the project and highlight their sources

Material	Quantity	Source

POTENTIAL ENVIRONMENTAL IMPACTS

Please indicate environmental impacts that may occur as a result of the proposed project.

A. The Biological Environment

The Natural Environment

Describe the habitats and flora and fauna in the project area and in the entire area expected to be affected by the sub-project (e.g., downstream areas, access roads):

_____

Will the project directly or indirectly affect?

Natural forest types?

Swamps?

Wetlands (i.e., lakes, rivers, swamps, seasonally inundated areas)?

Natural critical habitats (parks, protected areas)?

Other habitats of threatened species that require protection under Liberia laws and/or international agreements?

YES _____ NO _____

Are there according to background research/observations any threatened/ endemic species in the project area that could be affected by the project?

YES _____ NO _____

Will vegetation be cleared? If yes, please state the distance/length of affected area

YES _____ NO _____

Will there be any potential risk of habitat fragmentation due to the clearing activities?

YES _____ NO _____

Will the project lead to a change in access, leading to an increase in the risk of depleting biodiversity resources?

YES _____ NO _____

Provide an additional description for “yes” answers:

_____

Protected Areas

Does the subproject area or do subproject activities?

Occur within or adjacent to any designated protected areas?

YES _____ NO _____

Affect any protected area downstream of the project?

YES _____ NO _____

Affect any ecological corridors used by migratory or nomadic species located between any protected areas or between important natural habitats (protected or not) (e.g., mammals or birds)?

YES _____ NO _____

Provide an additional description for “yes” answers:

_____

Invasive Species

Is the sub-project likely to result in the dispersion of or increase in the population of invasive plants or animals (e.g., along distribution lines)?

YES _____ NO _____

Provide an additional description for a “yes” answer:

_____

B. The Physical Environment

Geology/Soils

Will slope or soil stability be affected by the project? YES _____ NO _____

Will the subproject cause physical changes in the project area (e.g., changes to the topography)? YES _____ NO _____

Will local resources, such as rocks, wood, sand, gravel be used?

YES ____ NO ____

Could the subproject potentially cause an increase in soil salinity in or downstream the project area? YES _____ NO _____

Could the soil exposed due to the project potentially lead to an increase in lixiviation of metals, clay sediments, or organic materials? YES _____ NO _____

_____

Landscape / Aesthetics

Is there a possibility that the sub-project will adversely affect the aesthetics of the landscape?

YES _____ NO ____

_____

Pollution

Will the sub-project use or store dangerous substances (e.g., large quantities of hydrocarbons)? YES _____ NO _____

Will the subproject produce harmful substances? YES _____ NO _____

Will the subproject produce solid or liquid wastes? YES _____ NO _____

Will the subproject cause air pollution? YES _____ NO _____

Will the subproject generate noise? YES _____ NO _____

Will the subproject generate electromagnetic emissions? YES ____ NO _____

Will the subproject release pollutants into the environment? YES ____ NO ____

_____

C. The Social Environment

Land Use, Resettlement, and/or Land Acquisition

Describe existing land uses on and around the sub-project area (e.g., community facilities, agriculture, tourism, private property, or hunting areas):

_____

Are there any land use plans on or near the sub-project location, which will be negatively affected by subproject implementation? YES ____ NO ____

Are there any areas on or near the subproject location, which are densely populated which could be affected by the sub-project? YES _____ NO _____

Are there sensitive land uses near the project area (e.g., hospitals, schools)?

YES ____ NO____

Will there be a loss of livelihoods among the population? YES ____ NO ____

Will the sub-project affect any resources that local people take from the natural environment? YES _____ NO _____

Will there be additional demands on local water supplies or other local resources?

YES _____ NO _____

Will the sub-project restrict people's access to land or natural resources?

YES ____ NO ____

Will the project require resettlement and/or compensation of any residents, including squatters?

YES _____ NO _____

Will the subproject result in construction workers or other people moving into or having access to the area (for a long-time period and in large numbers compared to permanent residents)?

YES ____ NO _____

Who is/are the present owner(s)/users of resources/infrastructures the subproject area?

_____

Loss of Crops, Fruit Trees, and Household Infrastructure

Will the subproject result in the permanent or temporary loss of:

Crops?

Fruit trees / coconut palms?

Household infrastructure?

Any other assets/resources?

Occupational Health and Safety, Health, Welfare, Employment, and Gender

Is the sub-project likely to safeguard worker's health and safety and public safety (e.g., occupational health and safety issues)? YES _____ NO _____

How will the project minimize risk of HIV/Aids?

How will the sub-project minimize the risk of accidents? How will accidents be managed, when they do occur?

_____

Is the project likely to provide local employment opportunities, including employment opportunities for women? YES _____ NO _____

Provide an additional description for "yes" answers:

_____

Historical, Archaeological, or Cultural Heritage Sites

Based on available sources, consultation with local authorities, local knowledge and/or observations, could the sub-project alter?

Historical heritage site(s) or require excavation near the same? YES ____ NO _____

Archaeological heritage site(s) or require excavation near the same? YES ____ NO ____

Cultural heritage site(s) or require excavation near the same? YES _____ NO ____

Graves, or sacred locations (e.g., fetish trees or stones) or require excavations near the same?

YES _____ NO _____

N.B For all affirmative answers (YES) Provide description, possible alternatives reviewed and/or appropriate mitigating measures.

RECOMMENDATIONS

Environmental category: (tick where applicable)

	Category	**Justification**
	Does not require further environmental or social studies	
	Requires submission of only a Project Brief	
	Requires a full ESIA to be submitted on date	
	Requires an ESMP to be submitted on date	
	Requires a RAP to be submitted on date	
	Requires an Indigenous Peoples Plan (IPP)	
	Requires a Physical Cultural Resources Plan	

CERTIFICATION

We certify that we have thoroughly examined all the potential adverse effects of this subproject.

Reviewer: ……

Name: ……..

Signature: …….

Date: …….

Annex 4: Environmental & Social Monitoring Report Template

1. Name of subproject:

2. Project Location:

3. Environmental and Social Impacts Brief description of the environmental impacts which were predicted when the project was designed.

4. Environmental and Social Impacts Observed During Field Visit Brief description of the environmental effects observed during the field visit against the predicted effects and level of damage, as well as the unpredicted effects and level of damage

5. Project Compliance of environmental and social policy, laws and regulations Brief description of the project's compliance with environmental specifications and guidelines

6. Results of Field Visit Brief description of the ongoing bio-physical and socio-economic effects against baseline values and past monitoring results

7. Conclusions and Recommendations to Project Management Listing of recommendations for adjustments so that project becomes fully compliant

8. Conclusions and Recommendations to the Monitoring Programme Listing of recommendations for adjustments to the monitoring programme

9. Other Observations:

10. Recommendations and Conclusions

11. Name of Monitor:

    Signature: Date:

12. Date of Review by ESMT:

    Recommended Actions by ESMT

13. Brief summary of discussions and decisions on the issues by ESMT

14. Signed by Safeguards Manager: Date

Annex 5: Chance Finds Procedures

Project-supported civil works could impact sites of social, sacred, religious, or heritage value. "Chance finds" procedures would apply when those sites are identified during the actual construction period.

1. Cultural property includes monuments, structures, works of art, or sites of significant points of view, and are defined as sites and structures having archaeological, historical, architectural, or religious significance, and natural sites with cultural values. This includes cemeteries, graveyards and graves.

2. The list of negative subproject attributes which would make a subproject ineligible for support includes any activity that would adversely impact cultural property.

3. In the event of finding of properties of cultural value during construction, the following procedures for identification, protection from theft, and treatment of discovered artefacts should be followed and included in standard bidding documents;

    1. Stop the construction activities in the area of the chance find;

    2. Delineate the discovered site or area;

    3. Secure the site to prevent any damage or loss of removable objects;

    4. Notify the Supervising Engineer who in turn will notify the responsible authorities;

    5. The Ministry of Information, Cultural Affairs, and Tourism (aka Ministry of Cultural Affairs), in collaboration with responsible local authorities (where applicable), would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures;

    6. Decisions on how to handle the finding shall be taken by the Ministry of Cultural Affairs or other responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance), conservation, restoration and salvage;

    7. Implementation of the authority decision concerning the management of the finding shall be communicated in writing by the Ministry of Cultural Affairs; and

    8. Construction work could resume only after permission is given from Ministry of Cultural Affairs or other responsible authorities concerned with safeguarding the cultural heritage. These procedures must be referred to as standard provisions in construction contracts. During project supervision, the Supervising Engineer shall monitor the above regulations relating to the treatment of any chance find encountered. Relevant findings will be recorded in World Bank Supervision Reports and Implementation Completion Reports will assess the overall effectiveness of the project's cultural property mitigation, management, and activities, as appropriate.

Annex 6: Environmental Rules for Contractors

These Environmental Rules for Contractors are prepared for all the contractors to be engaged for any RETRAP civil works construction activities. The rules include provisions for proper management of construction sites, safe storage of construction materials and safe disposal of wastes.

General Considerations

1. The contractor shall, in all his activities ensure maximum protection of the environment and the socio-economic wellbeing of the people affected by the project, whether within or outside the physical boundaries of the project area;

2. Before any construction works begin, the contractor shall ensure that the relevant environmental and land acquisition certificates of authorization for the works have been obtained from Liberia's Environmental Protection Agency and/or Land Commission;

3. In general, the contractor shall familiarize himself with the ESMF for the RETRAP. Specifically, the contractor shall make every effort to follow and implement the recommendations and mitigation measures of the ESMF and any supplemental safeguards document, to the satisfaction of the EPA, World Bank as applicable; and

4. The contractor shall always keep on site and make available to environmental inspectors or any authorized persons, copies of the ESMF and any other relevant documents for the monitoring and evaluation of environmental and social impacts and the level or progress of their mitigation.

Acquisition of Construction Materials

The contractor shall ensure that construction materials such as sand, quarry stone, soils or any other construction materials are acquired from approved suppliers and that the production of these materials by the suppliers or the contractor does not violate the environmental regulations or procedures as determined by the EPA.

Movement and Transportation of Construction Materials

The movement and transportation of construction materials to and within the construction sites shall be done in a manner that generates minimum impacts on the environment and on the community, consistent with the provisions of the ESMF.

Fencing of Construction sites

Construction sites refer to all areas required for construction purposes, including equipment staging areas. The boundaries of the site shall be demarcated prior to any work commencing on the site. It is the responsibility of the contractor to decide on an appropriate system of protective fencing for the site. The site boundary demarcation fence shall be removed when construction is completed, if appropriate. The Contractor shall ensure that all their equipment and materials remain within the boundaries of the site and

he shall ensure that materials used for construction on the site do not blow away or otherwise escape the site.

Storage of Construction Materials and Equipment

Construction materials shall be stored in a manner to ensure that:

1. There is no obstruction of service roads, passages, driveways and footpaths;
2. Where it is unavoidable to obstruct any of the service paths, the contractor shall provide temporary or alternate by-passes without inconveniencing the flow of traffic or pedestrians;
3. There is no obstruction of drainage channels and natural water courses;
4. There is no contamination of surface water, ground water or the ground;
5. There is no access by public or unauthorized persons, to materials and equipment storage areas;
6. There is no access by staff, without appropriate protective clothing, to materials and equipment storage areas; and
7. Access by staff and public or unauthorized persons, to hazardous, corrosive or poisonous substances including sludge, chemicals, solvents, oils, asbestos cement dust or their receptacles such as boxes, drums, sacks and bags is prohibited.

Solid Waste Management

The Contractor shall institute a waste control and removal system for the site. All wastes shall be disposed of offsite at an approved refuse disposal site in consultation with the EPA. Burning of any waste on any construction site is forbidden. The Contractor shall supply waste bins throughout the site at locations where construction personnel are working.

The bins shall be provided with lids and an external closing mechanism to prevent their contents blowing out and shall be scavenger-proof to keep out any animals that may be attracted to the waste. The Contractor shall ensure that all personnel immediately deposit all waste in the waste bins for removal by the Contractor. Bins shall be emptied on a frequent basis and waste removed to a temporary storage site where it shall be properly contained in water and windproof containers until properly disposed of. The bins shall not be used for any purposes other than waste collection.

In performing his activities, the contractor shall use the best practical means for preventing emissions of noxious or offensive substances into the air, land and water. He shall make every effort to render any such emissions (if unavoidable) inoffensive and harmless to people and the environment. The means to be used for making the emissions harmless or for preventing the emissions shall be in accordance with the ESMF and any other applicable safeguards document, and with the approval of the EPA and (if applicable) relevant Local Authority. Hazardous wastes shall be treated and disposed of in conformity with the national regulations and where applicable, with the supervision of qualified personnel.

Wastewater Management

The Contractor shall construct and operate the necessary collection and treatment facilities for waste water to prevent pollution. In cases where water is mixed with oily waste, separators shall be installed. The oil should be stored in tanks or drums as hazardous waste and disposed of in approved manner. The Contractor shall dispose of collected waste water in a manner agreed with the EPA and respective local officials. The Contractor may discharge "clean" silt laden water overland, preferably vegetated land at the construction site and allow this water to filter into the ground.

However, the Contractor shall ensure that he does not cause soil erosion as a result of any overland discharge. Water from washing operations shall be collected in a sturdy container and disposed of in a manner agreed with EPA. Trucks delivering concrete or other construction supplies or equipment shall not be washed at the project site, nor in any other environmentally sensitive areas. All washing operations shall take place at a location where wastewater can be disposed of in an acceptable manner. Sanitary wastes shall be disposed into septic tanks.

Stockpiles, Borrow Pits and Quarries

Borrow pits and quarries shall be prohibited where they might interfere with the natural or designed drainage patterns. River locations shall be prohibited if they might undermine or damage the river banks, or require works in the wet area, which may carry too much fine material downstream. The Contractor shall ensure that all borrow pits and quarries are restored, either to their original conditions or to semi-natural habitats that maintain useful conditions for wildlife.

Site Restoration

The Contractor shall ensure that all temporary structures, equipment, materials, and facilities used for construction activities are removed upon completion of the project. Any oil and fuel contaminated soil shall be removed and buried in waste disposal areas. Soak pits and septic tanks shall be covered and effectively sealed off and the sites shall be re-vegetated.

Health and Safety of Workers

The contractor shall protect the health and safety of workers by providing the necessary and approved protective clothing and by instituting procedures and practices that protect the workers from dangerous operations. The contractor shall be guided by and shall adhere to the relevant national labor regulations for the protection of workers. In addition, the contractors should indicate specific measures they will take during construction to prevent HIV/AIDS or other disease transmission by the work force.

Natural Habitats

In all relevant civil works projects, the contractor shall locate project facilities (permanent and temporary) so as to avoid or minimize the clearing of natural vegetation. The contractor shall enforce a strict prohibition on the washing of vehicles or changing of lubricants in waterways or wetlands.

Chance Finds Procedures for Physical Cultural Resources

If, during project construction, the contractor or project workers encounter archaeological relics, fossils, human remains, or other items of historical or other cultural value, the Contractor shall:

1. temporarily suspend any works which might damage these items; and
2. notify the Supervising Engineer who will then notify the competent authority (Ministry of Cultural Affairs) for guidance regarding the appropriate next steps to evaluate, salvage, recover, protect, and/or document the items found.

Worker Behavior

To help ensure that good environmental and social practices are consistently followed throughout project construction and operation, all workers, operational staff, and contract personnel shall be prohibited from (i) hunting, (ii) fishing, (iii) wildlife capture, (iv) bush-meat purchase, (v) plant collection, (vi) unauthorized vegetation burning, (vii) speeding, (viii) weapons possession (except by security personnel), (ix) working without Personal Protection Equipment (PPE), (x) inappropriate interactions with local people, (xi) disrespecting local customs and traditions, (xii) littering of the site and disposing trash in unauthorized places, (xiii) using alcohol on-site or during working hours, (xiv) sexual harassment, or (xv) setting unauthorized fires of any kind.

Annex 7: Sample Terms of References for Environmental Impact Assessment

According to both the World Bank's ESF, as well as GoL national laws and regulations, environmental impact assessments (EIAs) are to be conducted for proposed developments that are likely to have significant impacts on the environment and this can be upon preparation of an Environmental and Social Management Framework (ESMF). The EIA should identify potential environmental and social impacts, and environmental management plans should be prepared to avoid, minimize, mitigation or otherwise compensate those impacts. The EIAs become necessary to be prepared once specific details of the project sites become clear as well as levels of anticipated impacts of the project on the environment arising from a screening process that will be conducted.

These generic terms of reference, which are provided as a sample, should be viewed as a tool of the ESMF and a guide to the preparation of project-specific EAs for all projects, including PPP transactions, under RETRAP. Once projects have been selected, these sample ToRs should be modified and tailored to specific project requirements and used as a requirement for the private entity contracted to develop EA documents.

Environmental Impact Assessment Approach

The environmental impact assessment is required to be conducted by licensed EA consultant in Liberia, following the national environmental regulations, guidelines and standards. Meanwhile, it shall also comply with the requirement of the World Bank's ESF

An initial environmental screening will be (has been) conducted by PCU and approved by the World Bank. It is concluded that the proposed project would have substantial environmental and/or social impacts according to the World Bank ESF.

The following EA documents shall be prepared and submitted to the EPA for review and approval before commencement of project activities.

These are:

1. Environmental and Social Impact Assessment Report; and
2. Environmental Management Plan.

SCOPE OF STUDY

The contents of the EA documents shall follow the requirement of Mongolia Law of EA and the World Bank ESSs 1Assessment and Management of Environmental and Social Risks and Impacts.

An example Table of Contents (ToC) is attached at the end of this Annex for references. Modification may be needed to adapt to actual project situation.

The following aspects need special attention and should be adequately addressed during preparation of EIA and EMP. These include:

Identification of environmental sensitive sites and key issues

The EIA shall carefully identify and determine the project area of influence first, and identify all the environmental, social and cultural sensitive sites within the project influence areas, with special attention to critical and non-critical habitats, protected areas, physical cultural resources, and human settlement areas and associated facilities etc.

Adequate baseline survey on ecological environment must be conducted through field visit, data collection and consultation with relevant government agencies, NGOs and local public during EA preparation, to identify presences of critical and non-critical habitats, protected areas, protected and endangered wildlife, and key migration routes of wildlife. Any project that may lead to significant conversion or degradation of critical natural habitats (either directly or indirectly) shall be rejected, and alternative locations or alignments must be sought.

Careful screening for physical cultural resources shall be conducted through field survey, consultation with local communities and relevant authorities. Special attention should be paid to archeological and paleontological sites that are considered sacred or have spiritual significance to the local or regional communities, or geological landscapes with special visual aesthetics, and local shrines. Some of them may not have an official protection title, nevertheless, they are considered as physical cultural resources and need to be adequately addressed in EA though proper consultation with stakeholders involved, evaluation of significance, assessment of potential impacts and development of necessary mitigation measures in ESMP.

Residential areas are also sensitive to the potential impact of noise, dust, wastewater, safety, social disturbance and induced development, therefore, warrant careful and thorough investigation, impact assessment and adequate protection in EA process.

Alternative analysis

Alternative analysis shall be conducted for the project strategy (e.g. groundwater or surface water pipelines, road or railway), project site (e.g. power plant, wastewater treatment plant) or alignment (road or railway), technologies adopted (e.g. environmental friendly technology for power plant, or construction methods), etc. Comprehensive comparison shall be carried out for all the alternatives from technical, environmental, social and economic perspective. The final selection should be based on overall optimum consideration among all these factors.

Impact Assessment and Mitigation Measures

As standard practice, the EIA will assess all potential environmental and social impact during project construction and operation and develop feasible mitigation measures for all proposed works.

Major environmental and social impact shall be given adequate attention of assessment, for which necessary mitigation measures shall be developed in ESMP.

These issues include (but not limit to) the following:

1. Potential conversion or degradation of critical or non-critical natural habitats;
2. Segregation of natural habitats;
3. Loss of surface vegetation and biodiversity;
4. Blocking of wildlife migratory routes;
5. Lowering and/or depletion of groundwater;
6. Land degradation and desertification;
7. Loss or access restriction to livelihood of local herders;
8. Social and cultural impact on local communities from project operation as well as from induced development;
9. Noise, dust impact from transport corridor on local communities and wildlife;
10. Wastewater discharge impact and potential pollution of groundwater;
11. Public health (e.g. HIV/AIDS) impact due to influx of workforce and induced development;
12. Induced urbanization impact management
13. Cumulative impacts
14. Regional Impacts
15. Direct and indirect impacts
16. Other environmental issues related to the operation of the.

Construction related impacts shall also be fully captured by the EA and adequate mitigation measures be developed in the ESMP.

These include (but not limit to):

1. Construction nuisance of noise and dust impact on construction workers, local communities and wildlife;
2. Temporary disturbance of wildlife habitats and migratory routes;
3. Borrow pits and quarry impact and restoration/reclamation;
4. Construction wastewater impact and management;

5. Water and soil conservation

6. Traffic disturbance and safety for local communities;

7. Hygiene and health concerns of worker camps;

8. Social impact of influx of workforce, e.g. cultural conflict, STD/HIV/AIDS;

9. Potential impacts on any physical cultural resources, and development of chance-find procedures

Besides development of mitigation measures for implementation, environmental assessment shall provide valuable input for better project design to avoid or minimize potential environmental and social impact upfront. Though the feasibility study and design has considered a series of environmental, social and technical factors, it is valuable for EA to assess and if necessary recommend to improve the project design in line with the following principles:

1. Avoid or minimize the need for resettlement of population;

2. Avoid valuable natural habitats;

3. Avoid physical cultural resources;

4. Provision of proper crossing for wildlife migration;

5. Provision of convenient crossing for herders' livelihood;

6. Safety design for local community life and livelihood activities;

7. Reclamation and restoration plans prior to construction;

8. Environmental enhancement design included in the main project, e.g. creation of offset natural habitats

Environmental and Social Management Plan (ESMP)

An Environmental and Social Management Plan (ESMP) is to be developed in the EIA or as a stand-alone document, serving as a convenient and efficient tool for environmental management manual during project implementation and operation.

The ESMP shall include the following contents:

1. **Mitigation measures**. The ESMP shall include all mitigation measures such as avoidance, prevention, reduction, integration, optimization and compensation measures (with as much as possible specifics) for project design, construction and operation stages with clear indication of responsibility for implementation/supervision, monitoring indicator and frequency, and implementing schedule and budget estimates.

2. **Environmental management and supervision structure**. The ESMP shall clearly identify the environmental management and supervision setup, with clear description of environmental management responsibility for all the involved parties, i.e. project management office, project implementing agencies, design institutes, contractors, supervision engineers etc.

3. **Institutional capacity**. Appropriate training programs should be designed and incorporated into the project ESMP prior to commencement of operation.

4. **Integration of ESMP measures and budget into project implementation contracts**

Public consultation and information disclosure

Public consultation is an integral part of ESIA/ESMP preparation, as required by both GoL environmental laws and the World Bank ESF. Specifically, ESS10 is required for public consultations. I.e. (1) public consultation before finalization of ToRs of EIA; and (2) consultation after draft EIA report is available. Public consultation shall be conducted through both formal and informal presentations and meetings with the project affected people, NGOs and relevant stakeholders, government agencies, individual interviews and an opinion survey. For the first round of consultation, the ESIA consultant shall present brief description of the proposed project, potential environmental and social issues, and ESIA approached to address these concerns; for the second round of consultation, the ESIA consultant/project owner shall present to the public the key findings of ESIA and recommendations of mitigation measures to get feedback from public.

The ESIA should include a chapter that summarizes:

1. the dates and venues of consultation events;

2. the organizations or stakeholder groups consulted;

3. the main comments provided, particularly regarding the perceived adequacy of mitigation and monitoring measures;

4. how the comments and recommendations were or were not taken into account in finalizing project designs; and

5. feedback mechanisms, including provisions for future consultations throughout project implementation. For category B project, at least one round of public consultation is needed.

The ESIA report shall be locally disclosed in places with free accessibility to local public (open offices of city governments, libraries, or internet), with meaningful announcement of such disclosure through local newspaper, or radio/TV, bulletin board posters etc.

1. DELIVERABLES AND TIMETABLE

2. QUALIFICATIONS OF THE CONSULTANT(S)

3. EXAMPLE OF TABLE OF CONTENT (TOC)

The following example ToCs is only for reference purpose and could be adjusted subject to project-specific situation and provisions of national and/or local regulations.

DRAFT TABLE OF CONTENT FOR ESIA REPORT

Annex 8: Photos