

CI-GEF PROJECT AGENCY

GEF Project Document

**Building and strengthening Liberia's national capacity to
implement the transparency elements of the Paris
Climate Agreement**

Liberia/West Africa region

3rd August 2018

PROJECT INFORMATION

PROJECT TITLE:	Building and strengthening Liberia's national capacity to implement the transparency elements of the Paris Climate Agreement		
PROJECT OBJECTIVE:	To build and strengthen Liberia's national capacity to implement the transparency elements of the Paris Climate Agreement.		
PROJECT OUTCOMES:	<p>1.1 Procedures to measure, track and report mitigation and adaptation data from the land use, agriculture, energy, transport and waste sectors transparently strengthened</p> <p>1.2 NDC transparency system in place in accordance with the prescribed UNFCCC standard</p> <p>1.3 Capacity of key ministries and stakeholders to effectively utilize the developed NDC transparency system strengthened</p> <p>1.4 Coordination among key government agencies on NDC implementation enhanced.</p> <p>2.1 Capacity to measure and report land use, agriculture, energy, transport and waste sectors NDC improved.</p> <p>3.1 Fully developed data integration and sharing procedure for use by stakeholders as a one stop source of information for transparency reporting</p>		
COUNTRY(IES):	Liberia	GEF ID:	9923
GEF AGENCY(IES):	Conservation International (CI)	CI CONTRACT ID:	
OTHER EXECUTING PARTNERS:	Conservation International (CI) and Environmental Protection Agency (EPA) of Liberia	DURATION IN MONTHS:	24 months
GEF FOCAL AREA(S):	CC-M	START DATE (mm/yyyy):	
INTEGRATED APPROACH PILOT:	IAP-Cities IAP-Commodities IAP-Food Security	END DATE (mm/yyyy):	
NAME OF PARENT PROGRAM:		PRODOC SUBMISSION DATE:	08/31/2018
RE-SUBMISSION DATE(S):			

FUNDING SOURCE	AMOUNT (USD)
GEF PROJECT FUNDING:	1,344,495
PPG FUNDING:	50,000
TOTAL GEF GRANT:	1,394,495
Co-FINANCING 1: GOVERNMENT OF LIBERIA	1,500,000
Co-FINANCING 2: CONSERVATION INTERNATIONAL	100,000
Co-FINANCING 3:	
TOTAL Co-FINANCING :	1,600,000
TOTAL PROJECT COST:	2,994,495

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ACRONYMS & ABBREVIATIONS

AFOLU	Agriculture Forestry and Other Land Use
BURs	Biennial Update Reports
CBIT	Capacity Building Initiative for Transparency
CC: GAP	Climate Change Gender Action Plan
CDM	Clean Development Mechanism
CI	Conservation International
CSOs	Civil Society Organizations
DNA	Designated National Authority
EPA	Environmental Protection Agency of Liberia
ESAL	Environmental Science Association of Liberia
ESWG	Environmental Sector Working Group
FCPF	Forest Carbon Partnership Facility
FDA	Forest Development Authority
FFS	Farmer Field School
FIA	Freedom of Information Act
FTI	Forestry Training Institute
GEF	Global Environment Facility
GHG	Greenhouse Gas
GMP	Gender Mainstreaming Plan
INC	Initial National Communication
INDCs	Intended Nationally Determined Contributions
IPCC	Intergovernmental Panel on Climate Change
IPM	Integrated Pest Management
ISFM	Integrated Soil Fertility Management
KM	Knowledge Management
LCTDU	Liberia Chainsaw and Timber Dealers Union
LCU	Liberia Charcoal Union
LEC	Liberia Electricity Corporation
LEITI	Liberia Extractive Industries Transparency Initiative
LERC	Liberia Electricity Regulatory Commission
LISGIS	Liberia Institute of Statistics and Geo-Information Services
LPRA	Liberia Petroleum Regulatory Authority
LPRC	Liberia Petroleum Refining Company
LRREA	Liberia's Rural and Renewable Energy Agency
LULUCF	Land Use, Land Use Change and Forestry
MPEA	Ministry of Planning and Economic Affairs

MRV	Measurement, Reporting and Verification
MoA	Ministry of Agriculture
MoU	Memorandum of Understanding
MFDP	Ministry of Finance and Development Planning
MLME	Ministry of Lands, Mines and Energy
NACUL	National Charcoal Union of Liberia
NAPAs	National Adaptation Programmes of Action
NCCSC	National Climate Change Steering Committee
NDC	Nationally Determined Contribution
NEC	National Energy Committee
NEP	National Energy Policy
NFRL	National Forestry Reform Law
NGF	National Gender Forum
NGP	National Gender Policy
NOCL	National Oil Company of Liberia
NSDLG	National Strategy for Decentralization and Local Governance
PIF	Project Identification Form
PPG	Project Preparation Grant
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RREA	Rural and Renewable Energy Agency
RS	Remote Sensing
SEIS	Shared Environmental Information System
SEP	Stakeholder Engagement Plan
ToT	Training or Trainers
UoL	University of Liberia
UNFCCC	The United Nations Framework Convention on Climate Change
VPA	Voluntary Partnership Agreement
WB	World Bank
YCCI	Youth Climate Change Initiative

GLOSSARY OF TERMS

AFOLU	According to the 2006 IPCC Guidelines, Agriculture and Land use are merged into AFOLU (Agriculture, Forestry and Other Land Use) for Annex I Parties reporting from 2015
Agriculture	Refers to agricultural practices (e.g. burning of crop residues, fertilizer application, rice cultivation, enteric fermentation in livestock, manure management) on farms that result in only emissions of mainly methane and nitrous oxide
Land use	Refers to forest land, cropland, grassland, wetlands, settlements and other lands (e.g. bare soil, rock, ice, etc.) that have been traditionally covered under LULUCF where CO2 emissions and removals occur.
REDD+	Reducing Emissions From Deforestation and Forest Degradation in developing countries, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries.
INDC	Intended Nationally Determined Contributions under the UNFCCC refers to country-specific reductions in GHG emissions developed in anticipation of a global goal on climate change, which was established by the Paris Agreement in December 2015. Since the entry into force of the Paris Agreement, many countries' INDCs became their de-facto GHG targets for their Nationally Determined Contributions (NDCs).
2006 IPCC Guidelines	The 2006 IPCC Guidelines for National Greenhouse Gas Inventories, prepared by the Intergovernmental Panel on Climate Change National Greenhouse Gas Inventories Program. They provide methodologies for estimating national inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases.
MRV	Measurement, Reporting and Verification (MRV) in the context of NDC implementation refers to an integrated framework/accounting system and/or processes which aim to assess and monitor the results of mitigation and adaptation actions, their synergies and/or the support provided (measuring) and to document this information in a transparent way (reporting-national & international), so that it can be examined for accuracy (verification-Quality Control and Quality Assurance).
Tier 1	Uses simple tools and methods, scale is very coarse (global data sets) and indirect estimates based on default emission factors. Reporting under this tier is currently used because of low costs, requires minimal capacity. However, provides least accurate estimates of emissions (sources) and removals (sinks). Source: IPCC (2003). *Minimum level as per IPCC.
Tier 2	Uses advanced tools and methods (e.g. Remote Sensing, field inventories). The scale is of high resolution and disaggregated. Uses emission factors and activity data (specific). Better estimates of emissions and removals are registered at moderate costs and capacity.

Tier 3	Uses higher order methods, models and inventory with measurement systems driven by high resolution. Actual inventories are done with repeated direct measurements over time-panel data. Uses specific, disaggregated and detailed/fine resolution and complex modeling. This reporting ensures good results for baselines, emissions and removals but is very demanding in terms of costs, high analytical capacity and skills. It optimizes the ability to monetize carbon using full C-accounting models.
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CI-GEF PROJECT AGENCY

Building and strengthening Liberia's national capacity to implement the transparency elements of the Paris Climate Agreement

PROJECT DOCUMENT

SECTION 1: PROJECT SUMMARY

1. Liberia is already bearing the brunt of climate change and recognizes both the current and future climate change associated risks and has committed to a 10% reduction in GHG emissions by 2030 to be achieved via a long-term strategy for attaining carbon neutrality by 2050. Liberia is committed to do more to further cut down on its GHG emissions with support from the international community. It has ratified several protocols and submitted the Initial National Communications (INC) to the UNFCCC in 2013. In 2015 Liberia submitted its INDC, a gesture of its ambition to use nature-based approaches to reduce GHG emissions in light of its domestic circumstances and capabilities. More recently, Liberia ratified the Paris Agreement on climate change¹ in which the Enhanced Transparency Framework was established (Article 13) to help understand, compare, harmonize and track national and global commitments in fighting climate change. The “transparency framework” requires countries to regularly provide: (i) A national inventory of greenhouse gas emissions (by sources) and removals (by sinks) (ii) Information necessary to track progress toward achieving their Nationally Determined Contribution (NDC) (iii) Information related to climate change impacts and adaptation (iv) Information on financial, technology transfer and capacity building support needed and received and (v) Information on any support they provide to developing countries. GEF established and operationalized the Capacity Building Initiative for Transparency (CBIT) to support developing countries to prepare to meet the enhanced transparency requirements of the agreement in both the pre- and post-2020 period based on the Paris Agreement. Liberia's PIF for a project titled “Building and strengthening Liberia's national capacity to implement the transparency elements of the Paris Agreement” was submitted and approved by GEF. This was followed by GEF approval of a Project Preparation Grant (PPG) for this project to be implemented by the Liberia Environmental Protection Agency (EPA) and Conservation International (CI).
2. This project was conceived to overcome four (4) major obstacles to successful NDC implementation in Liberia, namely; 1. Lack of a robust institutional structure to manage the NDC implementation process in a transparent manner 2. Lack of technical capacity to establish and manage a NDC transparency system that can measure, track and report mitigation and adaptation activities and other elements of Article 13 of the Paris Agreement 3. The lack of awareness and/or knowledge about the Paris Agreement, climate change, and NDCs, and 4. Shortcoming on the part of the NDC to fully capture the GHG emissions by sources and removals by sinks from land use sector (e.g. LULUCF). These barriers were identified through earlier assessments conducted during the preparation of Liberia's 1st National Communication, preparation of INDC and other project/consultancy-based work on capacity building aimed at improving the national GHG inventory under the auspices of EPA. These were also

¹ <https://reliefweb.int/report/liberia/liberia-ratifies-paris-agreement-climate-change-milestone-achievement-foster-low>

confirmed through a systematic review of literature, Focus Group Discussions (FGDs), and expert consultations held during the 1st stakeholder's workshop as part of the PPG phase implementation.

3. This project consists of three (3) components; i) Strengthen the capacity of national institutions to track NDC implementation and sustain transparency efforts over time; ii) Provide direct technical support to harmonize land use, agriculture, energy, transport and waste sectors collection and reporting through training and assistance; and iii) Integrated Platform for Data Sharing and Policy Making. The scope will be NDC sectors (land use, agriculture, energy, transport and waste) that are affected and affect climate change. In addition, the project will provide direct technical assistance to implement the National Energy Policy (2009). It will provide for results from other GHG monitoring systems (e.g. REDD+ MRV) under the Liberia Forest Sector project to be captured in the national MRV system. The project builds on past accomplishments that include some capacity building projects covering aspects relevant to the MRV system. Following is a description of project components.
4. **Component 1:** Supports strengthening of the capacity of national institutions to track NDC implementation and sustain transparency efforts over time. This action will involve establishing a centralized NDC online transparency system at EPA consisting of the hardware, software and technical expertise for GHG data collection and management of the land use, agriculture, energy, transport and waste sectors in compliance with the UNFCCC and national reporting requirements. A comprehensive institutional capacity needs assessment will be conducted across the NDC sectors and staff will be identified and trained on the basic functions of the system, data management and reporting. A framework to enable cooperation across multiple sectors and government institutions will be developed and strengthened. This project will seek to strengthen the capacity of the NCCSC to undertake its roles and responsibilities in NDC awareness creation and stakeholder inclusion. Staff of EPA and NDC sector institutions will participate in experiential learning trips to countries with functional MRV systems (e.g. South African Republic and Germany), to equip them with skills for managing the NDC transparency system.
5. **Component 2:** Provides for direct technical support to harmonize land use, agriculture, energy, transport and waste sectors data collection and reporting through training and assistance. The training will be organized to leverage past and ongoing capacity building projects. Capacity for harmonization of data collection and reporting of GHG data across the NDC sectors (land use, agriculture, energy, transport and waste) and linkages to LULUCF via REDD+ will be built. Partner organizations with competence in IPCC methodologies and protocols will be identified to support the government of Liberia to build MRV capacity in the energy sector to meet its mitigation targets as per the National Energy Policy (2009).
6. This work will not start from scratch. Some capacity building was done during the preparation of various national and international reports on GHG emissions and removals particularly for staff in government institutions. Capacity gaps still however exist as confirmed by stakeholders consulted during PPG phase. Limited technical expertise at individual level for the collection, processing and transmission of GHG data, and inadequate technology solutions (both hard and software) within the NDC sector institutions for GHG data management are cited. Strengthening national capacities to implement the transparency elements of the Paris Agreement calls for a more comprehensive policy and stakeholder engagement process. Targeted support to the energy sector, identifying innovative and practical mitigation plans and building capacities to support their operationalization are target outcomes under this component. This action will *inter-alia* build on cross sectoral policy efforts such as Liberia's climate change Gender Action Plan (cc-GAP) that brings to fore a multi-dimensional

perspective to the climate change agenda andG broadens stakeholder participation. This will be particularly important considering the concern of low involvement of Liberian women in science related activities. Focus will be on increasing stakeholder awareness on GHG and MRV systems, developing technical capabilities for key individuals and institutions to collect and manage GHG data, and effective reporting at domestic and international levels. In consultation with stakeholders at the PPG stage, innovative approaches for capacity building for NDC implementation were proposed. Training of Trainer’s workshops for key technical persons across the NDC sector institutions and EPA were affirmed by stakeholders as measures to increase institutional capacities in GHG data collection and reporting.

7. **Component 3:** Integrated Platform for Data Sharing and Policy Making. This action will support the development of a mechanism for online aggregation of GHG inventory data from different sources into a NDC transparency system to transition from tier 1 to tier 2 reporting. Technical support will be provided to EPA staff to facilitate the process of data assembly and uploading into the global transparency system in compliance with the UNFCCC standard requirements. Capacity will also be built for NCCSC and national stakeholders to analyze and utilize the GHG data to inform climate change policy review and formulation. Efforts will be made to build capacity of non-state stakeholders to play a more active role in reducing emissions and promoting ecosystem-based climate resilience in their areas of operation. Technical support will be provided to selected institutions in the Liberia’s NDC sectors, to transmit data to the EPA national GHG inventory system and the Global CBIT Coordination Platform. Currently the different stakeholders across the NDC sectors are engaged by EPA through consultants to collect and transmit the required reporting GHG data at national and international levels. Through the project, these institutions will be organized and sectoral hubs created to facilitate the transmission of GHG data (under component 2). This process will be managed by GHG technical teams across the NDC sectors, to track the nationally determined contributions (NDCs) and transmit the information and data to EPA, and subsequently uploaded to the CBIT Coordination Platform. Information on the NDC implementation to support policy and decision-making processes in the relevant ministries and government agencies including parliament, district, technical institutions and lower level local councils, CSOs and academia will be disseminated. Financing for MRV development remains a critical element to assure the sustainable and progressive NDC implementation and development of the GHGI and MRV in Liberia. A review will be made of available financing mechanisms and sources during the development of NDC implementation plans (under component 2), and round table discussions with financing partners will be organized, and gaps and areas for future support for Liberia’s GHGI and MRV development identified.

SECTION 2: PROJECT CONTEXT

A. Geographic Scope

- Liberia is situated on the West Coast of Africa and covers an area of 111,370 square km, with 13.5% covered by water and the remaining 86.5% consisting of land. The country has a coastal belt 563 km long to the south on the Atlantic Ocean. It is bordered by Sierra Leone to the west, Guinea to the north, and Côte d'Ivoire to the east. The Liberian landscape has significant forest area, estimated around 30% of total land in 2009 by FAO, and holds around 40% of the remaining West African moist forest (EPA 2015). Liberia has a tropical climate with heavy rainfall from May to October, and a short interlude in mid-July to August, while the dry season extends from November to April.

Figure 1. Map of Liberia



Source: www.ezilon.com

9. Historically, the Liberian economy has depended heavily on foreign aid, foreign direct investment, and the export of natural resources such as iron ore, rubber, and timber. The country has however experienced an extended period of civil war, with the first civil war from 1989 to 1996 and the second from 1999 to 2003. In 2010, the country's nominal GDP was US\$974 million, and GDP reduced by an estimated 90% between 1989 and 1995 due to the civil war (GOL, 2011). In the second civil war, Liberia's GDP reduced by 50% (GoL 2012). Critical economic activities and industries such as manufacturing iron ore mining, rice and rubber were destroyed, and the country also suffered immense destruction of government institutions and infrastructure. The country's recovery process was disrupted with the outbreak of the Ebola Virus Disease (EVD) in 2014 which severely paralyzed economic activity in all the sectors. Before the EVD epidemic, GDP growth was estimated at 8 percent on average, but this plummeted to 0.7% in 2014, and 0.3% in 2015 (MFDP 2016).
10. The Liberia 2016 Statistical Report estimates Liberia's population at just above 4.2 million (LISGIS 2017). According to the World Population Prospects a UN Report (UN 2017 Revision) the population is however projected to increase to 10.6 million by 2055. Liberia once had one of the highest population growth rates in the world at 4.6% in 2006, but this has since fallen to an average of 2.5% per year. About 2.2 million Liberians (50.9%) are classified as poor, and 16.5% categorized as living in extreme poverty, while about 39.1% of the population is regarded food poor (LISGIS 2017). More than half of the country's population lacks access to basic social services and the majority use biomass as the primary source of energy. In addition to the multitude of socio-economic challenges in the country, Liberia is faced with the growing impacts of climate change. More than 70% of the population lives in coastal cities including Monrovia the country's capital. Low-income countries like Liberia are on the frontline of human-induced climate change and may experience gradual sea-level rise, warmer days and nights, more unpredictable rains, and larger and longer heat waves (EPA 2013). These climatic changes will have a negative impact on sectors of the Liberian economy that are just starting to recover, such as agriculture, forestry, health and energy. Women and children are also particularly vulnerable to the impacts of climate change.
11. Liberia recognizes the current and future threats of climate change because of the high level of dependence on climate-sensitive sectors (e.g. rain-fed agriculture, health, forestry, energy, coastal areas) which are highly exposed to climate variability and change, higher temperatures, more extreme weather events (e.g. heavy rains, rising sea levels). Liberia's vulnerable populations depend on these highly vulnerable sectors and ecosystems for their livelihoods. Liberia has taken significant strides toward addressing these threats, more recently with the ratification of the Paris Agreement and attracting the CBIT project. An overarching climate change policy is also currently being developed that will serve as the basis for comprehensive sectoral strategies and action plans to address climate change concerns in Liberia. The Climate Change Policy will enable better coordination of climate change work in the country and provide opportunities for cooperation and collaboration between the government and other key stakeholders.

B. Environmental Context and Global Significance

12. Liberia is considered a global biodiversity hotspot, and home to some of the endangered species (e.g. chimpanzees, forest elephants and leopards) that reside largely in the natural forests and coastal mangroves and wetlands. Liberia has one of the world's oldest forests and the forest ecosystem was identified to be one of the global biodiversity hotspots by Conservation International. The natural forest of Liberia covers 4.8 million ha, with disturbed productive (unprotected productive forest) forest constituting 45% of the total ha available. Rainforest cover is being reduced at the rate of 1-2%

annually. The two remaining dense forest areas are found in the northwestern and southeastern regions of the country, separated and isolated from each other by a corridor extending from Monrovia to Nimba County. The northwestern rainforest is one of the last strongholds of intact forest in West Africa, home to many endangered and endemic species. Some species rely on Liberia's forest for survival since it has become home to their remaining populations. According to FAO (2011), Liberia holds about 40 percent of the remaining West African moist forest (Upper Guinean Forest).

13. Current estimates of flora and fauna show that there are over 2,000 species of flowering plants in Liberia, of which 240 are valuable timber trees. The fauna also consists of 125 species of reptiles and other amphibians, as well as more than 1000 insect species. The Mount Nimba, Cestos-Sankwein River Shed, Lofa-Mano, and Sapo National Park areas contain many endemic species. These four areas are among the 14 centers of plant endemism within the Upper Guinea Hotspot. Some of the endangered species in Liberia have been hunted for the bush-meat trade, further reducing their numbers. Conversion of natural forestry into arable land through slash and burn agriculture and illegal logging has also exacerbated the loss of endangered species and their habitats. Deforestation due to population and poverty pressure has been spreading throughout northeast Liberia, even in the country's protected areas, affecting many of Liberia's unique species. In these mountains and forested areas iron ore, timber, diamonds, gold and hydropower are extracted, furthering threatening forest protection. Unless deforestation is arrested, Liberia stands a high risk of increased GHG emissions that may undermine its efforts to attain its goals.
14. Mangroves characterize the wetlands of Liberia and cover a small area along the coast from Cape Mesurado to Cape Palmas, at the edges of lagoons, riverbanks and river estuaries and in widespread areas of swamps. The coastline of Liberia is 560km (350 miles) long and about 58% of its population lives along this coast and derive >65% of their protein needs from the ocean. With a continental shelf of 14,894 km² and a territorial sea of up to 159,200 km², the coastline consists of swamp related vegetation, which includes mangrove forests and savannah related vegetation, extending up to 25 km inland. These serve as important nurseries to the young of many species. Wetlands cover 0.5% of the land surface of Liberia. The most common mangrove species is *Rhizophora racemosa*; but six (6) other species occur in the country. Mature mangroves, reaching heights up to 30 m were found along the lower Sankwein and neighboring rivers where species such as *Rhizophora harrisonii*, *Rhizophora mango*, and *avicennia* occur together with impressive tracts of *pandanus*. Except for few places in the central part of the country, primary mangrove forest has been replaced by secondary ones. Much of the mangrove destruction appears to be concentrated along the edges of creeks, and particularly more widespread around the larger towns and cities, such as Monrovia, Robertsport, Buchanan, Greenville and Harper. Mangroves are degraded due to urban expansion, collection of fuel-wood and construction of makeshift homes and establishment of unplanned human settlements. The coastal and marine environments are subjected to a variety of pressures: erosion due to sand mining, oil pollution, waste dumps, human settlement and the discharge of municipal waste water.
15. Globally, climate change is likely to adversely affect the ability of physical and biological systems to sustain human development particularly the achievement of Sustainable Development Goals (SDGs) 13: Climate action, 3: Good health, 2: Zero Hunger and 1: Poverty. Under the United Nations Framework Convention on Climate Change (UNFCCC), countries agreed to the adoption of the Paris Agreement to address climate change in December 2015. Article 13 of the Paris Agreement establishes the Enhanced Transparency Framework (UNFCCC, 2015). The framework was established to enable the tracking, comparing and understanding of national commitments worldwide to fight climate change. The "transparency framework" requires countries to regularly provide: (i) A national

inventory of greenhouse gas emissions (by sources) and removals (by sinks) (ii) Information necessary to track progress toward achieving their Nationally Determined Contribution (NDC) (iii) Information related to climate change impacts and adaptation (iv) Information on financial, technology transfer and capacity building support needed and received and (v) Information on any support they provide to developing countries. Liberia's long-term goal is to attain C-neutrality by 2050 through implementation of strategic mitigation and adaptation options as articulated in the INDC that were submitted prior to the Paris Agreement and after 2015 effectively became the NDC.

16. Liberia's NDCs reflects the country's ambition for reducing emissions, taking into account its domestic circumstances and capabilities. Commitment to utilizing nature-based approaches for climate change is emphasized across the sectors through both mitigation and adaptation actions. Its NDC consists of mitigation and adaptation climate change actions. The strategic mitigation options for reducing/avoiding GHG emissions and minimizing adverse environmental effects that have been identified in the NDC include the energy sector (electricity, transport) and the waste sector. Four mitigation scenarios have been stipulated, namely; 1. Renewable energy generation from biomass and hydropower plants increased, 2. Energy efficiency increased in the use of fuel wood and charcoal through distribution of Eco-stoves and use of more efficient kilns to produce charcoal, 3. Biofuel use in transport to reduce on emissions of GHGs from fossil fuels, and 4. Waste sector focuses on improved solid waste management including landfill recovery, waste incineration with energy recovery, composting of organic waste, controlled wastewater treatment, and recycling and waste minimization. Using the Low Carbon Development Strategy, Liberia also has ambition for C-market inclusion through the CDM in the post-2020 climate regime that could benefit from improved C-accounting and transparency. Liberia recognizes that the MRV system is a crucial pillar in its NDC implementation. The framework for NDC implementation stretches to 2030. Other planned specific mitigation actions will also benefit from the NDC accountability and transparency system.
17. The NDC also reflects how Liberia will adapt to climate change impacts, and what support they need from other countries to adopt low-carbon pathways. To build climate resilience, Liberia identifies the following as priority sectors to implement the NDC and address climate change: Energy (renewable and non-renewable), land use, agriculture, transport, and waste. Liberia's adaptations actions in the NDC for the short-, medium- and long-terms cover seven sectors, namely; Agriculture, Energy, Health, Forestry, Coastal zone, Fishery and Transport/infrastructure. So far, under the National Adaptation Programme of Action (NAPA) three pilot projects (agriculture adaptation, coastal-Grand Bassa Buchanan and the monitoring climate information and services to enhance adaptation in climate change) were implemented starting 2010. Future implementation of the NAPAs will benefit from the NDC transparency and accountability system. This may be in form of estimating the co-mitigation benefits and avoided GHG emissions. Below is a synopsis of the NDC sectors and their significance to the climate change agenda.

Energy sector:

18. In Liberia, the energy sector is the highest contributor of GHG emanating mainly from the use of traditional fuels such as firewood, charcoal and palm oil and the use of fossil fuels, especially petroleum products. Liberia's total national GHG emissions for the year 2000 are estimated to be 8,022 Gg of equivalent CO₂. Of the four non-LULUCF sectors responsible for the country's sources of GHGs, the energy sector is the most significant, accounting for about 67.5% of the national total (EPA Report 2013). To address the problem and also reduce its greenhouse emissions, Liberia has put in place an enabling policy framework with the National Energy Policy (NEP) as the overriding policy framework. A Renewable Energy and Energy Efficient Policy and Action Plan are under preparation.

Liberia is, however also implementing some mitigation strategies in the energy sector through clean energy sources such hydroelectric power projects and eco-stove projects.

Land use sector

19. Liberia's NDC recognizes the land use sector as comprising forest land, cropland, grassland, wetlands, settlements and other lands (e.g. bare soil, rock) that have been traditionally covered under LULUCF to constitute a major pathway for reaching the national mitigation targets. According to Liberia's Low Carbon Development Strategy, carbon stock should reside in living forest biomass. LULUCF activities in Liberia, however, can impact the ability of ecosystems to absorb and store atmospheric greenhouse gases. Liberia clearly recognizes that nature-based solutions such as forest protection are an immediate and cost-effective way to reduce greenhouse gas emissions and enhance resilience to climate change. Human activities in Liberia are starting to have a profound impact on terrestrial sinks and consequently, the exchange of CO₂ between the terrestrial biosphere system and the atmosphere is being altered. The INC contains a national inventory of anthropogenic emissions by sources and removals by sinks of GHG. The data shows that LULUCF was responsible for removing 96,811 GgCO₂ Equivalent in the year 2000. However, over the last decades the country's emissions of CO₂ from human activities (e.g. shifting cultivation, charcoal production, commercial logging) have increased significantly. To further support mitigation, Liberia will need to reduce gross emissions from the land sector (e.g. deforestation and forest degradation) as well as increase the potential for carbon storage (e.g. maintenance or enhancement of the LULUCF sink). The forestry sector thence offers more mitigation promise than the other sectors.

Deforestation

20. Liberia forests constitute 3,154,000 hectares (32.8%) of which 4.1% is classified as primary forest. Between 1990 and 2000, Liberia lost an average of 60,300 hectares of forest per year i.e. an average annual deforestation rate of 1.49%. The rate of forest change increased to 1.74% per annum between 2000 and 2005. The sum forest cover loss between 1990 and 2005 was 22.3% (904,000 hectares). The total rate of habitat conversion (defined as change in forest area plus change in woodland area minus net plantation expansion) for the 1990-2005 period for Liberia constituted a loss of 22.3% of its forest and woodland habitat. Protected forests are at great risk largely due to unsustainable human activities including shifting cultivation, charcoal production, fuel wood, quest for mineral resources, commercial logging. Forest conversion for oil palm plantation constitutes a major form of deforestation. Also, there are massive legal and illegal chain sawing activities everywhere in the forest without reforestation. Forest clearance activities are greatly undermining the mitigation efforts by contributing to more GHG emissions and reversing the potential co-benefits.

Forest degradation

21. Forest degradation refers to the decline of the capacity of a forest to produce healthy ecosystem products and services (e.g. provision of timber and other resources support to biodiversity, carbon storage) as a result of environmental and anthropogenic changes. In Liberia, the major causes of forest degradation include excessive extraction of forest products (e.g. timber, charcoal, firewood), road construction and associated soil erosion, open mining, flooding and degradation of surrounding areas, expansion of urban areas, overgrazing).
22. Liberia plans to implement mitigation actions including the protection of forest and increasing the amount of forested land through reforestation of degraded lands, promoting responsible forest products industry and Sustainable Forest Management. The country plans to conserve 30% or more of its forests as protected areas with the remainder to be used for sustainable forest management

and community forestry. Reducing emissions from deforestation and forest degradation (REDD+) constitutes the most advanced mitigation initiative in Liberia for reducing emissions from deforestation and forest degradation, and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks. Currently, Liberia is implementing the Forest Sector Project to strengthen institutional capacities for creating an enabling environment for decentralized implementation of the sustainable forest sector management jointly with local communities. Establishment of a MRV system to track the country's forest cover and progress made in reduction of GHG emissions over time is a major output of the Forest Sector Project.

Agriculture:

23. In Liberia, the emissions from the agricultural sector are 32% (2,562 GgCO₂ Equivalent in the year 2000) of total national emissions. Agricultural emissions are mainly in form of methane and nitrous oxide produced by burning of crop residues and bush under shifting cultivation, rice cultivation and enteric fermentation in livestock. Agriculture has been expanding and has replaced vast tracts of forests in all parts of the world to meet the increasing demand for food and fiber. The work of LISGIS in Liberia revealed that agricultural land is rapidly increasing. Liberia's emissions of CO₂ from human activities (e.g. shifting cultivation, bush burning) and natural causes increased significantly.
24. Agriculture in Liberia is largely rain-fed, which makes the country vulnerable to climate variability and change. There are major concerns over the climate change impacts on agriculture such as reduced productivity. The increase in rainfall could damage rubber production due to poor drainage, while heavy rainfall and high winds over short periods could lead to broken rubber trees. Losses in rice production also attributed to water lodging due to excessive rains, with rice plants bending over and collapsing. The NDC clearly identifies climate-resilient agricultural practices and activities as an adaptation activity could make the sector more resilient to the impacts of climate change. In an effort to implement its NAPA within the NDC framework, Liberia received GEF support for development of an agricultural adaptation project titled "Enhancing Resilience to Climate Change by Mainstreaming Adaptation Concerns into Agriculture Sector Development in Liberia", which was implemented by the Ministry of Agriculture.

Transport sector:

25. The transport sub-sector in Liberia is progressively increasing its contribution to GHG emissions through vehicular and fleet traffic and load fuel consumption. Data on the current vehicle imports in Liberia was not available. Available data indicated a drop-in number of vehicles in the country from 8,225 in 2001 to 5,660 in 2003 as a result of the civil war. However, the number of vehicles increased dramatically to 10,150 in 2005 after the war and has since continued to increase. Most of these vehicles use low-grade diesel and mixed petroleum and have high potential to emit large quantities of GHG. Liberia's 490km of rail remains out of use since the civil war, and this system has not been maintained or even repaired. This situation is bound to increase demand for road transportation means and as a result the number of vehicles imported will continue to rise. The transport sub-sector contributes 27.1% to the Liberian national GHG emissions with carbon dioxide amounting to 2,152Gg CO₂ eq. and 21 Gg CO₂ eq. of methane based on the INC estimates of the year 2003. Liberia currently has the world's second largest fleet in shipping tonnage as a result of the country's "open registry" or "flag of convenience" status that attracts foreign vessels to the country's four seaports (Buchanan, Greenville, Harper, and Freeport of Monrovia). The seaport area as a result has sunken vessels and boats that cause extensive pollution around the fuel storage installations.

Waste sector

26. For the waste management sector, three waste management systems are recognized in Liberia; solid waste disposal on land, industrial and domestic wastewater handling, and incineration. The period 1989–2005 has been marked by a poor waste management system in Liberia. There was no institutional mechanism to ensure the proper disposal of rubbish as well as human feces in both urban and rural localities. The destruction of the water plant and electricity facilities during the civil war has increased the level of improper waste disposal experienced in Liberia, particularly in Monrovia and other urban centers. The operating capacity of the Monrovia City Council has declined significantly, and the most common method of waste disposal is open private and public heaps and in freshwater bodies, which affects the environment as well as human and animal health. Estimated waste production for the Monrovia municipality is about 724 metric tons and is projected to increase by 2.5% every year, producing 153,009 tons/day in 2012 and about 321,000 tons/day in 2020 (INC 2013). Some of the rubbish (metallic substances, chemical fluids, plastic bags, and other indissoluble substances) are difficult to dissolve or rot, thereby posing serious environmental and human/animal health problems. In addition to household rubbish disposal, industrial waste management is also a problem in Liberia. The weak regulatory framework and monitoring of discharge of industrial waste products into the ocean and freshwater bodies and on the land are a common challenge to the authorities.

C. Socio-Economic and Cultural Context

Population size and composition

27. Liberia's population is about 4.2 million. Of this, 48.9% are males, and 51.1% are females, while about 49.1% is the young population under the age of 18 years (LISGIS 2017). About 25% of Liberia's population lives in the Greater Monrovia area, a coastal area and location of the country's capital city Monrovia. Cited among Liberia's population drivers is; (i) The high rate of fertility currently estimated at 4.4 children/woman, (ii) A very high proportion of youth (60% of the population below 25 years), and (iii) a high rate of urbanization estimated at 3.2% annually for the period 2015-20 (CIA 2017). The associated impacts are evident in the increased pressure on natural resources in form of deforestation and land degradation, urban congestion, pollution (air, water, land). Liberia's population growth unless well planned may have negative impacts on the natural resources particularly the forest sector that continues to provide revenue, raw materials and employment opportunities. Most often populated areas occur around the fringes of forests and reports indicate that Liberia's forest cover gradually reduced with population growth.

Poverty

28. Poverty is a major driver of environmental problems through injudicious decisions and actions in exploiting natural resources. About 2.2 million Liberians (50.9%) of the population is classified as poor, with the highest incidences of poverty in rural areas (71.6%), while urban areas registered 31.5%. About 39.1% of the population is food poor, with food poverty higher in rural areas (50.9%) than in urban areas (28.1%). Extreme poverty is 16.5% at the national level, with male headed households on average being poorer than female headed households with absolute poverty at 52.3% and 46.3% respectively (LISGIS 2017). Managing the natural resources on a sustainable basis could alleviate poverty, create employment and contribute to the Poverty Reduction Strategy (PRS) of Liberia. This is particularly important because people living under poverty and unemployment tend to be careless about protecting the environment in the midst of hunger. They are mostly concerned with the tangible goods and services that the natural resources can provide at the moment for their survival. Of concern are the forest dependent communities that are highly vulnerable and affected by

biodiversity loss and changes within ecosystem services. Their livelihood, culture and traditions are strongly attached to the forest.

- 29. Economic activities:** Liberia's economy has experienced growth since 2006 attributed to the post war reconstruction efforts by the Government. In 2012, Liberia witnessed an economic growth rate of 8.9%, driven by exports of iron ore, timber and rubber, and growth in the construction and services sector. This progress was however disrupted by the Ebola Virus Disease outbreak in 2014, with GDP growth reducing to 0.3% in 2015. Despite the circumstances experienced, Liberia's economic outlook is positive. According to the MFDP 2016 Annual Economic Review, Liberia's Gross Domestic Product, at constant prices, was estimated to grow at 0.3 percent to US\$898.9 million in 2015, from US\$896.4million estimated in 2014. Agriculture and Fisheries contributed about 23.9 percent (US\$214.4 million), Forestry 10.5 percent (US\$94.7 million), mining and panning 11.4 percent (US\$102.2 million), manufacturing 7.6 percent (US\$68.4 million), and services 46.6 percent (US\$419.2 million).
30. In 2015, agricultural activities constituted an estimated 46 percent of the labor force particularly in the formal sector, with about 70 percent of rural households involved in the sector. Although, the sector's contribution to the labor force is high, its contribution to real GDP is low, estimated at 23.9% in 2015, down from 24.2% recorded in 2014 (MFDP 2016). The sector is predominated with smallholder farmers, with less than 3% of farming households cultivating more than 5 hectares of land. The sector is characterized with an extremely limited use of modern inputs, with only 4% of the planted area being irrigated, and chemical fertilizer usage estimated at less than 2.8 kilograms per hectare (LISGIS 2016). The country exports are coffee, rubber, and cocoa, with rubber being the largest contributor to GDP. The rehabilitation of cocoa and coffee farms following the civil wars has been rather slow, and this continues to impact on the sector's potential to generate export revenues. Domestic food production was also affected by the war, and production has not yet recovered to pre-war levels, compelling the country to import rice for domestic consumption needs. The GoL through the Economic Stabilization and Recovery Plan (2015) prioritizes agriculture to revitalize the economy to pre-crisis levels by supporting those value chains with potential for export and job creation (e.g rubber, oil palm, cocoa, fish, and cassava).
31. The mining sector is primarily driven by contribution from iron ore, gold, diamond and oil. The mining sector was very much affected by the outbreak of the Ebola virus in 2014 with the lag effect spilling over in 2015. For example, Gold production at the end of September 2015 decreased by 37.6 percent from 6 percent expansion reported in the previous year. Government revenue on mining specific tax line (excluding income tax) in FY 2014/15 declined by 13.8 percent to US\$29.9 million from US\$34.6million in FY 2013/14. Despite the outbreak of the Ebola virus, revenue from the petroleum sector (excluding income tax) in FY 2014/15 increased to US\$137.03 million from US\$1.60 million in FY 2013/14 (MFDP 2016). Gold and diamond mining in Liberia consists largely of alluvial and small-scale operations with artisanal miners found working in mineral-rich areas which are mostly located in the forests. Gold mining is predominantly in Gbarpolu County, while iron ore mining takes place in Grand Gedeh, Nimba Count, Bea Mountain, Bomi Hills, and Mano River iron ore deposits. The projected growth of the mining sector including petroleum activities, if not appropriately balanced with sustainable exploitation and preservation of the environment n poses a great danger to Liberia's rich biodiversity Mining activity causes both onsite (intense localized disturbances) as well as offsite damage (pollution of surface and ground water, water quality of watersheds and fragmented forest areas) downstream of major mines. Besides, it is reported that illegal artisanal mining is taking place in nearly all of Liberia 's protected areas.

32. In 2015, the forestry sector averaged a 2.0% growth. This is a 0.2% decrease compared to 2.2% in 2014. Round logs and sawn timber produced output of 179,739m³ (3%) and 832,946pcs (9%), respectively. Charcoal and wood, the two major contributors to the sector account for 91.7% of total contribution of the forestry sector while logs and timber account for 8.3% (MFDP 2016). Logging activities in Liberia are regulated by the Forestry Development Authority (FDA) and these have remained highly centralized and focused on the commercial harvesting of forest products as a source of national revenue. Unsustainable commercial logging however is considered a threat in Liberia and drives both deforestation and forest degradation. Chainsaw Milling (CSM) commonly referred to as pit sawing in Liberia, is also recognized to be a major driver of forest degradation. This involves felling of tree species and converting the logs into sawn timber using mechanical saws.
33. Charcoal is used mainly in urban areas as fuel for cooking and heating at household and institutional level, with close to 95% of the 1.5 million people in Monrovia depending on charcoal for cooking and heating. The widespread use of charcoal is thus a major accelerator of the deforestation that Liberia is experiencing. The illicit destruction of forest for charcoal production has even extended into rubber plantations, where charcoal miners illegally destroy rubber trees to make charcoal. In addition to charcoal, firewood is being used extensively for cooking and heating in rural areas, towns and villages. Outside Monrovia, some 70–80% of the population in urban centers and large rural localities are also using firewood for cooking and heating. The disruption and damage of the electricity production and distribution grid infrastructure during the civil war caused a scarcity of energy sources and increased reliance on charcoal and fuelwood to meet the prevailing energy needs. The improvement in the supply of hydroelectricity in Liberia is therefore critical to the conservation of Liberia’s remaining forests as well as the improvement in charcoal production technologies and other alternate renewable sources of energy.
34. Bush meat supply and trade is a consequence of deforestation with wildlife habitats being destroyed and the fauna is exposed to hunting and poaching. It was estimated that prohibited or fully protected wildlife species account for about 35% of bush meat sales in Liberia, and partially protected species account for a further 40-50%. A number of socio-economic factors are driving the bush meat trade including the rising demand as the majority of Liberians regard bush meat as a major source of protein and delicacy, the increasing urban population and the high income generated from the trade. Reports indicate that some rural people have abandoned farming for hunting animals which they believe brings “quick money”. Therefore, Liberia’s protected species could be lost if the bush meat industry continues to be poorly-regulated.

Climate Change impacts on human health

35. Liberia’s future climate for 2050 and 2080 is projected to be warmer and wetter in most parts of the country (EPA 2013). Wetter environments in the future will make Monrovia and other coastal cities vulnerable to flooding. Increased rainfall and flooding will lead to a greater vulnerability of the local communities. Epidemics of malaria, cholera, and diarrheal diseases, and increased incidences of Lassa fever, schistosomiasis, lymphatic filariasis, yellow fever, hepatitis A, and intestinal worms may increase as a result of flooding (EPA 2013). In addition, warmer environments coupled with land-use change will exacerbate the spread of insect vectors of disease such as mosquitoes and tsetse flies. Higher temperatures will also lead to higher rates of measles, respiratory conditions, and heat stress among the young and elderly.

Climate Change and Gender

36. Throughout Liberia, gender inequality varies according to age, status, income levels, region, rural/urban areas, and traditional culture. Women in Liberia in general have limited access to education, healthcare, and land. While in the economic sector, women account for 89% of vulnerable workers particularly in agriculture and wholesale and retail trade. While women lag behind in many socio-economic indicators compared to men, some progress has been observed for women. For instance, access to education has increased for both girls and boys (15-19 years) with an increase from 31% in 2007 to 41% for girls in 2013 and from 36% in 2007 to 46% for boys in 2013 (Revised NGP 2017).
37. The Government of Liberia recognizes the role and contribution of women to development through two policy provisions; the National Gender Policy (NGP) 2017 and the Climate Change Gender Action Plan (cc:GAP). The goal of the NGP is 'to reduce and eliminate gender inequality, discrimination, exclusion, and marginalization, by addressing the needs and concerns of women, girls, men and boys'. Policy implementation is through two processes; as direct interventions targeted to girls/boys or women/men, and 'gender mainstreaming' initiatives aimed at mainstreaming gender-responsive considerations into policies and programs (Revised NGP 2017).
38. In Liberia women are more vulnerable to climate change than their male counterparts. This is because they constitute the majority of the country's poor and are more dependent for their livelihood on natural resources that are threatened by climate change. Additionally, women are faced with social, economic and political barriers that limit their ability to cope with climate change. In rural communities, women are especially vulnerable because they are highly dependent on local natural resources for their livelihood. These are often responsible to secure the basic needs at family level namely; water, food and fuel for cooking and heating. The Climate Change Gender Action Plan (cc:GAP) provides for gender equality in Liberia's climate change policies, programs, and interventions. The strategy aims to have both men and women have equal opportunities to implement and benefit from mitigation and adaptation initiatives in combating climate change, and positively impact the outcome of Vision 2030. The cc:GAP identifies six priority sectors as entry points to mainstream gender in climate change policy and related initiatives: I. Agriculture and Food Security, II. Coasts, III. Forestry and REDD, IV. Health, V. Water and Sanitation, and VI. Energy. This Project is designed to respond to the aspirations of the NGP and cc:GAP, and gender mainstreaming will be an integral part of project implementation (EPA 2013). The National Gender Forum is recognized as the national machinery to enhance gender mainstreaming in Liberia.

D. Global Environmental Problems and Root Causes

39. Based on past studies, national and international reports as well as evidence on the ground, four (4) major environmental problems of global concern have been identified in Liberia, namely: climate change, deforestation and forest degradation, environmental pollution, and coast line erosion. These have significant social-economic and environmental impacts aggravated by climate change.

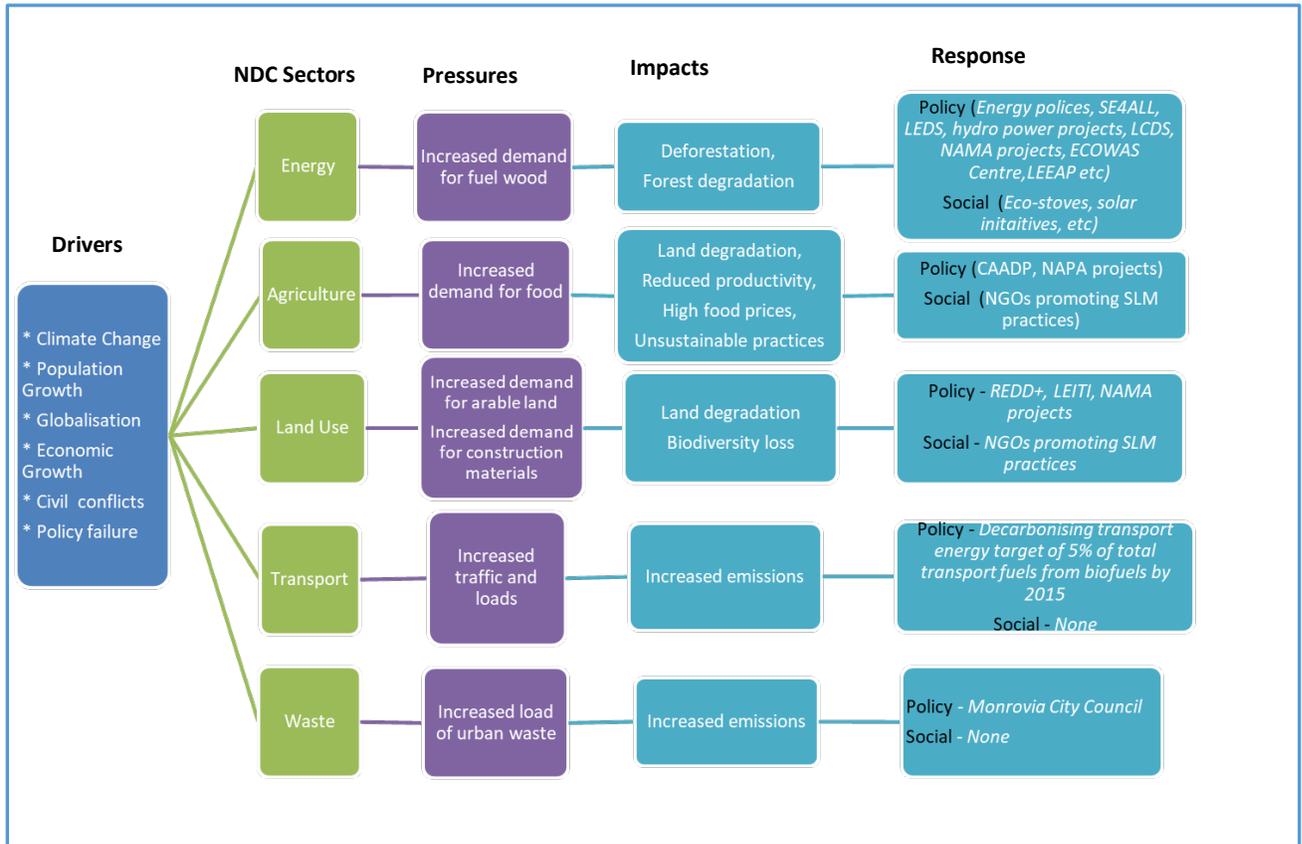
Environmental Problems

40. **Climate Change** is causing negative impacts through pressures/threats (e.g. gradual sea-level rise, warmer days and nights, more unpredictable rains, and larger and longer heat waves) as shown in Fig 2 adapted to the Liberian situation. These changes pose a huge risk to the Liberian economy considering that it is largely based on climate sensitive sectors (e.g. agriculture, forestry, health, energy) and is just emerging and recovering from civil strife. The impacts are felt on the population in

terms of decline in the productive capacity of agriculture, and loss of livelihoods, income and settlement. Huge infrastructure investments along the coast (e.g. seaports, hospitals, schools, hotels) are also at a huge risk of being destroyed by sea erosion. Liberia recognizes the current and future threats of climate change and has been taking initiatives toward addressing these threats.

41. **Deforestation and forest degradation** are amongst the major global environmental problems Liberia is facing as vast areas of forest cover are being lost daily. Although Liberia is rich in biodiversity and a signatory to the United Nations Convention on Biological Diversity (CBD) which aims at protecting biodiversity globally, Liberia's forest has significantly declined over the years. For example, it decreased from 4.92 million ha in 1990 to 4.32 million ha in 2010. Deforestation refers to the loss of forest cover by anthropogenic activities, while forest degradation describes the reduction in the quality of goods and services provided by the forest. Liberia is gradually experiencing loss of forest cover as a consequence of human drivers which include but are not restricted to shifting cultivation; unsustainable logging practices, mining activities, and population growth (Goll II, 2014). The average deforestation rate in Liberia rated at 1-2% per year, with the greatest over a period of 14 years in Margibi (26%), Bomi (13%) and Grand Bassa (9%) counties and rates in remaining counties were 0.5-8%.
42. **Environmental Pollution** refers to the process of introduction of contaminants into the natural environment and this is increasing in Liberia particularly for air, soil and the water bodies. The increasing vehicular traffic and loads particularly from second hand cars has led to increased air pollution. Associated with climate change, if overexploitation of natural resources and increased environmental pollution continues unabated, the future risks will be great leading to unsustainable natural resource management and increased negative impacts of climate change.
43. **Coastline erosion** continues to pose increasing threats to the shorelines of coastal cities including major infrastructures and investments in Liberia. It has been estimated that a one-meter rise in sea level along Monrovia's coastline will place 230,000 people at risk and cause the loss of 2,150 km² of land, including associated infrastructure (IUCN, 2012). Coastal erosion can also lead to displacement, loss of lives and properties and can severely undermine national security. Threats to critical infrastructure are found at two of Liberia's premier health facilities (JFK and Redemption hospitals), which are seriously threatened by erosion of the coastline. Involuntary migration due to coastline erosion, flooding and drought triggers disputes over land and other resources, which has security implications.
44. The state of these environmental problems, their root causes, impacts in Liberia and globally have been analyzed for this CBIT project, and described using the Drivers-Pressures-State-Impact-Response (DPSIR) framework (Fig. 2). The major drivers across the NDC sectors include climate change, population growth, economic growth, civil conflicts and policy failure. The drivers exacerbate the environmental problems in the sectors by exerting pressures that cause a state of degradation and increased emissions.

Figure 2. Drivers-Pressures-State-Impact-Response (DPSIR) framework: Major Environmental Problems in Liberia



Root causes

45. **Pressures/threats** identified in Liberia according to Figure 2 include increased demand for fuel wood, increased demand for food and arable land, increased demand for construction materials, increased traffic and loads, market demand, significantly contribute to the exacerbation of the environmental problems. Liberia 's forest areas and resources are being deforested, degraded, pressured and this is driven by several factors including commercial logging activities, mining, flooding and collection of fuel wood.

E. Barriers to Addressing the Environmental Problems and Root Causes

46. Institutional and policy coordination/cooperation arrangements: There is a lack of a robust institutional structure to manage the NDC implementation process in a transparent manner. There is a need to strengthen the capacity of national lead institutions to develop and implement NDC-related policies and programs, coordinate with sectorial line ministries, and engage stakeholders in the NDC implementation process.

47. Technical capacity to measure, track and report on GHG activities: There is a lack of technical capacity at institutional and individual levels to establish a system that can measure, track and report mitigation and adaptation activities and other elements of the transparency framework. The transparency framework requires Liberia to regularly provide (i) A national inventory of greenhouse

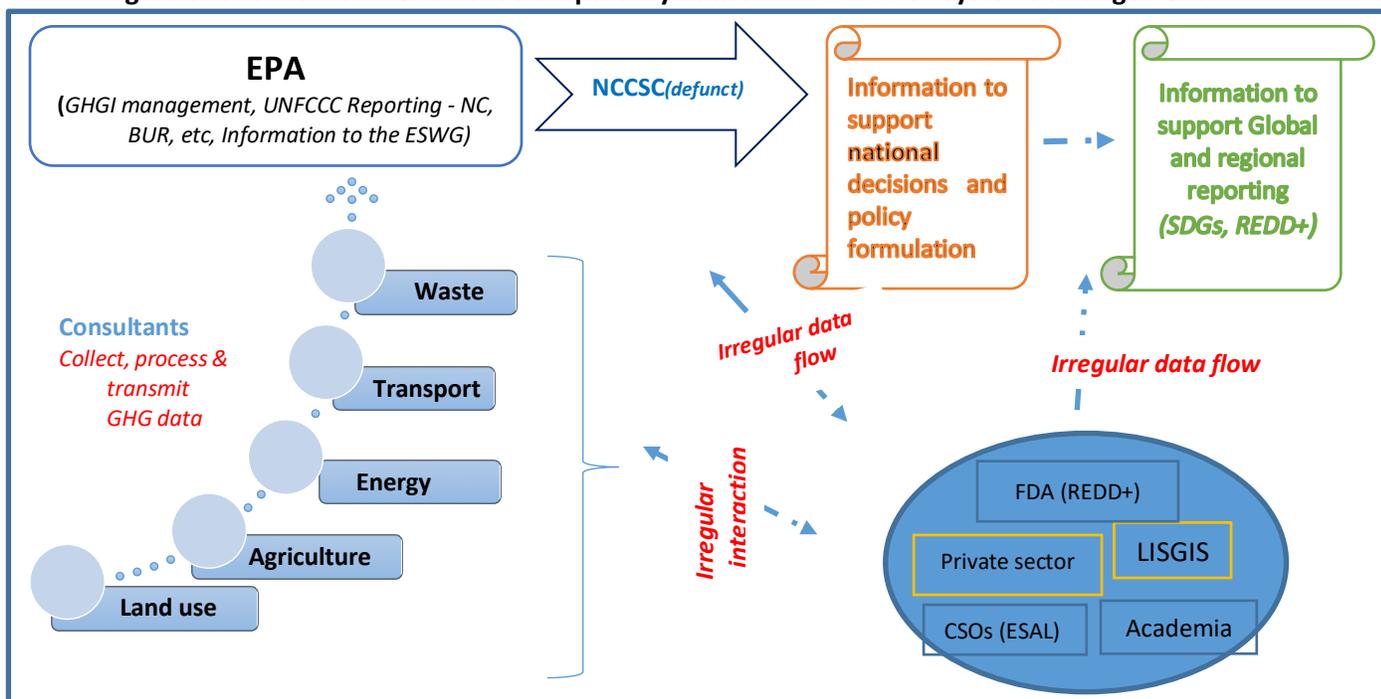
gas emissions (by sources) and removals (by sinks) (ii) Information necessary to track progress toward achieving their Nationally Determined Contribution (NDC) (iii) Information related to climate change impacts and adaptation (iv) Information on financial, technology transfer and capacity building support needed and received, and (v) Information on any support they provide to developing countries.

48. Liberia's 1st National Communication emphasizes the need for massive training and capacity-building at all levels to reduce uncertainties in the statistics and develop national- and/or sector specific emission factors with the ultimate objective of improving and updating the national GHG inventory. The National Communication identified capacity building needs to strengthen the reporting and monitoring of national GHG data gathered for different sectors and the implementation of standardized technical guidelines and regulations, codes of practice for accountability and transparency. The proposed project will deliver some of these training and capacity building needs, while at the same time build a process for the long- term sustainability of GHG data management and reporting in Liberia.
49. Limited awareness and/or knowledge about the Paris Agreement, climate change and NDCs: The lack of awareness and/or knowledge about the Paris Agreement, climate change, and NDCs provides a significant obstacle to successful NDC implementation in Liberia. Since the submission of Liberia's NDC to the UNFCCC, the level of public awareness and information sharing on its content with stakeholders has been limited. The low adaptive capacities and low prioritization of climate change issues at the policy level is evident, and this is demonstrated by the slow pace of connecting scientific and technical issues of climate change to policy making (EPA 2013). At sectoral level, the different sectors have established different processes to track and report on compliance with a range of environmental and social indicators, however these knowledge management systems tend to be sector specific.
50. Limited Scope of Liberia's NDC: Liberia's NDC demonstrates commitment to utilizing nature-based approaches for climate change, particularly in the adaptation section of the NDC. However, this commitment should be strengthened to reflect GHG emissions from other sectors identified in the national communication to ensure that all sectors are included in reporting transparently toward Liberia's meeting its GHG targets. The NDC recognizes that intact forests perform an important function as carbon sinks in Liberia but does not fully incorporate all key activities such as REDD+. Liberia's NDC only briefly mentions REDD+ even though it is widely seen as an important tool in the mitigation of climate change. Liberia's mitigation actions include the protection of forest and increasing the amount of forested land through reforestation of degraded lands. Liberia clearly recognizes that nature-based solutions such as forest protection are an immediate and cost-effective way to reduce greenhouse gas emissions and enhance resilience to climate change. Actions to reduce GHGs associated with agriculture are also not detailed or prominently expressed in Liberia's NDC despite the fact that it is a key source of emissions. More needs to be done to enhance and maximize opportunities to reduce emissions and improve resilience for farming communities.
51. Policy failure: Liberia currently has several environmental policies, laws and regulations to govern the environment. However, the full implementation of these legal frameworks remains a challenge. For example, forest contract holders have constantly violated the policies thus creating room for environmental degradation and the misapplication of revenue from the forestry sector. Also, many of the components of these instruments did not adopt the bottom-up approach wherein all stakeholders, especially rural people, are involved. Consequently, some of Liberia's policy frameworks are ambiguous and not applicable.

F. Current Baseline (Business-as-Usual Scenario) / Future Scenarios without the Project

52. Liberia is currently implementing a flexible NDC policy to address global emissions and global impacts under the Business as Usual (BAU) scenario. The following institutions are involved in transparency activities: (i) **The National Climate Change Steering Committee (NCCSC)** was established in 2010 by the Ministry of Finance and Development Planning to coordinate NDC implementation. The NCCSC is currently defunct and unable to effectively support and implement its mandate. This is attributed to the absence of a secretariat to support and coordinate the NCCSC activities, and inadequate resources to finance activities such as building awareness on the country's transparency agenda. (ii) **Environmental Protection Agency (EPA)**, the designated UNFCCC focal point for Liberia, and the lead technical agency for GHG and MRV systems and collection of sectoral data from NDC sector institutions. EPA is also coordinating a number of initiatives related to GHG data collection and reporting (e.g. NC, BUR, LEITI, ESIA, etc.) as well as serving as the secretariat for the Environment Sector Working Group. The EPA data collection and reporting is premised on Tier 1 of the IPCC categorization, and continues to use consultants to undertake the required tasks related to the NC and BUR reporting requirements, (iii) **Forest Development Authority (FDA)**, responsible for protection and conservation of Liberia's forestry resources also coordinating the REDD+ Initiative for Liberia. Other actors also involved in GHG and MRV activities are **LISGIS** for data standards management and data supply, and the Ministry of Finance and Development Planning (MFDP) tracking and reporting on the Low Carbon Development Strategy, **NDC sector institutions** such as the Ministry of Lands, Mines and Energy, and the Monrovia City Council for energy and waste sectors respectively, and non-state actors such as **academic institutions** and private sector (e.g timber dealers and charcoal unions). These primarily constitute the groups serving as GHG emissions data sources and an elaborated list is provided as Appendices VI and IX. The EPA has primarily used consultants to collect the required data and information from these institutions to meet the transparency reporting requirements. Figure 3 below is an illustration the current arrangement for GHG data management in Liberia.

Figure 3. Overview of the current transparency data and information systems arrangements



Implications for BAU Scenario

53. **Institutional coordination:** Absence of a functional overall coordination structure for GHG governance and management is a major setback to Liberia's climate mitigation and adaptation efforts and ambitions. NDC sectoral data collection and reporting, and implementation of NAMA and NAPA projects will remain fragmented with the BAU scenario.
54. **Compliance with UNFCCC and Paris Agreement:** Liberia will continue to be subject to the transparency requirements under the UNFCCC as follows: (i) National Communications every 4 years under the UNFCCC reporting and verification requirements (ii) National GHGI reports in compliance UNFCCC reporting requirements, (iii) Biennial Update Reports (BUR) on national GHGI emissions and mitigation plus information on mitigation actions, and (iv) NDC reporting under the Paris Agreement. However, with the BAU scenario, climate change reporting will continue to be largely indicative, reporting based on Tier 1 and through a costly process. The implementation of the NDC policies without the MRV system will also remain a challenge under the scenario. The flexibility of the NDC process and the diversity of the terms and metrics involved cannot, therefore, guarantee compliance to enhanced transparency under the Paris Agreement with the BAU scenario.
55. **Policy accountability:** Currently Liberia does not have a robust system for effectively assessing its climate policies and impacts resulting from implementation of the NAPAs and NAMAs. Under the BAU scenario, Liberia would not be able to meet the enhanced and increased ambition in the post-2015 Paris Agreement climate regime that necessitates both the BURs and a national MRV system to meet the increased transparency through tracking mitigation progress and support provided on a more frequent basis. Measuring the actual progress of implementation towards Liberia's stated NDCs goals over time would be difficult. As such Liberia and other similar Parties will not be able to track the results of climate action in terms of quality, quantity and timing for the set targets. Under this scenario, it will remain difficult to ascertain the achievement of the expected and actual climate policy goals, and how these compare and contribute to the aggregate global outcomes.
56. **Limited scope of stakeholder participation:** NDC implementation in Liberia is considered a responsibility for government institutions. The involvement of non-state actors such as private sector, CSOs and forest dependent communities remains limited and their contribution to NDC implementation not adequately captured in Liberia's transparency communications. This means that some key sources of emissions remain unaddressed and may therefore not provide a comprehensive picture of emission activity in Liberia thus undermining the environmental effectiveness of NDC implementation.
57. **Comparability of climate reporting:** Liberia's current capacity to report on the country's climate actions both nationally and internationally falls along similar sector divisions as in other countries such as Uganda for energy, agriculture, waste and transport sectors. The reporting largely remains qualitative limited to Tier 1 data, which does not allow for effective comparability between countries.
58. **Credibility of climate change action:** Implementing Liberia's NDC without a MRV system to produce and check the GHG information will be a challenge for Liberia to track its efforts and attract more participation, compliance, ambition and financing.
59. **Efficiency of policy action:** Without the MRV system, Liberia would find it difficult to fully evaluate the performance of different policy designs and instruments in terms of reducing GHG emissions and costs

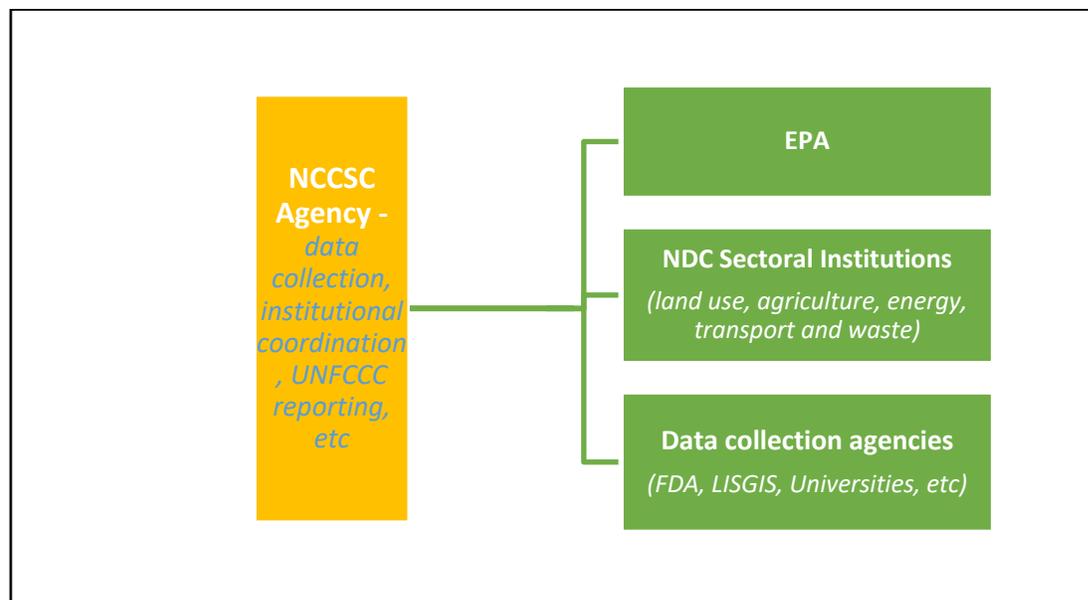
(direct compliance costs and broader social opportunity costs), and ancillary impacts (both co-benefits and countervailing harms in other environmental, social and economic outcomes). For example, reducing emissions from deforestation may also affect biodiversity and local human populations, while the promotion of use of renewable forms of energy-solar and wind energy may affect biodiversity.

G. Alternatives to the Business-As-Usual Scenario

Alternative Scenario 1: NCCSC as overarching policy and technical agency for GHG and MRV

60. Under this scenario the NCCSC is equipped to assume the responsibility for both the governance and management of GHG and MRV activities, and to coordinate NDC implementation. An agency of the NCCSC will be created, equipped and staffed to purpose, to oversee and coordinate data collection and reporting by the sectoral hubs or institutions, and develop a system for GHG data aggregation and reporting in compliance with the UNFCCC requirements. The agency will also be responsible for the development of standards and systems required for the effective management of GHG data, including the policy and institutional cooperation mechanisms, and ensure data quality control measures and quality assurance. Collaboration with EPA and other data collection agencies (e.g. LISGIS) will be limited to data collection through defined cooperation mechanisms and projects.

Fig 4. Alternative Scenario 1 - NCCSC as an agency for GHGI and MRV system management



Positive elements of Alternative Scenario 1

61. The NCCSC is an initiative of the MFD, and this positions the committee to attract financing from both domestic and foreign sources to fulfill its mandate, demand active sectoral participation in climate change activities and coordinate broader stakeholder engagement. Under this scenario, the EPA would be relegated to providing technical assistance to the NCCSC to deliver on its mandate, while all communication with the UNFCCC would be channeled directly through the NCCSC agency. The agency would also be responsible for synthesis of the GHG data to inform policy direction and reforms. Under this scenario, access to resources to finance GHG and MRV development and

implement the NDC strategy, and being positioned to strengthen institutional coordination are strong points.

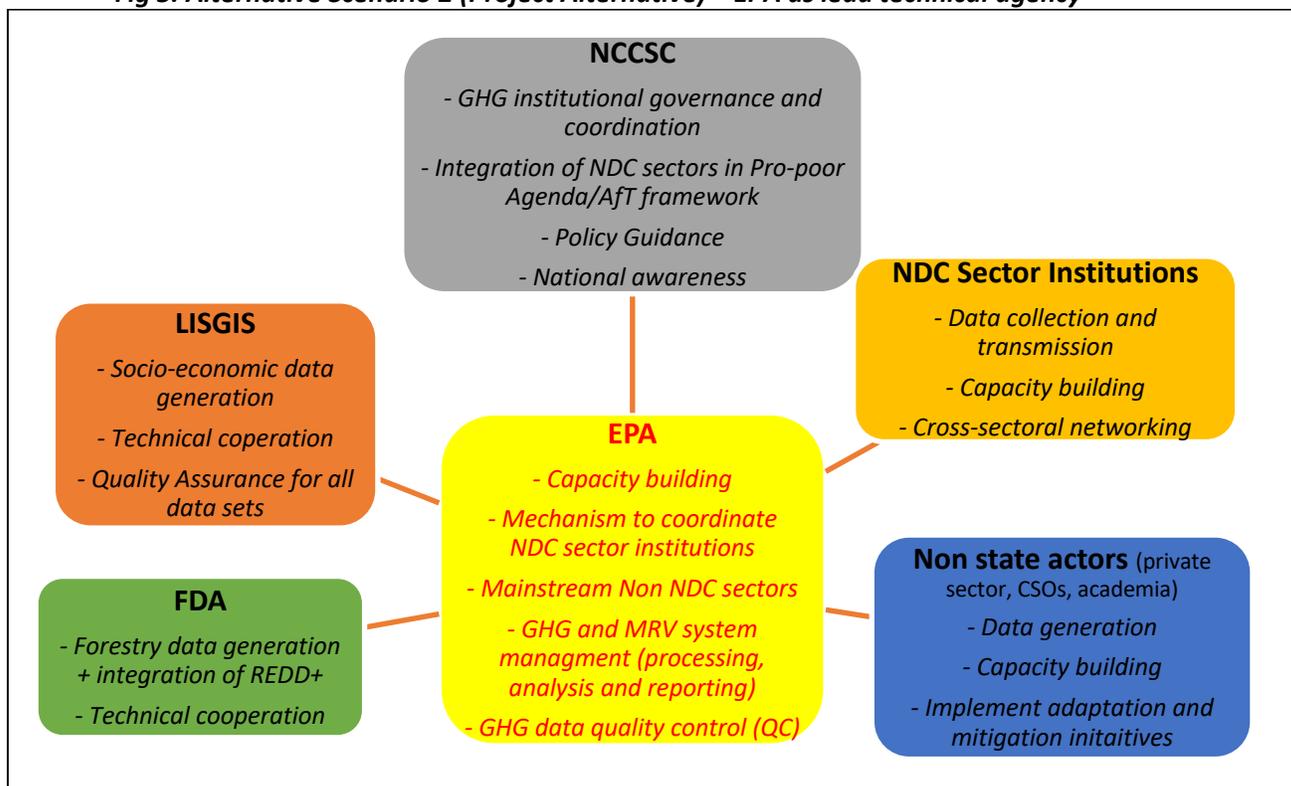
Limitation of Alternative Scenario 1

62. Despite the strong affiliation to the Ministry of Finance and cabinet as high-level institutions, the NCCSC has since its establishment (in 2010) not attracted the resources needed to support the creation of a fully functional secretariat for its activities. NCCSC was established as a coordination body with representation from a wide range of stakeholders. Expectations were high, but these were never realized. Their limited visibility, and lack of clarity on roles and responsibilities has contributed to the committee’s inert presence in GHG and MRV activities. Attempts to revive the committee to serve a larger mandate may, therefore, not happen soon enough. Substantial resources will be required to recruit and train staff, and equip the agency to function effectively, which may not be possible in the short or medium term.

Alternative Scenario 2 (Project Scenario): Strengthen and equip EPA to effectively coordinate GHG data collection and reporting, and enhance the existing structures to support NDC implementation.

63. EPA is the designated technical agency for GHG data collection and reporting and has over the past years registered efforts to build institutional capacities to meet its mandate and support implementation of the NDC strategy. Under the proposed scenario, EPA maintains the technical oversight responsibility and supports the NCCSC to fulfill its mandate of policy oversight, while working with the respective data agencies to respond to the UNFCCC reporting requirements.

Fig 5. Alternative Scenario 2 (Project Alternative) – EPA as lead technical agency



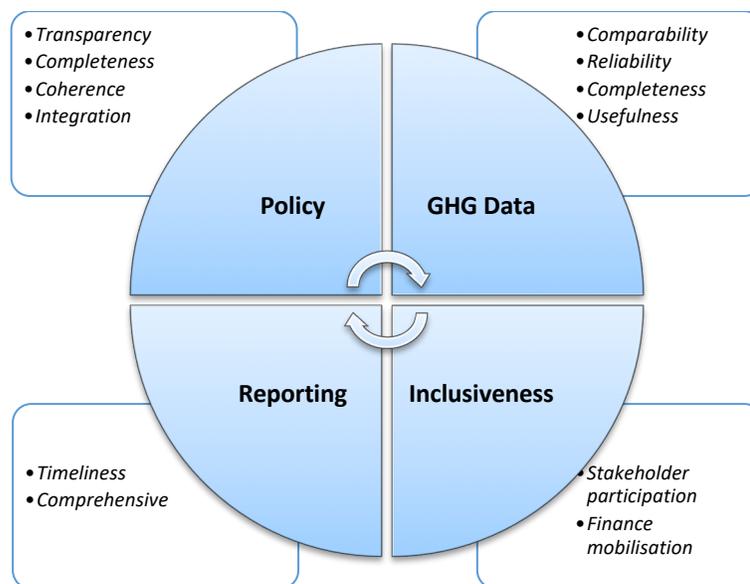
64. The NCCSC will be capacitated to clearly define and structure its mandate to respond to the current and future needs of Liberia’s transparency agenda and the broadened and diverse stakeholder interests introduced through the project. The EPA shall be responsible for the technical processes related to GHG and MRV management, including data collection, processing, transmission and reporting in response to the national and international obligations. EPA will work with LISGIS and FDA to address and mainstream the socio-economic and forestry data sets, and information currently not captured by the NDC sector institutions.

H. Cost Effectiveness Analysis of Chosen Alternative

65. Analysis of the cost-effectiveness of the chosen alternative scenario is based on a combination of qualitative and quantitative approaches and the three scenarios were considered; (i) Business As Usual (Baseline), (ii) NCCSC as overarching policy and technical agency for GHG and MRV, (iii) EPA as lead technical agency and supporting the NCCSC to fulfil its mandate.

66. Alternative Scenario 3 which is EPA as the lead technical agency for GHG and MRV activities in Liberia is chosen. The goal of the chosen alternative intervention is to capacitate and strengthen EPA and the NDC sectors to provide timely and quality GHG data and reporting on a sustainable basis. This calls for progressive shift from Tier 1, through Tier 2 to Tier 3. Informed by the needs for heightened transparency in accordance with the elements of the Paris Agreement, indicators of effectiveness have been developed and here illustrated as Fig 6 below.

Fig. 6. Indicators of Effectiveness



67. Analysis of the different scenarios reveals that all three options are possible. However, most of the alternatives indicate a higher cost-effectiveness ratio against the indicators defined, and this is illustrated in Table 1.

Table 1: Cost Effectiveness Analysis of the Scenarios 1-3

Scenario	Cost Assessment		Effectiveness Assessment			Cost Effectiveness Ratio
	Qualitative indicator	Quantitative score	Indicator	Qualitative indicator	Quantitative score	
1. BAU	High	3	Policy transparency, completeness, coherence, integration	Low	1	3
2. NCCSC Agency	High	3		Low	1	3
3. Project Alternative	Medium	2		High	3	0.7
1. BAU	High	3	GHG data comparability, reliability, completeness, and usefulness	Low	1	3
2. NCCSC Agency	High	3		Medium	2	1.5
3. Project alternative	Medium	2		Medium	2	1
1. BAU	High	3	Reporting timeliness and comprehensive	Low	1	3
2. NCCSC Agency	High	3		Low	1	3
3. Project alternative	Medium	2		Medium	2	1
1. BAU	High	3	Inclusiveness - stakeholder participation and finance mobilization	Low	1	3
2. NCCSC Agency	High	3		Low	1	3
3. Project alternative	Medium	2		High	3	0.7
Final Assessment						
Scenario	Total Score		Mean Score			
BAU	12		3			
NCCSC Agency	10.5		2.6			
Project alternative	3.3		0.8			

68. The project approach is the most cost effective with the best cost-to-effectiveness ratio of 0.8, and also strategically combines the benefits of improved policy integration, domestic and international reporting and broader stakeholder participation in NDC implementation. Nationally, EPA and its sectoral hubs will collect, process, and report GHG Inventory data on emissions and removals under an agreed institutional framework of cooperation. Generally, financing for the National Communication by GEF is estimated at about US \$80,000 and the work has been done previously by consultants. The chosen alternative is cost-effective in the medium and long term. Also, the Government of Liberia received GEF funding for the preparation of the Biennial Update Report (BUR). EPA intends to use this project funding to improve its technical and technological capacity and those of the NDC sector hubs, to assemble, process data and produce timely reports (e.g. the National Communication and BUR).

69. In the alternative scenario, the assessment of benefits accruing from the costs incurred in capacitation of EPA as the designated technical agency with overall responsibility for the NDC transparency system (Fig 6) is based on four considerations, namely; (i) Building on relevant past and ongoing capacity building efforts, (ii) Collaboration across the NDC sector institutions and stakeholders, (iii) Integration of GHG data and reporting on mitigation, adaptation, and mitigation co-benefits and (iv) Policy impacts beyond NDC, covering all climate policies relevant to the GHGs in the selected sectors (e.g. forests/REDD+) and mitigation co-benefits, costs (to enable policy design comparisons), technology transfer and financing options for sustainability.
70. The operationalization of the NDC transparency system under this alternative scenario will be value-added to the on-going UNFCCC rigorous reporting requirements, building on the past and ongoing capacity building efforts. Significant capacity relevant to the transparency system has been developed in several government agencies coordinated by EPA. The benefits in terms of improved monitoring and reporting to meet enhanced transparency requirements under EPA will, therefore, come at a lower cost.
71. Currently, there is no collaboration across NDC sectors (land-use, agriculture, energy, transport, waste), and between key stakeholders (government and non-government actors). Establishment of the framework of cooperation between the NDC sectors and EPA, and with NCCSC as an oversight organ will reduce the cost for enhanced measurement, verification and reporting. EPA in the BAU scenario meets all the operational costs for data collection, processing and reporting. However, the reporting is not efficient. Working jointly with other agencies (e.g. LISGIS, FDA) will reduce the costs of quality assurance and control. The role and contribution of the NCD sector institutions and others such as academia and private sector will also be more streamlined and effective as a result of the project intervention.
72. Integration of GHG data and reporting on mitigation, adaptation, mitigation co-benefits in a centralized national data base of the NDC transparency system housed by EPA will bring down the cost of information and knowledge management for enhanced transparency. The cost of implementation of NDC policy, and all other climate policies relevant to the GHGs in the selected sectors, and their comparison in terms of mitigation, adaptation, mitigation co-benefits, technology transfer and financing options for sustainability will also go down. Liberia will be more empowered to review and reformulate its climate relevant policies at a lower cost and result in more effective implementation. This may in turn lead to greater flow of resources.

SECTION 3: PROJECT STRATEGY

A. Objective, Components, Expected Outcomes, Targets, and Outputs

73. **Project Objective:** To build and strengthen Liberia's national capacity to implement the transparency elements of the Paris Agreement.
74. Over the twenty four months of implementation, the project will strengthen national capacities to track NDC implementation and monitoring, and improve institutional coordination and collaboration to utilize the transparency system effectively. Technical capacities to collect, process and aggregate GHG data will be built, with due consideration of the gender dimensions, and seeking to operationalize the GHGI and MRV system. A hybrid approach to MRV system development will be adopted, with a centralized system managed by EPA that aggregates contributions from the various

NDC sectors and institutions for national and international reporting. A progressive development approach to MRV system development and capacity building will be used in the implementation of the project and to sustain transparency efforts over time. This project will focus primarily on moving from tier 1 to tier 2 with some ambition for tier 3.

Project Components

75. Component 1: Strengthen the capacity of national institutions to track NDC implementation and sustain transparency efforts over time

76. A review of the baseline situation and stakeholder consultations in Liberia reveal that all the NDC sectors do not have IPCC standard procedures to measure GHG emissions and removals from both mitigation and adaptation action. The 1st National Communication of Liberia and the NDC submitted to the UNFCCC emphasize the need to strengthen national capacities for GHG data collection and management to inform NDC implementation. This includes data interpretation, storage and updating of databases by the Liberian Environmental Protection Agency (EPA), and tracking NDC implementation by the sectors. This component will strengthen the capacity of the national institutions to measure, track and report mitigation and adaptation data from the land use (including forestry), agriculture, energy, transport and waste sectors through a user- friendly protocol and methodology for data collection across multiple sectors. A centralized NDC transparency system will be developed and housed at EPA in accordance with the UNFCCC standard. The EPA will serve as the administrator of this online system for collecting and managing the NDC data and information.
77. This component will also build the capacity of stakeholders on how to effectively use the NDC transparency system to inform the GHG activity data by sector. Training will be provided along the following broad categories; technical experts in the NDC sector institutions and technical committees, policy makers, academia, private sector, and CSOs. Staff will be identified and trained from all the NDC sectors on the basic functioning of the NDC system, data management and reporting. Training of Trainers (ToT) workshops will be conducted for selected sectors and technicians to further deepen and broaden the knowledge on the transparency requirements of the NDC and also to ensure that there will be a process in place to assure continuity after the GEF project ends. This component will strengthen the Environmental Sector Working Group housed in the EPA to improve the transparent collation and dissemination of GHG data contributions from the different sectors.
78. **Outcome 1.1:** *Procedures to measure, track and report mitigation and adaptation data from the land use, agriculture, energy, transport and waste sectors transparently strengthened.*

Measuring and tracking mitigation and adaptation activities is complex and requires a broader set of measurements. Currently, knowledge and application of 2006 IPCC standard procedures to measure GHG emissions and removals from both mitigation and adaptation action across the different NDC sectors in Liberia is lacking. For the preparation of the INC, default global factors were used to report. Similar procedures are being used in the development of the SNC and BUR. The REDD+ under the forestry sector however do have some specific factors they use, but these are currently not being applied for the NDC sectors. The proposed project will establish a transparent monitoring system that will identify and define the parameters for collecting data and ensure that this aligns with global best practice. Improving capacity in Liberia should provide a firm basis for updating the NDC in the near future by identifying specific emission reduction targets in each sector not identified in the national communication.

Targets for Outcome 1.1:

- At least one protocol consisting of standard methods for measuring, tracking and reporting GHG data for each of the NDC sectors developed and pre-tested in compliance to IPCC requirements;
- At least one technical guide developed on data transmission and communication for each NDC sector based on IPCC reporting requirements.

Outcome 1.1 will be delivered by the following outputs;

79. **Output 1.1.1: Protocol and methodology for data collection across multiple sectors established.** The project will establish a protocol for monitoring NDC implementation that includes estimated baselines or reference emission levels, and also develop a system that monitors emission levels over time and the registries for emissions in the different sectors on a regular basis.

This output will be delivered by the following activities:

- (i) *A GHG Protocols Technical Committee is established* to support and coordinate the delivery of the output 1.1.1. The committee will comprise technical resource persons from the NDC sectors and shall meet periodically to provide technical inputs and review outputs. An orientation meeting will be organized and facilitated by an expert on GHG data tools and methodologies. The expert will also emphasize the significance of harmonization of multiple sectoral data sets to inform transparency and national reporting.
- (ii) *Refine/develop protocols and methodologies for data collection*: An inventory of existing protocols and methodologies currently in use to collect, measure, track and report mitigation and adaptation data for each of the NDC sectors (land use, agriculture, energy, transport and waste sectors) will be developed. Using this inventory as a foundation, protocols consisting of standard methods/tools for measuring, tracking and reporting GHG data will be developed for each of the NDC sectors and compared against the IPCC guidelines. A technical expert shall be engaged to support the process, and technical meetings held to review the outputs and guide the protocols development process.
- (iii) *Sensitization on Gender disaggregated GHG data*: The project shall facilitate a gender awareness session for the NDC sector institutions and gender related institutions to enhance understanding of the gender dimension in the GHGI and MRV system. The NDC sector institutions shall be supported to mainstream gender in the protocols and methods/tools developed.
- (iv) *Pre-test and certify the protocols and methodology*: The protocols and methodologies will be pre-tested for the collection and processing of GHG data (including gender disaggregated data). At least one set of protocols and methodologies for each NDC sector will be pre-tested and the final set submitted to the Liberia Institute of Statistics and Geo-Information Services (LISGIS) for certification. The certified set of protocols and methodologies will be published and copies distributed to the NDC sector institutions.
- (v) *Needs Assessment and Compliance to IPCC requirements*: The NDC sector institutions will be assessed for their capacity to effectively apply the protocols and methodologies developed to meet the IPCC requirements. The assessment outcome will inform the preparation of technical guides for application of the protocols for each NDC sector in compliance with IPCC reporting requirements.

Output 1.1.2 Technical guides on data transmission and communication in compliance with IPCC standards developed

80. Data transmission refers to the transfer of data (a digital bit stream or a digitized analog signal) over a point-to-point or point-to-multipoint communication channel (Wikipedia). Currently the GHG data generated by the NDC sectors is compiled and synthesized by consultants to respond to the reporting requirements. The active role of the sector institutions in transmitting GHG data remains limited under the BAU, and no guiding documents exist to support the movement of the data from multiple points to a centralized point. Under this project, the sector institutions will assume a very proactive role as primary GHG data generators, consolidators and transmitters. 'NDC sectoral hubs' will be created under Output 1.2.2 and will be responsible for the transmission of the GHG data from the multiple points into a centralized online system to be managed by EPA. Technical guides will be developed for each sector to support this process. The guides will elaborate the GHG and emissions sources subject to transmission, data quality control mechanisms (as defined in the protocols developed under Output 1.1.1), transmission mediums and staff responsibilities at the hubs, as well as the common cross sectoral data sets to facilitate synergies and data harmonization by EPA at Component 3.

This output will be delivered by the following activities:

- (i) Preparation of the technical guides: A lead international expert will support the process to prepare 5 technical guides, with input from national sector experts identified for each of the NDC sectors. The lead consultant will develop the document templates and define the process for data collection intended for the technical guide documents. The consultant will also assess compliance to the IPCC standards. Draft technical guides will be developed for each of the NDC sectors, and a technical meeting convened for experts from government and academia to review the draft documents.
- (ii) Production of technical guides: Feedback and comments generated from the technical meeting will inform the finalization of the technical guides. A total of 200 hard copies will be produced and disseminated to the NDC sector institutions and key stakeholders including government agencies, academia, CSO and private sector involved in the GHG data supply and management chain.

81. Outcome 1.2: NDC transparency system in place in accordance with the prescribed UNFCCC standard

There is no NDC transparency system for Liberia and this was confirmed by stakeholders during the PPG phase consultations. As mentioned earlier, the current reporting arrangements is based on projects implemented by EPA, and adhoc consultations and engagement of other GHG stakeholders (e.g. NDC sectors, LISGIS, FDA, NCCSC, non-state actors). Each sector institution collects and manages their data and no clear channels of transmission of GHG data to EPA were seen. Transparency information flows back to stakeholders on NDC implementation was also lacking. The proposed project seeks to establish a centralized, user friendly, online system managed by EPA. The system will include GHG data that are generated from the different NDC sectors and NDC information from key institutions, and shall be easily accessed by all stakeholders. EPA will be strengthened to manage the NDC system effectively, while the NDC sector institutions will be supported to transmit the GHG data in an effective and timely manner, and in compliance with the UNFCCC requirements.

Targets for Outcome 1.2:

- At least 1 web based system for managing all NDC information and GHG data operationalized at EPA;
- At least 4/5 NDC sectoral hubs fully compliant in reporting nationally and internationally.

Outcome 1.2 will be delivered by the following outputs:

82. Output 1.2.1 Online system for collecting and managing all NDC information and data on transparency including GHG inventory in collaboration with Liberian Environmental Protection Agency developed.

The proposed project will build a user-friendly online system for managing all NDC information and data collected from the land use, agriculture, energy, transport and waste sectors in a transparent manner. There have been several national processes used to collect and report on GHG emission level and data as demonstrated in the national communication, some of which are not housed in one institution. The proposed project will allow the holistic reporting and processing of GHG emission data from the different sectors in a single and uniform format that meets international acceptable standards and shall become a national system to promote transparency in tracking NDC progress. The online system will also be linked to several websites such as government ministries and will serve as a central repository for public information in line with the National Freedom of Information Act. The system will draw on information generated from Output 1.4.1 on the stakeholders involved in NDC implementation, and the governance and cooperation frameworks for their engagement and participation.

This output will be delivered by the following activities:

- (i) *A review of the current transparency data and information systems:* The review will focus on the current GHG data and information processes and systems and identify the critical technology gaps needed to respond to UNFCCC requirements at sector level and EPA. Special attention will be given to data transmitted from non-NDC sectors such as socio-economic data from LISGIS, and mainstreaming gender disaggregated data relevant for the NDC system.
- (ii) *Online system for NDC information:* A user driven and friendly system will be developed by a team of data management leads from the EPA and relevant institutions with the assistance of an expert. The system will draw on information on GHG and MRV stakeholder categories generated from Output 1.4.1 and the NDC sectors, and will be designed to collect and disseminate NDC information tailored to their needs.
- (iii) *System operational manual:* A manual will be developed to support the operationalization of the NDC system to enhance its use by stakeholders.

83. Output 1.2.2 NDC sectoral hubs strengthened to comply with NDC system requirements

The current system for GHG data management is fragmented and led by different government agencies that collect and transmit the data and information to EPA for reporting on NDC implementation. Through Output 1.4.1, the multiplicity of stakeholders relevant to the NDC system both as suppliers of data and consumers of the information will be revealed. The NDC sector institutions shall be assisted to establish sectoral hubs to enable these function effectively as organized sources and suppliers of GHG data for the NDC system. The project shall facilitate the creation of NDC sectoral hubs that will comprise government institutions as well as non-state actors essential for the operationalization and functioning of the NDC system. Guided by the NDC system operational manual, the sectoral hubs will be assisted by an expert to ensure that their activities comply with the requirements of the NDC system, as well as the national and international reporting templates. The proposed project will help upgrade the technologies and process systems needed to gather the GHG emission data in accordance with UNFCCC requirements. Equipment will be procured for EPA, the NDC sector hubs and LISGIS, to facilitate the timely transmission of data into the centralized NDC online system managed by EPA.

This output will be delivered by the following activities:

- (i) *Establishment of NDC sectoral Hubs*: The NDC sector institutions will be assisted to create sectoral hubs across the land use, agriculture, energy, transport and waste sectors. This will be guided by a preliminary list of key sectoral actors (based on Output 1.4.1), and intra-sectoral cooperation and engagement modalities defined and strengthened over the project period.
- (ii) *Procure GHG system technologies and equipment*: Grants will be provided to EPA, NDC sector hubs and LISGIS to procure GHG technologies and communication systems to enable the timely transmission of data and information to EPA for aggregation and reporting. An expert shall provide guidance on the specific technology upgrade needs at central and hub level in form of software and hardware, including computers, servers, scanners, power back-up systems, and external drives.

84. Outcome 1.3: Capacity of key ministries and stakeholders to effectively utilize the developed NDC transparency system strengthened

Technical staff at EPA and NDC sector institutions in the past benefited from short trainings related to the GHG and MRV system. The trainings organized by Government and partners responded to the specific capacity needs for reporting such as the preparation of NCs and BUR reports, and the delivery of news project initiatives such as the LEITI and REDD+. Sector specific trainings were also conducted particularly in the forestry sector, with over 100 individuals trained on forest emissions inventory and monitoring. The NDC sectors however have not benefited from most of the training on GHG and MRV as confirmed by stakeholders consulted during the PPG stage.

85. The project intends to build capacities of stakeholders to utilize the NDC system established under Output 1.2.1 and develop mechanisms for the transfer of the knowledge and information beyond the CBIT project period. Appropriate training packages will be developed and targeted training conducted across the range of stakeholders. These will include policy makers, GHG technicians and experts, the media, academia, civil society and private sector. The project will also integrate capacity building solutions such as Training of Trainers, specialized trainings and external learnings/exposure visits to countries implementing more advanced GHG and MRV systems. The capacity building activities will also serve to establish and reinforce cooperation and interaction among stakeholders across the different sectors involved in NDC implementation.

Targets for Outcome 1.3

- At least 300 MRV stakeholders equipped to use the NDC transparency system in place;
- At least 3 ToT workshops conducted.

Outcome 1.3 will be delivered by the following outputs:

86. Output 1.3.1. Training for at least 300 stakeholders over the life of the project to utilize the NDC transparency system and manage relevant data conducted.

Training packages will be developed and tailored to the specific needs of the different stakeholders. For example, policy makers will be trained on interpretation of NDC information to inform climate change policy review and implementation, while the media will be trained on repackaging NDC results into appropriate public messages. Specialized training will also be conducted for the NDC sectoral Hubs, LISGIS, EPA and selected institutions directly involved in GHG data collection and management. At least 300 stakeholders will be trained and these will include; 30 policy makers (central and local government), 15 from National Gender Forum, 125 staff from NDC sector institutions, 60 from

relevant technical institutions (EPA, FDA, LEITI/NBC, and LISGIS) and technical committees (Energy Working Group, Environment Sector Working Group), 10 media experts, 30 academic staff (UoL, FTI and Cuttington University), 20 NGO Coalition, and 15 private sector.

This output will be delivered by the following activities:

- (i) Training needs assessment (TNA): A TNA will be conducted for the targeted institutions and shall respond to two key questions; (a) Determine the specific training needs for stakeholders to use the NDC transparency system in place, and (b) Establish the technical expertise required to manage the GHG data requirements of the NDC system.
- (ii) Training on the NDC transparency system: For each of the identified needs at 'i' above, a training package will be developed and trainings delivered to address the NDC system awareness needs, and the specialized/technical training for the technicians to manage the data needs. Two training sessions will be organized every quarter, each targeting an average of 40 participants.
- (iii) Specialized training: About 25 technical staff from the NDC sectoral hubs, EPA and relevant institutions involved in GHG data management will be trained on the GHG sectoral data collection, processing, and transmission into the NDC system.
- (iv) Exposure visits: The project shall facilitate exposure visits for staff at EPA and the NDC sectoral hubs. At least 24 staff shall visit countries with functional GHGI systems in 2 countries (South African Republic and Germany) over a period of 7 days (including travel days). The experience shall be documented to enhance learning and sharing beyond the selected participants. A media expert shall be included on the team to document the experience and learnings, and clear ToRs developed to guide his/her engagement.

87. Output 1.3.2. Three Training of Trainers workshops to deepen and broaden the knowledge of professionals working in climate change on the transparency requirements conducted.

The Forestry Training Institute, Cuttington University and University of Liberia are recognized in Liberia for providing regular trainings on environment and climate change. However, none of the academic institutions currently offers specialized training or research programs on GHG and MRV systems and transparency requirements (INC 2013). The CBIT Project shall conduct three (3) Training of Trainer's workshops over the project period to deepen and broaden the knowledge of professionals working in climate change on the transparency requirements, and staff at academic institutions, CSOs and private sectors shall be targeted for the trainings.

This output will be delivered by the following activities:

- (i) Preparation for trainings: In consultation with the Project Steering Committee, criteria will be developed and trainers selected along the lines of; sectoral representation, inclusiveness i.e non-state actors such as academia, CSOs and media, and integrating the gender dimension in the selection of the participants. At least 100 trainers will be selected and these will be expected to replicate trainings on the NDC transparency system in their respective institutions, and commit to support the EPA to sustain transparency efforts over time.
- (ii) Training manual and materials: The PMU with the support of a consultant shall prepare a training manual and materials for the ToT program. The manual shall be pre-tested.
- (iii) ToT workshops: The PMU together with the consultant will execute the three (3) ToT workshops over the project period.

88. Outcome 1.4: Coordination among key government agencies on NDC implementation enhanced.

There is a multiplicity of actors involved in GHG and MRV activities in Liberia, for example, LISGIS, the REDD+ Initiative, the Environment Sector Working Group as well as academia and private sector institutions. The NCCSC was created to support NDC implementation coordination in the country. However, the lack of clarity on roles and responsibilities for GHG data management and transparency governance in Liberia, and the absence of a comprehensive institutional coordination framework is a limitation to achieving the country's climate change ambition and implementation of the NDC. Reporting on the country's transparency agenda and NDC implementation is fragmented, with Ministry of Finance (MFD) focused on national reporting to inform policy and planning, while EPA is responsible for international reporting to respond to the UNFCCC requirements. This CBIT project seeks to centralize Liberia's national and international reporting on climate action under the NCCSC, and in coordination with identified sectoral groups such as the MFD, the REDD+ Initiative-FGD, and LISGIS reporting processes.

89. The successful implementation of the NDC therefore depends heavily on coordination across multiple sectors and between different government institutions. This project will improve inter-governmental communication through the Environmental Sector Working Group to avoid any duplication of effort and ensure that contributions across the different sectors are collated and disseminated transparently. Understanding the roles, responsibilities and contribution of the non-state actors such as CSOs, academia, private sector, development partners and forest dependent communities is also critical to meeting Liberia's transparency agenda. The project will also strengthen government's coordination and linkages with the non-state actors and enhance their participation and engagement through the NCCSC. Innovations such as interactive technical platforms and physical meetings to enhance learning and knowledge sharing, and incentive-based mechanisms to promote compliance to IPCC reporting requirements will be supported by the project.

Targets for Outcome 1.4

- At least 30% increase in number of non-state actors represented on the NCCSC;
- At least one GHGI and MRV system framework of cooperation (MoU) between EPA and NDC sectors for collecting, processing and sharing data signed;
- At least 4 NDC sectors 100% compliant with IPCC reporting requirements.

Outcome 1.4 will be delivered by the following outputs:

90. **Output 1.4.1: Liberia National Climate Change Steering Committee expanded and strengthened to include CSO, Private sector, Development partners and forest-dependent people representatives.** The National Climate Change Steering Committee (NCCSC) is mandated to bring together policymakers from different sectors to discuss, review and approve climate change mitigation and adaptation measures in Liberia. This inter-ministerial committee, by its status, is responsible for overseeing the full implementation of the NDC. The NCCSC however has not lived to its expectation since its inception and the project intends to rejuvenate and support its full operationalization to meet the objectives for which it was established, and improve transparency and NDC implementation. A comprehensive stakeholder mapping will be conducted to inform the composition of the NCCSC, and provide clarity on roles and responsibilities for NDC implementation. The project will encourage the inclusion of additional stakeholders from CSO, Private sector, Development partner and forest-dependent people, and support gender mainstreaming in NCCSC activities and NDC implementation. The project will extend support to NCCSC activities such as awareness raising meetings and workshops on roles and responsibilities for NDC implementation, and socialize the understanding of the NDC with and amongst local government and stakeholders across rural Liberia. A communication strategy will

be prepared with the assistance of an expert, and communication products developed to support the popularization of the transparency agenda in Liberia.

This output will be delivered by the following activities:

- (i) GHG stakeholders mapping: A comprehensive mapping of the stakeholders in GHG and transparency activities will be conducted. The exercise aims to identify opportunities and barriers to the effective engagement of stakeholders within and across public agencies, and with the non-state actors. Stakeholder roles and responsibility for NDC implementation and GHG activities will be clarified, with attention given to the NCCSC, and other crosscutting institutions such as the National Gender Forum, academia, CSOs and private sector.
- (ii) Sensitization on stakeholder roles and responsibilities: Workshops will be organized in collaboration with NCCSC to raise awareness on the stakeholders involved in GHG and transparency activities in Liberia and their roles and responsibilities. An expert shall be contracted to facilitate the process that will include the elaboration of the roles and responsibilities, and shall solicit stakeholder input and feedback on the proposed roles in GHG governance and data value chain management.
- (iii) Gender sensitization workshop: The workshop will be informed by a study on gender and NDC implementation, that will aim to elaborate and strengthen entry points for gender mainstreaming in transparency activities through the NCCSC. Gender institutions will be targeted for participation, and guidelines for gender mainstreaming on GHG and MRV will be developed.
- (iv) Cooperation frameworks developed: Cooperation frameworks will be developed to facilitate inter-governmental cooperation on information and knowledge sharing, and collaboration for GHG research and the overall development of Liberia's GHG and MRV systems. Guidelines will be prepared and MoUs signed to operationalize the cooperation frameworks developed between the different stakeholder categories.
- (v) Communication strategy: A communication strategy will be developed to popularize transparency activities, the NDC system and the stakeholder cooperation frameworks created. Targeted information materials will be developed to inform and educate stakeholders on a continuous basis, including online newsletters; stakeholder profiles e.g. the NCCSC and ESWG, research and policy briefs, and conference papers.

91. Output 1.4.2: NDC inter-sectoral arrangements strengthened

The interaction between EPA and the NDC sector institutions has been largely through projects designed to respond to the UNFCCC reporting requirements (NC, BUR, etc). The sectors provided the required data through consultants, and no structured system or mechanism exists for GHG data collection, processing and sharing between EPA and the NDC sectors. Formalizing cooperation between EPA and the NDC sectors provides the assurance for a structured engagement on agreed principles or engagement and aspects of work as regards NDC implementation over a given period of time. The project will support the preparation of a framework for technical cooperation between EPA and the NDC sectors, to guide GHG data collection, processing and sharing, and GHGI and MRV management. This activity shall build on Output 1.2.2 that provides for the establishment of NDC sectoral hubs for the organized participation of NDC sector institutions in GHG and MRV activities, including tracking emissions and set targets and support to NDC implementation.

This output will be delivered by the following activities:

- (i) Orientation meetings: The meetings organized by EPA shall aim to inform the NDC sectors on the importance of a cooperation framework to guide EPA's engagement with the sectors on GHG and MRV activity.
- (ii) Develop cooperation framework: EPA will prepare a draft a cooperation framework with the assistance of a technical expert and input from the NDC sectors. The cooperation framework will be signed at a high-level meeting that will be organized by EPA.

Output 1.4.3: NDC sector interactions and compliance with IPCC reporting requirements strengthened

92. In the absence of a national coordination framework for GHG and MRV stakeholders in Liberia, NDC sectors institutions have operated in silos and with limited opportunities for interaction and cross fertilization of information and knowledge. The need for cross sectoral interaction is real and confirmed by stakeholders consulted at the PPG stage. The CBIT project will support cross sectoral interactions across the NDC sectors in form of meetings and workshops, and also build on similar efforts registered in the course of implementation of the project. The project will also support the creation of an online interactive technical forum managed by EPA, to respond to questions and information requests posted by NDC sector institutions/experts. An incentive-based mechanism that encourages self-driven efforts by the NDC sectors towards compliance to the IPCC requirements will be developed and promoted by EPA.

This output will be delivered by the following activities:

- (i) Platform to facilitate sharing and exchange of technical NDC information: The project will support the creation of an online forum linked to the NDC online system to facilitate interaction and dialogue on the technical aspects related to tracking emissions and overall NDC implementation, and compliance to the IPCC requirements. The GHG technical platform will provide an interactive work space that presents the opportunity for technical engagement within Liberia for technical teams at EPA, LISGIS, FDA, academia, and LEITI, and at the international level with CI-GEF, CBIT Global Coordination Platform, UNFCCC, etc technical teams. EPA will create and coordinate the functioning of the technical platform, and manage the partnerships created therein.
- (ii) NDC sectoral meetings/workshops: The project shall support NDC sectoral meetings and or conferences aimed at enhancing stakeholder interaction and information and knowledge sharing for government, sector actors and non-state actors. EPA in collaboration with the NDC sectoral hubs established under Output 1.2.2 will organize the meetings.
- (iii) Recognition for NDC performing sectors: EPA will be supported to develop and implement an incentive-based mechanism to encourage compliance by NDC sector institutions to the IPCC reporting requirements. This could be in form of 'certificates of recognition' for best performing institutions in the NDC sectors, starting with government institutions, and later including non-state actors if required. Performance criteria could be linked to the national and international data collection, processing and reporting requirements, and the activity upscaled to include other partners such as LISGIS, FDA and international organizations. The NDC sectoral Hubs shall take the lead in the planning and execution of the performance recognition activity.

93. Component 2: Provide direct technical support to harmonize land use, agriculture, energy, transport and waste sectors data collection and reporting through training and assistance

94. Trainings conducted on MRVs, GHG data processing and transmission in Liberia focused mainly on domestic reporting requirements, and limited to sectoral interventions. No adequate attention has been given to the harmonization of the data and reporting to respond to international climate change reporting requirements. This project will provide technical support and training to harmonize GHG data collection and reporting for the sectors of land use, agriculture, energy, transport and waste sectors. Protocols and processes for measuring all GHG information and results generated from each sector will be developed, and capacity improved for staff in NDC sector institutions to measure and report GHG emissions. The REDD+ initiative in Liberia is currently not referenced under the NDC sectors. With this project, the REDD+ initiative will be reviewed and integrated into the NDC system for harmonized tracking and reporting across Liberia's high emitting sectors. It is also important for Liberia to analyze the best options for tracking its NDC that align with national circumstances, while ensuring that these are consistent with the UNFCCC principles for inclusiveness and transparency. The project will identify most innovative and practical methods to track and report GHG emissions within each sector, and develop NDC implementation plans. Trainings will be conducted for the NDC sector institutions and other key stakeholders on tracking and reporting on emissions within their sectors, and implementation of the NDC implementation plans.
95. The energy sector in Liberia is the highest contributor of GHG emissions and there is an urgent need for a strong process and capacity for tracking progress towards nationally determined mitigation goals. Tracking progress towards energy sector decarbonization is complex and requires a broader set of measurements. The project will build capacity in Liberia to ensure that the country can accurately measure and report on its energy sector contributions and implementation of the National Energy Policy.
96. ***Outcome 2.1 Capacity to measure and report land use, agriculture, energy, transport and waste sectors NDC improved***

Some staff have in the past received technical training in MRV, and processing and transmission based on domestic MRV and compliance to the IPCC and national requirements. Currently, there are some capacity building projects related to MRV processes that are also being implemented. The project will build on these and outputs registered under Outcome 1.1, particularly the field-tested data protocols developed for each of the NDC sectors, and technical capacity built to provide for the data requirements for the NDC system. The project seeks to provide a standardized approach for measurement and reporting information on emissions across the NDC sectors. Capacity assessments will be conducted to establish training needs for the NDC sectors to meet mitigation targets, and training conducted on tracking, measuring and reporting emissions. The project will also support the preparation of a mechanism to integrate the REDD+ MRV system under the Liberia Forest Sector Project into the NDC system managed by EPA. The energy sector will benefit from long term technical assistance to operationalize and implement the National Energy Policy, and build capacity to meet the sector's mitigation targets.

Targets for Outcome 2.1

- At least one protocol for measuring results from each of the NDC sectors developed;
- At least 200 stakeholders trained and involved in implementing NDC plans.

Outcome 2.1 will be delivered by the following outputs:

97. Output 2.1.1 Processes and protocols for measuring results related to the land use, agriculture, energy, transport and waste sectors established.

The proposed project will assist in the development of standardized processes and protocols for the measurement and reporting results related to the NDC sectors. Results from the forestry sector currently not integrated in the NDC system will also be captured and included for harmonized measurement and reporting on Liberia's emissions. The proposed project will also provide direct technical assistance to help Liberia meet the emissions reduction and efficiency goals established in its National Energy Policy (2009).

This output will be delivered by the following activities:

- (i) Review the REDD+ MRV system: A review will be conducted of the MRV system under the Liberia Forest Sector project for gaps in the measurement and reporting on land sector and coastal ecosystem activities. The activity will be undertaken by an expert.
- (ii) Standardized Protocols will be developed for the measurement and harmonized reporting on emissions across the NDC sectors. An expert will be engaged to facilitate the technical discussions and development of the protocols, including for activities in the land sector and coastal ecosystems.
- (iii) Mechanisms developed for integration of REDD+ MRV system into the NDC system. This process will be informed by the results at 'i' above, and an expert will steer the process in consultation with FDA and the REDD+ technical institutions (e.g REDD+ Technical Working Group).
- (iv) Capacity assessment and training for the NDC sectors to meet mitigation targets, and preparation of a training package to address the identified technical needs and gaps. Core staff at EPA and NDC sector institutions (through the sectoral hubs created under Output 1.2.2) will be trained on the measurement processes and tools for GHG data collection, processing and reporting, and meeting mitigation targets.
- (v) Technical assistance to the energy sector: The project will identify a reliable partner organization with strong capacity on methodologies and application of IPCC guidance to support the Government of Liberia to build MRV capacity in the energy sector and ensure that Liberia can reach its' mitigation targets. A consultant will provide technical assistance over a period of one year, with an average of 10 days' monthly input.

98. Output 2.1.2: Implementation plans developed and at least 200 stakeholders trained to incorporate land use, agriculture, energy, transport and waste sectors into the NDC

99. The project seeks to advance the development, uptake and upscale of innovative solutions for tracking and reduction of emissions for the NDC sectors. Potential emission reduction activities will be identified and NDC implementation plans developed with the support of an expert. The NDC stakeholders will be trained on the application and implementation of the plans, and future financing opportunities also explored in cooperation with the Ministry of Finance (MFDP) and development partners. The project will target the following stakeholders for the training on the NDC Implementation Plans; Five NDC sector institutions (*20 persons per sector*), Four technical institutions (FDA, LEITI, LISGIS and EPA), with 15 persons per institution, Three academic institutions (UoL, FTI and Cuttington University) with 5 persons in each, and non-state actors represented through

their umbrella organizations such the NGO Coalition for the CSOs in environment (15 persons), and Liberia Business Association (LIBA) for private sector (10 persons).

This output will be delivered by the following activities:

- (i)* *Innovative and practical strategies for emissions reduction* will be identified for each of the NDC sectors, with due consideration of the gender dimensions, and in consultation with key stakeholders.
- (ii)* *Preparation of implementation plans* to advance the development, uptake and upscale of the innovation strategies. An expert will assist in the preparation of the implementation plans and related training activities.
- (iii)* *Training on implementation plans*: A cross section of stakeholders in the NDC sectors, and particularly government experts, academia, civil society and private sector will be trained on the operationalization of the plans and to incorporate the plans into the NDC.

100.Component 3: Integrated Platform for Data Sharing and Policy Making

101.The Ministry of Finance and Development Planning is responsible for tracking and reporting on performance of all national-level activities that contribute to achieving the Low Carbon Development Strategy and Pro-Poor Agenda/Agenda for Transformation. There is the growing need to establish a process through which institutions working on NDC sectors can share and link their institutional online data systems to the centralized NDC system housed at the EPA. This project will develop a procedure that allows each sector to integrate and share data with the centralized NDC system developed under Output 1.2.1. GHG inventory data will be aggregated from different sources and included into the national NDC system, to enhance data coordination and reporting. The project will also help strengthen the government’s capacity to report on National GHG inventory data as well as the reporting to the UNFCCC and to national stakeholders. Up-to-date information and data captured by the Ministry of Finance (MFDP) and aggregated in the NDC system will help decision makers to make informed policy decisions on climate change and enhance their MRV capacity. This project will build capacity for relevant stakeholders to archive and analyze the data in the integrated system to inform the formulation of new national policies on climate change.

102.Outcome 3.1 Fully developed data integration and sharing procedure for use by stakeholders as a one stop source of information for transparency reporting.

Currently, for Liberia to meet its international obligation for reporting under the rigorous UNFCCC requirements (e.g. INC, BURs), consultants are mobilized to jointly work with the national staff in each of the sectors, and the GHG data and reports integrated by EPA. There are no clear protocols and procedures for data integration and sharing. This activity shall aim to practically bring together the different elements of the NDC system developed under components 1 and 2, into a fully developed system that responds to both the national and international information and reporting requirements. Under this outcome, the project will support the development of a one stop data integrated process at EPA that aggregates the GHG data and NDC information generated under the project. The GHG inventory and NDC information is intended to inform the national policy making process, and transmission into the CBIT Global Coordination Platform as required under the UNFCCC reporting obligations.

Targets for Outcome 3.1

- At least 5 NDC sector GHG data and MRV information is aggregated and uploaded into the Global CBIT Coordination Platform managed centrally by the EPA;
- At least one Public event organized by the NCCSC to launch the national GHG inventory to the public.

Outcome 3.1 will be delivered by the following outputs:

103. Output 3.1.1 Data for GHG inventory and MRV system aggregated from different sources, and included in the Global CBIT Coordination Platform

104. This activity is premised on the buildup of activities under Component 1 and 2, with outputs that include; GHG data management protocols and methods, an online NDC transparency system, and capacity built to promote and use the NDC system by stakeholders. Through this activity, the project seeks to aggregate the data from the different sources into a format that is compliant with the Global CBIT Coordination Platform. Staff from EPA and NDC sectors will be trained to upload the aggregated data into the Global CBIT Coordination Platform. The project will also equip EPA to effectively manage the NDC system and the transmission of GHG data and information in an efficient and timely manner to respond to the national and international reporting requirements. EPA will also be facilitated and supported to recruit staff teams and the procure the necessary office equipment and furniture to effectively and efficiently deliver the CBIT Liberia project.

This output will be delivered by the following activities:

- (i) Mechanisms for GHG data aggregation: Mechanisms will be developed for the aggregation of GHG data from multiple sectors into a centralized system managed by the EPA and subsequent upload onto the Global CBIT Coordination Platform. An expert will support this process and with the input of EPA and the NDC sectoral hubs, resulting into a draft handbook to be reviewed and validated at a stakeholder workshop.
- (ii) Training workshop on the Global CBIT platform: A technical workshop will be conducted for staff in EPA and each of the NDC sectors on the CBIT coordination platform and the data aggregation and transmission mechanisms based on the handbook developed at 'i' above.
- (iii) Technical assistance to input GHG data into the Global CBIT CP: Technical assistance will be provided to EPA and the NDC sectors, to practically upload the aggregated GHG data into the CBIT coordination platform
- (iv) Operationalization of the Project Management Unit: A technical team will be recruited, led by a Project Manager, and will include a Capacity Development Coordinator and a GHG Specialist. The team will be charged with the responsibility for project delivery and the operationalization of the GHGI and MRV system housed at the EPA. The project will support the project management costs including salaries, office equipment and operational costs over the 24 months of the project period. A project communication and knowledge management system will be created to facilitate information flow and exchange with the project partners such as the CBIT Secretariat, Conservation International, and also respond to the information needs presented by the NDC sectoral technical teams and the GHG technical platform.

105. Output 3.1.2 National inventory of greenhouse gas emissions established and made publically available

Currently, Liberia does not have a GHG Inventory system in place even when a national inventory report was included as part of the submissions of the Initial National Communication Report. The project will support Liberia to meet its obligations to prepare and submit an annual national greenhouse gas (GHG) inventory covering anthropogenic emissions by sources and removals by sink to UNFCCC. This project will also provide assistance to national institutions in quantifying and reporting impact of policy measures. Specific policies and strategies will be developed to address quantifications of GHG in terms of emissions and removals across the NDC sectors and policies and activities that can be pursued with existing national resources and those that are conditional to international support will be identified. The GHG Inventory system will be established at EPA. The National Climate Change Steering Committee and Climate Change Unit of the Environmental Protection Agency will provide the platform through which data and information gained by the enhanced MRV capacity will be used to influence policy and decision-making processes, while making it easier to report national GHG inventory information to the UNFCCC.

This output will be delivered by the following activities:

- (i) Technical Assistance to establish a GHGI system at EPA:* Building on the NDC online system and related sectoral data collection and transmission systems, a national GHGI system will be established and housed at EPA. An expert shall be contracted to provide technical support to EPA to set up and operationalize the GHGI.
- (ii) Assistance to NDC sector institutions to quantify and report policy results/impacts:* The NDC sector institutions will be assisted to quantify and report impact of policy measures using data and information in the NDC online system, the GHGI, and the Global CBIT Coordination Platform. Policy briefs will be prepared and information materials on NDC implementation and transparency requirements produced. Stakeholder awareness sessions will be organized to disseminate the policy information produced by the sectors.
- (iii) Policy training for NCCSC and EPA:* Two training workshops will be organized for the NCCSC and EPA to translate the GHG data and MRV outputs into policy options, inform policy processes and improve implementation of NDC plans. The training will also cover the identification of policies that can be implemented and the appropriate financing, and effective means for dissemination of policy outcomes from GHG activities and execution of public awareness activities.
- (iv) National conference on GHGI and MRV systems:* A public event aimed at sharing and dissemination of data and information to influence policy and decision-making processes will be organized by the NCCSC.

B. Associated Baseline Projects

106. For this project to be cost-effective and successful, concerted efforts will be taken to leverage the ongoing projects.

Table 2: Summary of Associated Baseline Projects

Project/ Initiative	Thematic focus	Budget Amount/ Source	Implementing Agency (ies)	Implementation Status	Number of people trained	Skills relevant to MRV
Liberian Extractive Industries Transparency Initiative (LEITI) covers extractive industries and forestry sectors Initiative.	Support to government to implement the transparency and accountability Article 4(b) of the LEITI Act of 2009. Involves tracking certified wood, wood fiber or non-wood forest products, research, verification and publication of production activities of their Clients to improve transparency.	World Bank, UKAid, USAID, UNDP, AfDB, IMF, GIZ, GoL	National Bureau of Concessions (NBC)	Ongoing	Multiple sector staff trained	Revised approved LEITI reporting template Transparency in the extractive industry sector
Preparation of Biennial Update Report (BUR) to the UNFCCC Oct 2017 – Sept 2019 (24mths)	Prepare and Submit the Republic of Liberia's 1 st Biennial Update Report (BUR1)	US\$342,000 GEF (93%) US\$25,000 (7%) GoL in-kind contribution	EPA, Consultants	Ongoing	25 persons (23male, 2 female)	GHG Inventory
INC	Emissions	GEF	EPA	Completed	na	Using 2006 IPCC guidelines for reporting based on tier 1
Status of Environment Report (SoER)	Status of environment report	World Bank	EPA	Ongoing	na	Skills for establishing default factors
The Liberia Renewable Energy Access Project (LIRENAP) Jan 2016 - June 2021	Objective is to increase access to electricity and to foster the use of renewable energy sources Components: (i) Decentralized electrification with hydropower and Diesel in Lofa County (ii) Technical assistance to strengthen rural electrification institutions and regulation (iii) Market development of stand-alone solar systems	US\$27 million Investment World Bank (Grant of US\$25 million (SREP), and IDA credit of US\$2 million to RREA)	RREA	Ongoing	4 persons	Capacity building in using different renewable energy technologies Tracking avoided emissions
Liberia Forest Sector Project (LFSP)	Based on GoL and Government of Norway Cooperation Agreement (2014) on REDD+ and to develop Liberia's agricultural sector Funding to Liberia's REDD+ efforts if verifiable deliverables for REDD+ are achieved.	Up to US\$150 million available	Lead - FDA Others; EPA, LISGIS, LLA and MoA	Ongoing	40 persons from multiple sectors (2 from EPA)	Forest sector monitoring; MRV skills and ToT; Forest inventory; GHG Emissions; Forest Mapping

Project/ Initiative	Thematic focus	Budget Amount/ Source	Implement ing Agency (ies)	Implement ation Status	Number of people trained	Skills relevant to MRV
<i>LFSP Con't</i>						
	<p>The first phases of funding towards preparation and demonstration of REDD+ interventions. Components include to establish a forest monitoring system, build institutional capacity and implement an MRV system to track the country's forest cover and progress made in the reduction or removal of GHG emissions over time.</p> <p>The final phase, from 2020 onwards, is for payments for verified emission reductions. The payments will reward actions that result in a reduction of emissions from deforestation and/or forest degradation, and support Liberia's green economic growth.</p>	US\$37.5 million Government of Norway, WB and GoL				
Forest Carbon Partnership Facility (FCPF)	Environmental Safeguards Information System	World Bank (WB)	CI and EPA FDA	Ongoing	120 persons from multiple agencies	Safeguards Information System (SIS)
	REDD+ Readiness	US\$8.5 million WB	MDPP, LTS, Tetra SAC, Winrock	Ongoing	Staff from different agencies trained	Skills in regulatory and institutional arrangements for REDD implementation
6 th ESIA Training	Environment and Social Impact Assessment (ESIA)	EPA	EPA	Completed	75 persons	Conducting ESIA
Household Income and Expenditure Survey (HIES)	Data collection and management	USAID	LISGIS	Completed	67 persons	Training on GIS
Whein Town Landfill Recovery project (CDM project) 2010	Mitigation of GHG from the waste sector. Expected to mitigate 936,353tCO ₂ e over a period of 10 years	WB	MLME	Ongoing	na	Tracking avoided emissions through improved waste management
Pilot - Natural Capital Accounting Project	Mapping land cover, mangrove and accounting for ecosystem services: 1) To map Liberia's natural capital (<i>based on existing land cover and mangrove ecosystem maps</i>); 2) a set of pilot accounts (<i>ecosystem extent, ecosystem condition, accounting for one or two key ecosystem services</i>)	US\$4.43 million	CI and EPA	About to begin	Still at project design stage	Not yet clear

Project/ Initiative	Thematic focus	Budget Amount/ Source	Implement ing Agency (ies)	Implement ation Status	Number of people trained	Skills relevant to MRV
“Capacity Building for Environmental Data Sharing and Reporting in Support of a Shared Environmental Information System [SEIS]”	To build the capacity of countries for data and knowledge sharing by Ministries and other relevant agencies at national level to support state of environment reporting and other reporting processes, as well as develop and implement a shared environmental information system (SEIS).	UNEP and EC US\$16,000	EPA	Ongoing	Staff from numerous institutions trained	Identification of data gaps Forest monitoring
African Forest Forum (AFF)	Carbon footprint training	Not known	FDA	Completed in 2016	More than 30 persons from public sector and CSOs	Carbon footprinting
Reporting for Results Based REDD+ Actions Project on the preparation of the GHG inventory in the AFOLU sector	Aims to build in-country capacity to prepare a national GHG inventory for emissions and removals related to land use, land use change and forestry (LULUCF).	Coalition for Rainforest Nations and EPA	FDA and EPA	Conducted a needs and risks assessment	Not started	MRV
ECOWAS Centre for Renewable Energy and Energy Efficiency MRV system setup project	Seek to prepare the ground for a development and submission of standardized baselines for Liberia, particularly in the energy sector, and to provide advice and guidance on the methodological and procedural aspects of the development of CDM. Other areas of focus; MRV concept and the UNFCCC reporting requirements; - Establish a solid and sustainable institutional arrangements for MRV; - Road-testing processes for data collection, processing, compilation and reporting in specific sectors, as component of a broader national MRV system.	Not known	EPA	Ongoing	na	MRV
National Adaptation Programme of Action (NAPA) pilot projects:						
“Coastal Defence Project and Climate Information and Early Warning Systems project”	Protection of biodiversity and Conservation of wildlife	US\$3.3 million UNDP, GEF	EPA	Completed	18 persons	Training on data collection

Project/ Initiative	Thematic focus	Budget Amount/ Source	Implement ing Agency (ies)	Implement ation Status	Number of people trained	Skills relevant to MRV
“Enhancing Resilience to CC by Mainstreaming Adaptation Concerns into Agriculture Sector Development in Liberia”	Farmers, including women organized in Farmer Field Schools (FFS) and exposed to adaptation innovations (e.g. Water management/water control practices for the lowlands, use of climate resistant crop varieties, ISFM and IPM)	US\$2.6million	Ministry of Agriculture	Completed	na	Assessing mitigation co-benefits
Rice production project	The project focused on lowland rice cultivation; through rehabilitation of irrigation infrastructure for eight swamps, and introduction of new short-duration, high yielding NERICA (New Rice for Africa) varieties of rice.		Ministry of Agriculture	Ended 2016	na	Skills in computing avoided GHG emissions due to wetland rice expansion
Smallholder Agricultural Productivity Enhancement & Commercialization Project	Introducing climate smart agriculture	US\$3m	Ministry of Agriculture	Ended	na	Assessing mitigation co-benefits
The Climate Information for Resilient Development/ Early Warning System (CIRDev/EWS) Project.	Meteorology and climatology	UNDP	Ministry of Transport (MoT)	Ongoing	27 persons trained	Meteorology, climatology, data processing
Monitoring climate information and services to enhance adaptation in climate change	Monitoring climate information and services	US\$7million	MoA	Started in 2014	na	Database management
Liberia Energy Efficiency and Access Project (LEEAP)	Improved access to reliable and cost effective electricity services for households and public institutions in the priority corridors in Liberia. Expand the service coverage of electricity sub-sector to meet Pro-poor Agenda/ AfT 2030 of 30% electrification rate in rural area, and 70% electrification rate in Great Monrovia and rural South East region, BOMI regions.	Africa Development Bank, GEF, EC & GoL. UAC 31,401,648 US\$ 48,358,538	Liberia Electricity Corporation (LEC)	Start date 2017	na	Skills in computing avoided GHG emissions due to service expansion

C. Incremental Cost Reasoning

107. The newly-elected government has committed itself to a pro-poor agenda that focuses on improving the lives of the poor and most vulnerable, helping to build resilience against climate-change induced disasters, and mitigating risks to natural hazards. The efforts will build on on-going climate change actions as articulated in the national priorities, plans, policy and legal frameworks. This project will add value to the on-going efforts by strengthening the capacity of key institutions in implementing the NDC transparency system to meet the country's Nationally Determined Contributions to the Paris Agreement. Currently, the Climate change activities to plan, support policy and budgeting frameworks, and prepare vulnerable sectors to mitigate against the negative impacts of climate change and reduce their GHG emissions are supported through state contributions, development partners and the emerging climate funding.
108. There are dedicated funds from bilateral and multilateral sources to help Liberia meet its obligations for international environmental conventions and agreements. The multilateral institutions through which funds are channeled include the Global Environment Facility (GEF).
109. The proposed project builds on the past work aimed at addressing the gap of lack of a comprehensive national mechanism to measure and track GHG emissions. In spite of the aforementioned baseline interventions, the GHG emissions data quality is still largely low, unreliable, and the reporting is project based. This is partly attributed to the low institutional and human resource capacity. Of all the projects funded under GEF, none is directly involved in strengthening capacity towards improved transparency with GHG reporting. Very little has so far been dedicated to improving reporting on climate change in general, and this is one of the reasons for lack of transparency in Liberia's reporting. GEF funding has largely supported biodiversity, climate change, and land degradation.
110. This CBIT project will build on the baseline to undertake activities that will support improvement of national capacities for measuring and reporting the GHG emissions. The additional funds will improve the quality and frequency of reporting.

D. Global Environmental Benefits

111. The global environmental benefits of this CBIT project will accrue through strengthening of the capacity of Liberian institutions to implement the full range of regional, national and sub-national policies, plans, legal, and institutional frameworks to meet its obligations under the Paris Agreement. The broader benefits of enhanced institutional and technical capacity include maintenance of biodiversity, reduction of land degradation, and protection of transboundary water systems, resulting in both the direct and indirect reduction of GHG emissions, strengthened water-food-ecosystems security and protected surface and groundwater. The government of Liberia has committed itself to a Pro-Poor development agenda along a transformational shift towards a low-emission and resilient development path of targeting 250 million tons of CO₂e mitigated (include both direct and indirect).
112. The global environmental benefits will be delivered by supporting the Government of Liberia to implement and report on commitments made in its NDC. Liberia's NDC identifies four mitigation scenarios which, combined, have the potential to reduce GHG emissions by 15% (797,000 tCO₂e) by 2030.

D. Socio-Economic Benefits

113. The project is bound to generate a range of human wellbeing benefits for the people of Liberia. Building human capacities through training and technical support to identify, respond and manage the current and future threats of climate change is a valuable contribution to the future of the Liberia. Improvements in data collection, monitoring and analysis will support policy decisions and implementation, and the prediction of weather related events and impacts of climate change. GHG data and information generated will help government agencies to design appropriate measures to mitigate and adapt to climate change. This early intervention will help make communities improve on their resilience and adapt to climate related shocks. In addition, increased reporting and data-based decision-making will enhance climate resilience and coping strategies of the citizens.
114. The project brings to light Liberia’s efforts to reduce emissions and enhance its sinks despite the domestic circumstances and capabilities. It reflects how Liberia will adapt to climate change impacts and what other additional support they need from other countries to adopt low-carbon pathways and to build climate resilience through multi-sectoral interventions. The project will support the identification and further development of future projects to reduce emissions and enhance mitigation efforts.
115. The stakeholder cooperation frameworks provide clarity on who is responsible for measuring, for reporting and for verification at the multi-governance and sectoral levels, and how any barriers to the successful implementation of the NDC and transparency activities can be addressed. Overall coordination in planning and execution of climate change and development projects will greatly improve owing to the multi-sectoral focus of the project. Through the formalization and operationalization of working arrangements between government agencies and with non-state actors, more openness in addressing climate change issues and information exchanges are key ingredients to inclusive and integrated development, as well as gender mainstreaming in Liberia’s transparency agenda.

F. Risk Assessment and Mitigation

Table 3: Risk Assessment and Mitigation Planning

Project Outcome	Risks	Rating (Low, Modest, Substantial, High)	Risk Mitigation Measures
1.3 1.4 3.1	Political commitment without financial resources will slow implementation	Modest	The NCCSC will be strengthened to spearhead institutional coordination and leverage sectoral resources to support GHG activity
1.4 3.1	Low participation of non-state actors such as private sector, CSOs and academia	Modest	Targeted participation in awareness activities will be assured so that non-state actors are informed and encouraged to participate in NDC activities.

			Representation on the NCCSC will be inclusive, and cooperation frameworks will be put in place that encourage the active participation of the non-state actors.
1.3 1.4 2.1 3.1	Limited capacity, commitment and/or governance among Government staff in GHG emission sector institutions	Modest	Starting with the design phase, the project will work in a participatory manner with Government staff in GHG emission sector institutions to discuss and define the cooperation arrangements necessary to implement the NDC and effectively respond to the national and international reporting requirements.

G. Sustainability

116. The stakeholder inclusiveness approach of the project allows for increased participation and accountability of multiple stakeholders in the GHG and MRV sector. Liberia’s GHGI and MRV efforts have been a domain of the public sector, however with the project intervention, the range of stakeholders involved will be scaled up and broadened to also include the non-state actors such as private sector, forest- dependent people, development partners, CSOs, and non-government organizations. Engagement will be particularly in implementation of land-use mitigation actions, decision-making and monitoring, thence ensuring sustainability of the project and policy outcomes.

117. The project seeks to consolidate all GHG and MRV activity under one centralized agency, which is the Climate Change Unit at EPA. This includes the NDC online transparency system, the GHGI, and the Global CBIT Coordination platform activities. Coordinating and managing the GHG and MRV systems created can only be sustained through the focused and strategic systems built at EPA with the project intervention.

118. The proposed project will not solely rely on external consultants/technicians, rather the technicians across the participating sector institutions will be trained and supported to consolidate institutional methodologies and protocols. These protocols will be well documented and readily available for use by new staff. The capacity building exercises will not be standalone activities, training of trainers (TOTs) will ensure that each institution experiences long- term continuity of capacity building activities.

119. The Government through its several initiatives and projects such as the Liberia Forest Sector projects, National Communications, the Reporting for Results-based REDD+ Actions and others has secured investments for long- term sustainability of the system. These projects have resources to support the generation of GHG emission data and establishment of a national data repository which could submit regular data to the central MRV system. The project will therefore strengthen linkages and coordination with these initiatives in order to reinforce the opportunities therein and assure sustainability of the outcomes. The proposed project will work with the Government of Liberia to ensure that funding is available to deepen the positive outcomes and support efforts in the future to incorporate land use, agriculture, energy, transport and waste sectors into the NDCs and to effectively utilize the NDC transparency system to inform policy and development plans.

H. Innovativeness

120. The current GHG reporting system does not integrate data sets from various sources (both internal and external). Through this project, a national and central system for transparent monitoring and accounting for GHG emissions will be created, which will report on different sectors in Liberia. The project will also support the development of institutional capacities, which will strengthen the enabling environment to sustain decentralized implementation of sustainable forest sector management, with the engagement of local communities. As part of the enabling environment, the proposed project will also include in the EPA hosted GHG and MRV system, the implementation of the MRV system under the REDD+ initiative designed to track the country's forest cover and progress made in the reduction or removal of GHG emissions over time. Stakeholders will be trained and empowered to conduct independent monitoring at sector specific levels, and capacity will be built to ensure continued training in the post project period. The independent monitoring process will increase transparency, strengthen data integration approaches and reduce bias at the local level, by combining independent reference data with regional and global datasets. The comprehensive and integrated project is the first of its kind in Liberia and presents a range of environmental and social benefits to the people of Liberia and globally.

I. Replicability and Potential for Scaling Up

121. The increase in emissions from deforestation and degradation is a global problem, and measurement of compliance with the Paris Agreement is a critical need in many African countries including Liberia. The project results and particularly increased technical capacities and the development of a functional online system will provide important information for future projects and UNFCCC reporting. This project will also offer an opportunity to improve existing data protocols required for the implementation of the REDD+ strategy, focusing on investments for early implementation of strategic land use options in targeted landscapes. The engagement of partners with global and regional presence such as Vital Signs will also enhance opportunities for scaling up of these interventions.

J. Consistency with National Priorities, Plans, Policies and Legal Frameworks

122. This project is in line with the Liberian national priorities and plans (e.g. Pro-poor Agenda/Agenda for Transformation), and policies and legal frameworks (e.g. Vision 2030, National Climate change policy) as elaborated in Table 4.

Table 4: Consistency with National Priorities, Plans, and Policies

National Priorities	Project Consistency
Vision 2030	<p>The people of Liberia aspire for 'a harmonious nation united in diversity, democratic and culturally vibrant, innovative, creative, self-reliant and prosperous, amid a beautiful and flourishing environment'. The project shall make a contribution towards two of the vision's tenets;</p> <ol style="list-style-type: none">1. Environment – where the GoL acknowledges the need to urgently put a stop to the environmental depletion and degradation with the vision is to 'reverse that trend and make appropriate investments so as to enhance the quality of the environment and promote its sustainable use for the benefit of present and future generations', and2. Innovation tenet with the vision is to make significant move towards a knowledge-based economy and society, amidst the technological innovation-led globalization. <p>The proposed project will contribute by strengthening human capacities required to address the environment depletion and degradation challenges, and enhance access to</p>

	technological solutions to measure and report on climate change to inform policy making and reporting obligations.
Pro-poor Agenda/Agenda for Transformation (Liberia's PRSP)	Chapter 2 in Liberia's Pro-poor Agenda/Agenda for Transformation highlights the need to create transparent, accountable and responsive public institutions that contribute to economic and social development as well as inclusive and participatory governance systems. The proposed project will contribute to the development of transparent national institutions in Liberia.
The Economic Stabilization And Recovery Plan 2015	The plan defines the strategic interventions that will stabilize and spur rapid social and economic recovery while at the same time help to improve the economy's resilience to any future shocks. Providing support for the poor and other at-risk groups to strengthen resilience and reduce vulnerability is one of the objectives and the agriculture sector is identified as an entry point through exports diversification and industrialization for potential value chains such as rubber, oil palm, cocoa, fish, and cassava. The proposed project will contribute by strengthening capacities to implement adaptation projects in the agriculture sector and enhance visibility of the efforts to increase resilience to shocks including climate change effects.
National Low Carbon Development Strategy	Although still under development provides the road map towards carbon neutrality by 2050
National Climate Change Policy	A National Climate Change Policy is being developed to ensure that a qualitative, effective and coherent climate change adaptation process takes place, and to serve as the pillar for comprehensive sectoral strategies and action plans. This policy will enable better coordination of climate change work in the country and provides opportunities for cooperation and collaboration between the government and people of Liberia as well as with development partners, international and regional institutions, intergovernmental organizations and consultants. The proposed project will inform the development of Liberia's National Climate Change Policy.
Liberia's Nationally Determined Contribution	Liberia's NDC states that further support will be needed to ensure that its MRV system is adequately able to track progress toward the implementation of the NDC, including non-GHG co-benefits. Liberia recognizes capacity building efforts in setting up the system of Monitoring, Reporting and Verification (MRV) as a fundamental pillar of its NDC for the purpose of transparency and accountability. The MRV system for the NDC will build upon existing structures for monitoring and evaluation (M&E) and inter-sectoral coordination. The development of a robust transparency framework which measures and tracks mitigation and adaptation efforts will enable Liberia to expand the activities through which it can meet its mitigation and adaptation targets.
Liberia's 1 st National Communication	Liberia's Initial National Communication emphasizes the need for massive training and capacity-building at all levels to reduce uncertainties in the statistics and develop national and/or sector specific emission factors with the ultimate objective of improving and updating the national GHG inventory. The National Communication identified capacity building needs to strengthen further the reporting and monitoring national GHG data gathered through different sector and the implementation of standardized technical guidelines and regulations, codes of practice for accountability and transparency.
National Adaptation Plan (NAP) Roadmap	Liberia developed its National Adaptation Programme of Action in 2008. A National Adaptation Plan (NAP) is currently being developed as a means of identifying Liberia's medium and long-term adaptation needs. The proposed project should help the GoL to identify additional activities for inclusion in the NAP.
Liberia's Low Emissions Development Strategies	The study to identify the capacity barriers, gaps and needs for the successful development of LEDS, NAMAS and MRV activities for mitigation. It also helps provide

(LEDS), Nationally Appropriate Mitigation Actions (NAMAs) and Measuring, Reporting and Verification System (MRVs)	information on what barriers need to be overcome as Liberia embarks on the process of pursuing a more sustainable development path that is less carbon intensive. The study highlights several capacity building gaps including strengthening of national capacities at all levels, and on issues related to the formulation and implementation of mitigation and the development of low carbon strategies; lack of monitoring systems and strategies that includes data collection, monitoring and the strengthening of the different GHG sectors; lack of standardization of MRV systems in the country; and poor frequency of reporting, data and information utilization.
National REDD+ Strategy	The national REDD+ strategy provides the basis for the development of a set of policies and programs to reduce emissions from deforestation and forest degradation, and to enhance carbon uptake from other REDD+ activities. The proposed project will produce a number of outputs that will inform the implementation of a National REDD+ strategy in Liberia.
The Liberia Extractive Industries Transparency Initiative (LEITI) Act	This Act was passed in 2009 and focuses on improving transparency and promoting sustainable use of revenues generated from natural resources. Under this process, all revenues paid by operators and received by government are routinely published and reconciled. LEITI is currently carrying out an audit of the processes to allocate/award concession agreements to ensure that these processes are in full compliance with Liberian legislation.
The Freedom of Information Act was ratified in 2010	This Act sets out requirements for all government agencies to improve accessibility of information for the public, both for information that should be pro-actively put into the public domain, and by setting out a process for handling and responding to information requests
Liberia Agricultural Sector Investment Plan (LASIP II) 2018-2022 (draft)	The plan is still under preparation and incorporates climate change considerations into all agricultural activities with the aim of identifying and mitigating the positive impacts of climate change.
National Integrated Water Resources Management Policy	The policy addresses water for domestic use and production, industry, and maintenance of integrated watershed systems. Enhanced institutional capacities for monitoring and assessment of use will help in capturing avoided emissions and reduce pressure on agricultural land for food production.
Voluntary Partnership Agreement (VPA)	This agreement states that a system for verifying the legality of all of Liberia's timber will be established and any timber that fails to meet the standard will not be eligible for export or trade. The legal standard includes verification that the operator has complied with their obligations under the (National Forestry Reform Law) NFRL and LEITI
The National Strategy for decentralization and Local Governance	This process is being coordinated by the Governance Commission, which provides support and training for Sector Decentralization Analysts / Consultants embedded within different line Ministries and Agencies. Implementation is ultimately the responsibility of these line Ministries and Agencies, and progress has been uneven.
Liberia's climate change Gender Action Plan (ccGAP)	Objective is to ensure that gender equality is mainstreamed into climate change policies, programs, and interventions.

K. Consistency with GEF Focal Area and/or Fund(s) Strategies

123. Contribute to the achievement of targets laid out in partner countries' Nationally Determined Contributions (NDC) and the Sustainable Development Goals (SDG), SDG-13 "Climate Action" by strengthening the capacity of institutions in Liberia to comply with the Transparency Requirements of the Paris Agreement.

L. Linkages with other GEF Projects and Relevant Initiatives

124. The proposed project will leverage ongoing efforts under relevant projects as described in Table 5.

Table 5: Other Relevant Projects and Initiatives

GEF Projects Other Projects/Initiatives	Linkages and Coordination
Liberia Forest Sector Project	<p>Liberia has plans to develop a REDD+ MRV system under the Liberia Forest Sector project. The MRV system will need to comply with international best practice guidelines for operational data collection, synthesis, analysis, and reporting, allowing for the monitoring, estimation, and accounting of carbon emissions and removals of carbon in comparison to the projected reference scenario currently developed.</p> <p>There is a need to link this forest sector GHG tracking system with the developed national systems and processes for measuring and reporting greenhouse gas (GHG) emissions house at the Environmental Protection Agency to ensure transparency in tracking and reporting progress on Liberia’s NDC. Explicitly linking actions in the NDC to LULUCF benefits could present an opportunity for increased financial resources via REDD+ and incentivize maintenance or enhancement of the sink and reduction of gross LULUCF emissions.</p> <p>The REDD+ MRV should provide some results but won’t account for all activities in the land sector and coastal ecosystem. The project will address gaps for measuring and reporting on land sector and coastal ecosystem activities. The project will also ensure that results from other monitoring systems such as REDD+ MRV contributions can be incorporated into reporting on Liberia’s NDC.</p>
Natural Capital Accounting project (NCAP)	<p>The NCAP is being implemented by CI-Liberia and EPA to 1) a map of Liberia’s natural capital (based on existing land cover and mangrove ecosystem maps), 2) a set of pilot accounts (ecosystem extent, ecosystem condition, accounting for one or two key ecosystem services). This CBIT project will build upon the ongoing efforts to integrate the data on the online transparency system.</p>
Capacity Building for Environmental Data Sharing and Reporting in Support of a Shared Environmental Information System [SEIS]	<p>The project intends to build capacity for data sharing by Ministries and other relevant agencies to support state of environment reporting and other reporting processes. The project will be used as a building block for Component 3 of aggregation of data sets and data sharing mechanisms.</p>
Reporting for Results Based REDD+ Actions Project on the preparation of the GHG inventory in the AFOLU sector	<p>This project aims to build in-country capacity to prepare a national GHG inventory for emissions and removals related to land use, land use change and forestry (LULUCF). The CBIT project will coordinate with the EPA to ensure efficient use of resources and avoid duplication of efforts.</p>
ECOWAS Centre for Renewable Energy and Energy Efficiency MRV system setup project	<p>The project seeks to provide advice and guidance on the methodological and procedural aspects of the development of CDM standardized baselines in the energy sector and also build institutional arrangements for MRV. The CBIT project will coordinate with this initiative to ensure synergies and avoid duplication of efforts particularly for components 1 & 2.</p>
Liberian Extractive Industries Transparency Initiative (LEITI)	<p>A multi-donor initiative of Government. Involves tracking certified wood, wood fiber or non-wood forest products, research, verification and publication of production activities of their clients to improve transparency. The CBIT project</p>

	shall engage with the LEITI initiative to enhance synergies in areas of data collection and reporting, as well as information and knowledge sharing and exchange.
GHG Reporting projects (e.g. Preparation of Biennial Update Report (BUR) - Oct 2017 to Sept 2019 (24mths), the INC, The Status of Environment Report)	The CBIT project under components 2 and 3 shall aim to strengthen capacities for GHG data collection, processing and reporting to respond to the national and international reporting requirements.

M. Consistency and Alignment with CI Institutional Priorities

125. Among CI's institutional priorities are climate change mitigation and adaptation, core elements of the GHG and MRV system being developed for Liberia through the CBIT project. The project also fully aligns with the CI's country engagement approach to work directly with national governments to identify and design projects, and advise on project implementation by ensuring that highest technical and financial standards and goals are met. In May 2018 CI Liberia jointly with the GoL, launch Liberia's first conservation fund – the "Liberia Conservation Fund (LCF) aimed at providing sustainable, long term financing for Liberia's protected areas². The proposed project is also designed to respond to CI-GEF environmental and social safeguards and with the required plans developed (Stakeholder Engagement Plan, Gender Mainstreaming Plan, and the Accountability and Grievance Mechanism), and whose implementation will assure compliance to CI institutional priorities during project implementation. Project monitoring tools such as the Results Based Management (RBM) and Project Monitoring Plan will be used, while project funds management will be guided by CI's finance and accounting policies and managed by a Finance Manager hosted at the CI-Liberia offices.

N. Communications and Knowledge Management

126. The project will use multiple communication platforms to respond to the various information and knowledge needs expressed by the different stakeholders. Direct and indirect communication mediums have been incorporated across the different components, and include materials and publication production, and implementation of detailed communication strategies to be developed under the project. The project will also share information with other countries through the CBIT Global Coordination Platform. Table 6 presents a summary of the communication and knowledge management activities across the different components.

Table 6. Communication and Knowledge Management activities by project component

<i>Component/Output</i>	<i>Communication products</i>	<i>Target audience</i>
Component 1	<p>Outcome 1.1: Materials/briefs disseminated at workshops, Banners displayed at workshops, and production of publications e.g. protocols and technical guidelines.</p> <p>Outcome 1.3: Materials disseminated at training workshops and through NDC sector institutions and partner institutions e.g. University of Liberia</p> <p>Outcome 1.4: Materials disseminated at stakeholder sensitization workshops, and communication strategy</p>	<p>Project beneficiaries including NDC sector institutions</p> <p>Project partners e.g. government institutions involved in GHG data collection and processing</p> <p>Policy makers</p>

² <https://www.liberianobserver.com/news/conservation-international-commits-us1m-for-liberia-protected-areas/>

	and products aimed at enhancing transparency awareness	
Component 2	Outcome 2.1: Materials disseminated at training workshops and partners reports (e.g. energy sector international TA partner)	NDC sector institutions and Global audiences
Component 3:	Outcome 3.1 Training workshops, national conference and project communication strategy and products e.g. website, newsletters, etc. The CBIT Global Coordination Platform	National and international stakeholders, and project partners. Other countries also using the platform

O. Lessons Learned During the PPG Phase and from other Relevant GEF Projects

127. During implementation of the Liberia PPG phase a lot of engagements with project partners and stakeholders was registered and generated many lessons. Physical interactions in form of face to face meetings, and stakeholder workshops were conducted, and regular communication registered through electronic mediums such as telephone, skype, and email communications. A summary of the lessons learned as a result of the engagements is provided here below as Table 7;

Table 7: Lessons learned during PPG Phase

<i>Thematic area</i>	<i>Lesson learned</i>
Policy	<ul style="list-style-type: none"> • Global problems require national (GoL) and international (CI) cooperation to address them; • Liberia has clearly taken significant strides in responding to the needs for improved transparency in terms of creating an enabling environment; • Liberia’s active fight against climate change engenders a strategy, modalities for multi-sector partnerships including non-state actors (e.g. private sector).
Technical	<ul style="list-style-type: none"> • Building transparency into Liberia’s NDC implementation is still very nascent and deserves support and assistance; • Several staff of EPA and other line ministries have been trained in aspects relevant to improved transparency on which this project should build; • There are ongoing capacity building efforts by other projects which this project should leverage; • Equipping staff of EPA and other NDC sectors with skills (e.g. monitoring, assemblage of data, analysis, transmission of information, reporting) is critically needed; • Information relevant to national and international reporting (MRV system) is very scanty and scattered hence the urgent need to establish an integrated platform for sharing and learning by the stakeholders. • Support is necessary to develop institutional capacity for developing protocols and methodologies that that meet IPCC standards; • Training staff of NDC sectors in collection, processing and reporting GHG emissions and removals is essential.

Institutional	<ul style="list-style-type: none"> • The host institution of the NDC system was already known among the stakeholders as EPA; • Capacity building of national institutions-EPA, UoL, NCCSC, LISGIS, FDA etc. is necessary; • A framework of cooperation is necessary for the different agencies relevant to the NDC system.
Strategic partnerships-Non state actors	<ul style="list-style-type: none"> • The private sector of Liberia is weak and efforts should be made to bring them aboard the climate change action; • Many climate change actors-stakeholders of the CBIT are not aware of the opportunities for fully implementing the NDC system and there is need to explore ways and means to create awareness during implementation; • Participation of local communities is valuable to sustainable development of NDC system as the forest degradation is picking up and may soon grow exponentially; • Support is needed in mobilizing financial resources to sustainably operate the NDC system for improved transparency.

SECTION 4: COMPLIANCE WITH CI-GEF PROJECT AGENCY'S ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

A. Safeguards Screening Results and Project Categorization

128. The safeguard screening process was initiated by CI on approval of the PIF and the safeguards screening form was prepared and guided by the CI-GEF Environmental and Social Management Framework and the Safeguards Templates. Only three safeguards were identified as being triggered by the project; (i) Stakeholder Engagement (ii) Gender Mainstreaming, and (iii) Accountability and Grievance Mechanisms.

129. The safeguards screening was completed and approved by Ian Kissoon the Safeguards Manager at CI-GEF in December 2017 and below is a summary of the results:

Table 8: Safeguard Screening Results

Policy/Best Practice	Triggered (Yes/No)	Justification
<i>Environmental and Social Impact Assessment Policy</i>	No	No significant adverse environmental and social impacts that are sensitive, diverse, or unprecedented is anticipated
<i>Protection of Natural Habitats Policy</i>	No	The project is not proposing to alter natural habitats
<i>Involuntary Resettlement Policy</i>	No	The project is not proposing involuntary resettlement or restriction of access/use of natural resources.
<i>Indigenous Peoples Policy</i>	No	The project does not plan to work in lands or territories traditionally owned, customarily used, or occupied by indigenous peoples
<i>Pest Management Policy</i>	No	There are no proposed activities related to pest management
<i>Physical Cultural Resources Policy</i>	No	There are no proposed activities related to physical and cultural resources
<i>Stakeholder Engagement</i>	Yes	The project is required to engage stakeholders
<i>Gender mainstreaming</i>	Yes	The project is required to mainstream gender at all levels

Accountability and Grievance Mechanisms	Yes	As a publicly funded GEF project, a Grievance Mechanism is required
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Measures to be taken by the Executing Agency to address safeguard policy issues.

I. Grievance Mechanism

130. To ensure that the project meets CI-GEF Project Agency's "Accountability and Grievance Mechanism Policy #7", the Executing Agency is required to develop an Accountability and Grievance Mechanism that will ensure people affected by the project are able to bring their grievances to the Executing Agency for consideration and redress. The mechanism must be in place before the start of project activities, and also disclosed to all stakeholders in a language, manner and means that best suits the local context.

In addition, the EPA as the Executing Agency will be required to monitor and report on the following minimum accountability and grievance indicators:

1. *Number of conflict and complaint cases reported to the project's Accountability and Grievance Mechanism; and*
2. *Percentage of conflict and complaint cases reported to the project's Accountability and Grievance Mechanism that have been addressed.*

II. Gender Mainstreaming

131. To ensure that the project meets CI-GEF Project Agency's "Gender Mainstreaming Policy #8", the Executing Agency is required to prepare a Gender Mainstreaming Plan.

In addition, the Executing Agency is required to monitor and report on the following minimum gender indicators:

1. *Number of men and women that participated in project activities (e.g. meetings, workshops, consultations);*
2. *Number of men and women that received benefits (e.g. training, employment, income generating activities, access to natural resources, land tenure or resource rights, equipment, leadership roles) from the project; and if relevant*
3. *Number of strategies, plans (e.g. management plans and land use plans) and policies derived from the project that includes gender considerations.*

III. Stakeholder Engagement

132. To ensure that the project meets CI-GEF Project Agency's "Stakeholders' Engagement Policy #9", the Executing Agency is required to develop a Stakeholder Engagement Plan.

In addition, the Executing Agency is required to monitor and report on the following minimum stakeholder engagement indicators:

1. *Number of government agencies, civil society organizations, private sector, Forest Dependent peoples and other stakeholder groups that have been involved in the project implementation phase on an annual basis;*
2. *Number persons (sex disaggregated) that have been involved in project implementation phase (on an annual basis); and*
3. *Number of engagement (e.g. meeting, workshops and consultations) with stakeholders.*

The final project categorization as a result of the safeguard screening process

133. The project triggers three safeguard policies; (i). Stakeholder Engagement, (ii) Gender Mainstreaming, and (iii) Accountability and Grievance Mechanism. The screening results indicate that no indirect and/or long-term impacts due to anticipated future activities are foreseen at this time. The proposed approach of the project is expected to avoid or minimize adverse impacts. As such, no better alternative can be conceived at this time.
134. The project is therefore expected to prepare the following safeguard plans; (i) A Stakeholder Engagement Plan, (ii) A Gender Mainstreaming Plan, and (iii) A Grievance Mechanism as measures to avoid or minimize adverse impacts.

Table 7: Safeguard Categorization

PROJECT CATEGORY	Category A	Category B	Category C
			X
<i>Justification: The proposed project activities are likely to have minimal or no adverse environmental and social impacts.</i>			

B. Compliance with Safeguard Recommendations

135. Guided by the CI-GEF PPG guidelines on stakeholder engagement, the number of women participants in the stakeholder consultation process through the interviews, bilateral meetings and the workshops was monitored. A ratio of 1:18 women to men attendance was registered at the first stakeholder consultation workshop in Monrovia. Significant strides were taken to safeguard against inequitable participation in the 2nd stakeholder consultation workshop. As a result, the ratio of women to men increased to 1:10. This issue was discussed at length during the workshop to understand the root causes of the problem. It was resolved that during the implementation of the project a ratio of 3:10 women to men should be targeted. The ProDoc drafting, makes reference to gender literature including policy documents, strategies and reports that will be relevant during the implementation of the project.
136. **Preparation of the Gender Mainstreaming Plan:** A gender assessment was conducted based on existing literature, and consultations at the stakeholder workshops conducted in Monrovia and the bilateral meetings. The assessment and the stakeholder workshop informed the preparation of the GMP that identifies the gender mainstreaming entry points for the project, and further elaborates these at component, output and activity level. A Gender Action Plan has also been prepared and provides the performance indicators for the project activities, and reporting responsibilities. The gender indicators are also captured in the Project Results Framework.
137. **Preparation of the Stakeholder Engagement Plan:** The identification of stakeholders started right from the start of the PPG phase implementation. In consultation with the EPA and CI, a preliminary stakeholder list was generated and periodically updated to increase numbers and the diversity of the participants. An assessment of the stakeholders was conducted to inform the preparation of the SEP. The information was also used to determine the stakeholder engagement modes for the PPG stage (for example who to participate at the two consultation workshops and the bilateral meetings), and involvement in project implementation. The findings of the stakeholder analysis are presented in the SEP, and their involvement in the project elaborated by component area.

138. Preparation of the Accountability and Grievance Mechanism: Guided by the GEF-CI ESMF, potential grievance areas were identified in the course of PPG implementation, and discussed with the executing partners. A mechanism to continually identify and address possible grievances arising by component area during implementation was developed and is presented as Appendix VI of the ProDoc. Indicators for measure of performance in ensuring accountability to the stakeholders and managing grievances are captured in the Monitoring Plan provided Appendix III.

SECTION 5: IMPLEMENTATION AND EXECUTION ARRANGEMENTS FOR PROJECT MANAGEMENT

B. Execution Arrangements and Partners

139. The Environmental Protection Agency (EPA) is the Designated National Authority (DNA) and climate change focal point to the UNFCCC. EPA houses the Climate Change Unit responsible for leading GHG inventory activities in Liberia and deals with climate change and almost all multilateral environmental agreements and the implementation of the Paris Agreement. The EPA will be the custodian of the developed NDC Online system and the GHGI and will integrate data into subsequent national and international reporting processes. The EPA, under the overall supervision of its Executive Director is the lead Executing Agency for the project, and the host institution for the CBIT Project Management Unit.

140. National Climate Change Steering Committee: The NCCSC is mandated to provide policy oversight and coordinate stakeholder engagement for NDC implementation, making the committee both a benefactor and partner in the project. The project will strengthen the NCCSC through the National Climate Change Unit to fulfill its mandate and to provide the required policy support to EPA for the effective implementation of the project.

141. Conservation International Liberia: CI-Liberia will co-execute the implementation of the project in close collaboration with EPA. CI-Liberia will be represented on the Project Steering Committee by the CI Deputy Country Director. Project finance management is the responsibility of CI Liberia, and a Finance and Operations Manager shall be delegated to manage the project funds through the life of the project. The main responsibilities for the Finance Manager will include, but not limited to;

- Periodic financial reporting
- Procurement of all services, goods, and equipment
- Financial record keeping
- Reporting and disbursements (financial)
- Contractual obligations

142. The Finance and Operations Manager will also provide guidance on CI financial policy and support the PMU and the project grantees (NDC sectoral hubs) towards compliance to the CI policies. CI – Liberia is the main institutional interface for the project with the CI-GEF Agency.

143. Conservation International-GEF (CI-GEF) Agency: The CI-GEF Project Agency will provide project assurance, including supporting project implementation by maintaining oversight of all technical and financial management aspects, and providing other assistance upon request of the Executing Agencies (CI-Liberia and EPA). The CI-GEF Project Agency will also monitor the project's implementation and achievement of the project outputs, ensure the proper use of GEF funds, and review and approve any changes in budgets or work plans. The CI-GEF Project Agency will arbitrate and ensure resolution of any execution conflicts.

144. The Project Steering Committee (PSC): The PSC will comprise of 8-10 institutional representatives from EPA, CI-Liberia, NCCSC, ESWG and NDC sector institutions for land use, agriculture, energy, transport and waste through the sectoral hubs. The National Gender Forum will also be represented on the PSC. The PSC will be responsible for providing strategic direction and oversight and ensure effective implementation of the project. The PSC will ensure all activities are in line with national policies, coordinate the inter-ministerial and inter-institutional support programs, and advise and support the work of the CBIT Project Management Unit. The PSC will meet quarterly to approve yearly work plans and budgets, quarterly technical and financial progress reports, and yearly progress reports. The PSC meetings will be chaired by the Executive Director EPA, and deputized by CI-Liberia, with the Project Manager (Head of PMU) as secretary. The PSC will organize the project inception workshop as part of its first meeting, and coordinate the recruitment for the technical team at the CBIT PMU.

145. CBIT Hubs: The CBIT hubs will be constituted as part of project implementation structure, and considered the sectoral focal points for project implementation. A total of 5 CBIT Hubs will be created for the NDC sectors of agriculture, energy, transport and waste, and land use (currently not NDC listed by Liberia), and led by MoA, MME, MoT, MCC, and FDA respectively. EPA and the CBIT Hubs will work closely with other related technical agencies and projects such as LISGIS and the LEITA to align the project outputs to the national agenda, and support delivery of the project.

Liberia CBIT Project Management Unit (PMU)

146. The Liberia CBIT Project Management Unit (PMU) is the project's management unit and responsible for day-to-day monitoring and reporting on the project. EPA will host the PMU for the duration of the project. The PMU will be responsible for project implementation and management, administration, and performance against set plans and budgets, and reporting. The PMU will also provide any support required by the PSC and the project partners.

The PMU, with support from EPA will be responsible for:

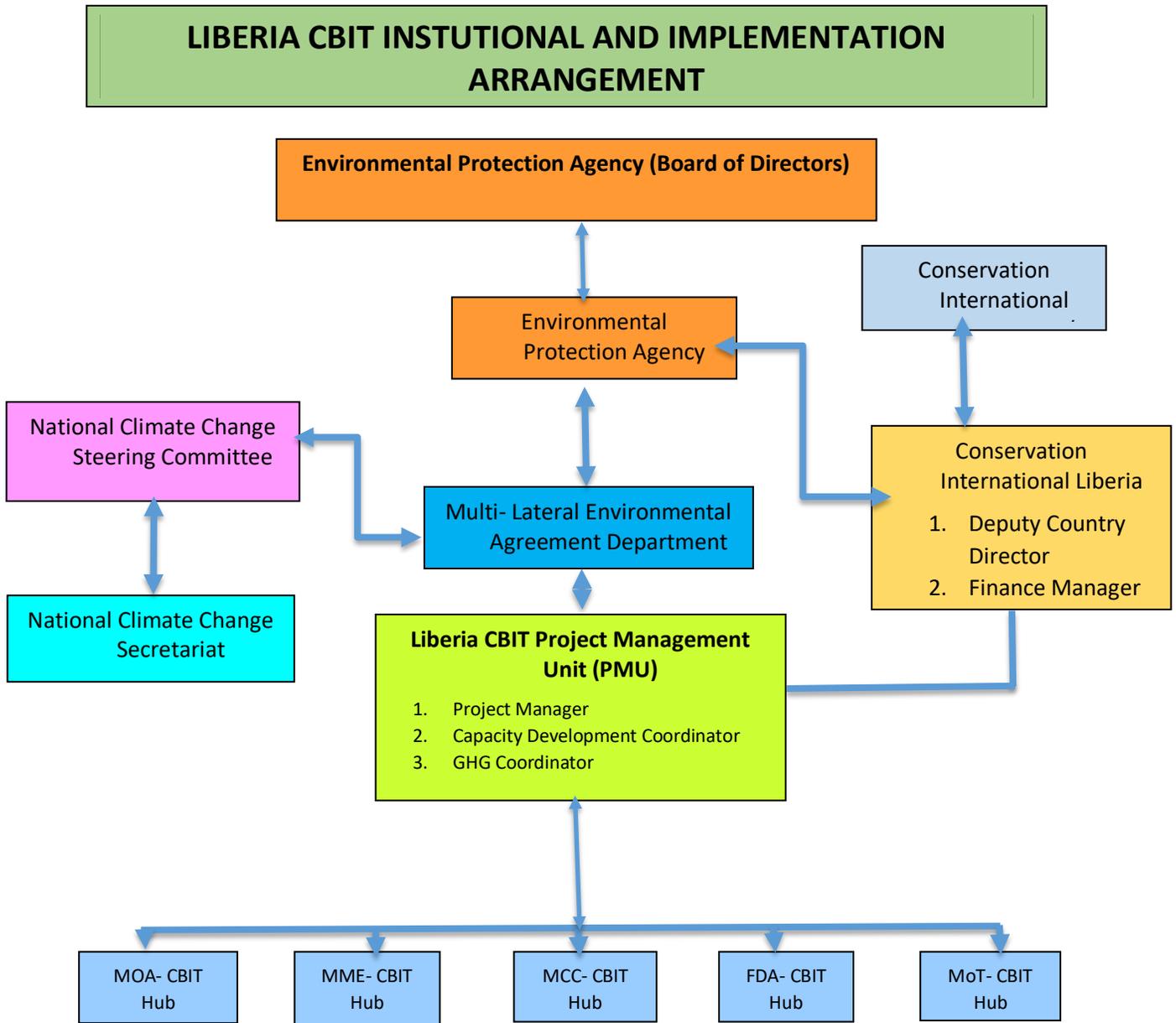
- Project monitoring and reporting (technical);
- Act as the secretariat for the PSC;
- Represent the project to the Government of Liberia, CI Liberia, and other partners as may be required;
- Ensure the smooth running of the project through monitoring and communication with the PSC, working and consultative groups, contractors, consultants, stakeholders and other engaged agencies, institutions, and individuals;
- Implement the communications strategy for the project, including identifying appropriate opportunities to communicate and demonstrate the progress and achievements of the program and responding to concerns, criticism, and questions that may arise regarding the program and its implementation.

147. The Liberia CBIT Project will hire a Project Manager, GHG Specialist, and a Capacity Development Coordinator, and Finance and Operations Manager³. The roles and responsibilities of the Project Manager will be: Overall management of project activities including acting as secretary to the Project

³ Finance and Ops Manager will be seated in CI-Liberia office

Steering Committee. He/She will coordinate delivery of the project components and all project activities and act as liaison between the project stakeholders including the EPA, the technical partners and CI-Liberia. The Project Manager will coordinate outputs and work streams, and ensure the program runs smoothly and delivers the specified outputs and overall objectives. H/She will be responsible for monitoring progress against the implementation plan, budgeting and reporting, and submission of all technical and financial reports to the CI-GEF Agency. Ensuring compliance to the CI-GEF Procurement Policy is the responsibility of the Finance and Operations Manager.

Figure 8. Institutional and Execution Arrangements



SECTION 6: MONITORING AND EVALUATION PLAN

148. Project monitoring and evaluation will be conducted in accordance with established Conservation International and GEF procedures by the project team and the CI-GEF Project Agency. The project's M&E plan will be presented and finalized at the project inception workshop, including a review of indicators, means of verification, and the full definition of project staff M&E responsibilities.

A. Monitoring and Evaluation Roles and Responsibilities

149. The Project Management Unit on the ground will be responsible for initiating and organizing key monitoring and evaluation tasks. This includes the project inception workshop and report, quarterly progress reporting, annual progress and implementation reporting, documentation of lessons learned, and support for and cooperation with the independent external evaluation exercises.

150. The project Executing Agency is responsible for ensuring the monitoring and evaluation activities are carried out in a timely and comprehensive manner, and for initiating key monitoring and evaluation activities, such as the independent evaluation exercises.

151. Key project executing partners are responsible for providing any and all required information and data necessary for timely and comprehensive project reporting, including results and financial data, as necessary and appropriate.

152. The Project Steering Committee plays a key oversight role for the project, with regular meetings to receive updates on project implementation progress and approve annual workplans. The Project Steering Committee also provides continuous ad-hoc oversight and feedback on project activities, responding to inquiries or requests for approval from the Project Management Unit or Executing Agency.

153. The CI-GEF Project Agency plays an overall assurance, backstopping, and oversight role with respect to monitoring and evaluation activities.

154. The CI Internal Audit function is responsible for contracting and oversight of the planned independent external evaluation exercises at the mid-point and end of the project.

B. Monitoring and Evaluation Components and Activities

155. The Project M&E Plan should include the following components (see M&E Table 8 for details):

a. Inception workshop

Project inception workshop will be held within the first three months of project start with the project stakeholders. An overarching objective of the inception workshop is to assist the project team in understanding and taking ownership of the project's objectives and outcomes. The inception workshop will be used to detail the roles, support services and complementary responsibilities of the CI-GEF Project Agency and the Executing Agency.

b. Inception workshop Report

The Executing Agency should produce an inception report documenting all changes and decisions made during the inception workshop to the project planned activities, budget, results framework, and any other key aspects of the project. The inception report should be produced within one month of the inception workshop, as it will serve as a key input to the timely planning and execution of project start-up and activities.

c. Project Results Monitoring Plan (Objective, Outcomes, and Outputs)

A Project Results Monitoring Plan will be developed by the Project Agency, which will include

objective, outcome and output indicators, metrics to be collected for each indicator, methodology for data collection and analysis, baseline information, location of data gathering, frequency of data collection, responsible parties, and indicative resources needed to complete the plan. Appendix IV provides the Project Results Monitoring Plan table that will help complete this M&E component.

In addition to the objective, outcome, and output indicators, the Project Results Monitoring Plan table will also include all indicators identified in the Safeguard Plans prepared for the project, thus they will be consistently and timely monitored.

The monitoring of these indicators throughout the life of the project will be necessary to assess if the project has successfully achieved its expected results.

Baseline Establishment: in the case that all necessary baseline data has not been collected during the PPG phase, it will be collected and documented by the relevant project partners *within the first year* of project implementation.

d. **GEF Core Indicators**

The relevant GEF Core Indicators will be completed i) prior to project start-up, ii) prior to mid-term review, and iii) at the time of the terminal evaluation.

e. **Project Steering Committee Meetings**

Project Steering Committee (PSC) meetings will be held annually, semi-annually, or quarterly, as appropriate. Meetings shall be held to review and approve project annual budget and work plans, discuss implementation issues and identify solutions, and to increase coordination and communication between key project partners. The meetings held by the PSC will be monitored and results adequately reported.

f. **CI-GEF Project Agency Field Supervision Missions**

The CI-GEF PA will conduct annual visits to the project country and potentially to project field sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Oversight visits will most likely be conducted to coincide with the timing of PSC meetings. Other members of the PSC may also join field visits. A Field Visit Report will be prepared by the CI-GEF PA staff participating in the oversight mission, and will be circulated to the project team and PSC members within one month of the visit.

g. **Quarterly Progress Reporting**

The Executing Agency will submit quarterly progress reports to the CI-GEF Project Agency, including a budget follow-up and requests for disbursement to cover expected quarterly expenditures.

h. **Annual Project Implementation Report (PIR)**

The Executing Agency will prepare an annual PIR to monitor progress made since project start and in particular for the reporting period (July 1st to June 30th). The PIR will summarize the annual project result and progress. A summary of the report will be shared with the Project Steering Committee.

i. **Final Project Report**

The Executing Agency will draft a final report at the end of the project.

j. **Independent External Mid-term Review**

The project will undergo an independent Mid-term Review within 30 days of the mid-point of the grant term. The Mid-term Review will determine progress being made toward the

achievement of outcomes and will identify course correction if needed. The Mid-term Review will highlight issues requiring decisions and actions, and will present initial lessons learned about project design, implementation and management. Findings and recommendations of the Mid-term Review will be incorporated to secure maximum project results and sustainability during the second half of project implementation.

k. Independent Terminal Evaluation

An independent Terminal Evaluation will take place within six months after project completion and will be undertaken in accordance with CI and GEF guidance. The terminal evaluation will focus on the delivery of the project’s results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The Executing Agency in collaboration with the PSC will provide a formal management answer to the findings and recommendations of the terminal evaluation.

l. Lessons Learned and Knowledge Generation

Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. There will be a two-way flow of information between this project and other projects of a similar focus.

m. Financial Statements Audit

Annual Financial reports submitted by the executing Agency will be audited annually by external auditors appointed by the Executing Agency.

156. The Terms of References for the evaluations will be drafted by the CI-GEF PA in accordance with GEF requirements. The procurement and contracting for the independent evaluations will be handled by CI’s General Counsel’s Office. The funding for the evaluations will come from the project budget, as indicated at project approval.

Table 10: M&E Plan Summary

Type of M&E	Reporting Frequency	Responsible Parties	Indicative Budget from GEF (USD)
a. Inception workshop and Report	Within three months of signing of CI Grant Agreement for GEF Projects	<ul style="list-style-type: none"> • Project Team • Executing Agency • CI-GEF PA 	3,600
b. Inception workshop Report	Within one month of inception workshop	<ul style="list-style-type: none"> • Project Team • CI-GEF PA 	<i>See amount under a above</i>
c. Project Results Monitoring Plan (Objective, Outcomes and Outputs)	Annually (data on indicators will be gathered according to monitoring plan schedule shown on Appendix IV)	<ul style="list-style-type: none"> • Project Team • CI-GEF PA 	30,000

d. GEF Core Indicators	i) Project development phase; ii) prior to project mid-term evaluation; and iii) project completion	<ul style="list-style-type: none"> • Project Team • Executing Agency • CI-GEF PA 	
e. Project Steering Committee Meetings	Annually	<ul style="list-style-type: none"> • Project Team • Executing Agency • CI-GEF PA 	10,666
f. CI-GEF Project Agency Field Supervision Missions	Approximately annual visits	<ul style="list-style-type: none"> • CI-GEF PA 	15,000
g. Quarterly Progress Reporting	Quarterly	<ul style="list-style-type: none"> • Project Team • Executing Agency 	35,000
h. Annual Project Implementation Report (PIR)	Annually for year ending June 30	<ul style="list-style-type: none"> • Project Team • Executing Agency • CI-GEF PA 	15,000
i. Project Completion Report	Upon project operational closure	<ul style="list-style-type: none"> • Project Team • Executing Agency 	
j. Independent Terminal Evaluation	CI Evaluation Office Project Team CI-GEF PA	<ul style="list-style-type: none"> • Evaluation field mission within three months prior to project completion. 	18,000
k. Lessons Learned and Knowledge Generation	Project Team Executing Agency CI-GEF PA	<ul style="list-style-type: none"> • At least annually 	8,000
l. Financial Statements Audit	Executing Agency CI-GEF PA	<ul style="list-style-type: none"> • Annually 	4,060

SECTION 7: PROJECT BUDGET AND FINANCING

C. Overall Project Budget

157. The project will be financed by a medium size GEF grant of USD 1,344,495 with co-financing from the Government of Liberia and Conservation International. A summary of the project costs and the co-financing contributions is given in the two tables below. The project budget may be subject to revision during implementation. The detailed Project Budget is provided in Appendix VII.

Table 11: Planned Project Budget by Component

	Project budget by component (in USD)				
	Component 1	Component 2	Component 3	PMC	Total budget
<i>Personnel Salaries and benefits</i>	71,023	28,397	161,371	87,438	348,228
<i>Professional services</i>	168,034	102,374	72,644	4,0600	347,112
<i>Travels and accommodations, Meetings and workshops</i>	124,484	54,623	80,784	10,666	270,556
<i>Grants & Agreements</i>	196,320	0	62,964	0	259,284
<i>Equipment</i>	8,000	0	5,500	0	13,500
<i>Other Direct Costs (Printing, Shared Office Costs, direct phone costs)</i>	37,163	9,975	38,614	20,063	105,815
TOTAL GEF FUNDED PROJECT	605,023	195,369	421,876	122,227	1,344,495

Table 12: Planned Project Budget by Year

	Project budget by year (in USD)		
	Year 1	Year 2	Total budget
<i>Personnel Salaries and benefits</i>	196,492	151,736	348,228
<i>Professional services</i>	247,455	99,657	347,112
<i>Travels and accommodations, Meetings and workshops</i>	215,439	55,117	270,556

Grants & Agreements	189,946	69,338	259,284
Equipment	13,500	0	13,500
Other Direct Costs	69,369	36,446	105,815
TOTAL GEF FUNDED PROJECT	932,201	412,294	1,344,495

B. Overall Project Co-financing

158. USD 1,344,495 will come as support from GEF and the total of USD 1,600,000 in co-financing for the project. USD 1,500,000 will come as support from the Government of Liberia for project monitoring and this will be provided in kind. Conservation International will provide offices and transportation for the duration of the project. This cost is estimated at USD 100,000.

The co-financing commitment letters are attached in the Appendix VIII

Table 13: Committed Cash and In-Kind Co-financing (USD)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount
Government	Government of Liberia	In-kind	1,500,000
GEF Agency	Conservation International	In-kind	100,000
TOTAL CO-FINANCING			1,600,000

APPENDIX I: Project Results Framework

Objective:	To build and strengthen Liberia's national capacity to implement the transparency elements of the Paris Agreement.		
Indicator(s):	1.No. of NDC sectoral hubs equipped for collecting, tracking and reporting all NDC information transparently 2.No. of skilled staff and MRV implementation plans, processes and protocols in place harmonizing land use, agriculture, energy, transport and waste sectors collection and reporting 3. No. of NDC sector GHGI and MRV data collected, aggregated and available for national use and on the Global CBIT Coordination Platform		
Expected Outcomes and Indicators	Project Baseline	End of Project Target	Expected Outputs and Indicators
Component 1: Strengthen the capacity of national institutions to track NDC implementation and sustain transparency efforts over time			
<i>Outcome 1.1.: Procedures to measure, track and report mitigation and adaptation data from the land use, agriculture, energy, transport and waste sectors transparently strengthened</i> Indicator 1.1.1.: No. of protocols to measure, track and report mitigation and adaptation data from NDC sectors developed, tested and certified	Currently, all the NDC sectors do not have IPCC standard procedures to measure GHG emissions and removals from both mitigation and adaptation action in the different NDC sectors. No sector-specific technical guides exist for data transmission and communication based on IPCC reporting requirements	At least one protocol consisting of standard methods for measuring, tracking and reporting GHG data for each of the NDC sectors developed and pre-tested in compliance to IPCC requirements	Output 1.1.1 Protocol and methodology for data collection across multiple sectors established. <i>Indicator 1.1.1.: No. of protocols to measure, track and report mitigation and adaptation data from NDC sectors developed, tested and certified</i> Target: At least one protocol consisting of standard methods for measuring, tracking and reporting GHG data for each of the NDC sectors developed and pre-tested in compliance to IPCC requirements
Indicator 1.1.2.: No. of technical guides developed		At least one technical guide developed on data transmission and communication for each NDC sector based on IPCC reporting requirements	Output 1.1.2 Technical guides on data transmission and communication in compliance with IPCC standards developed <i>Indicator 1.1.2: No. of technical guides developed</i> Target: At least one technical guide developed on data transmission and communication for each NDC sector based on IPCC reporting requirements.

Expected Outcomes and Indicators	Project Baseline	End of Project Target	Expected Outputs and Indicators
<p><i>Outcome 1.2 NDC transparency system in place in accordance with the prescribed UNFCCC standard</i></p> <p>Indicator 1.2.1: Number of web based systems for managing all NDC information and GHG data</p> <p>Indicator 1.2.2 Number of NDC sectoral hubs strengthened</p>	<p>There is no NDC transparency system for Liberia. Reporting to meet Liberia’s obligations to the UNFCCC being undertaken on a project/consultancy basis organized by EPA, with informal linkages with other GHG stakeholders (e.g. NDC sectors, LISGIS, FDA, NCCSC, non-state actors).</p> <p>Each sector institution collects and manages their own data and there are no clear channels of transmission of GHG data to EPA.</p>	<p>At least 1 web based system for managing all NDC information and GHG data operationalized at EPA</p> <p>At least 4/5 NDC sectoral hubs fully compliant in reporting nationally and internationally</p>	<p>Output 1.2.1.: Online system for collecting and managing all NDC information and data transparency including GHG inventory in collaboration with Liberian Environmental Protection Agency developed</p> <p><i>Indicator 1.2.1: Number of web based systems for managing all NDC information and GHG data</i></p> <p>Target: At least 1 web based system for managing all NDC information and GHG data operationalized at EPA</p> <p>Output 1.2.2.: NDC sectoral hubs strengthened to comply with NDC system requirements</p> <p><i>Indicator 1.2.2 Number of NDC sectoral hubs strengthened</i></p> <p>Target: At least 4 NDC sectoral hubs fully compliant in reporting nationally and internationally</p>
<p><i>Outcome 1.3 Capacity of key ministries and stakeholders to effectively utilize the developed NDC transparency system strengthened</i></p> <p>Indicator 1.3.1: Number of technical staff from NDC sectors and stakeholders trained to effectively utilize the developed NDC transparency system</p>	<p>Some trainings on GHG and MRV. were given by GoL and partners and intended to respond to capacity needs for reporting (e.g NCs and BUR reports), and support delivery of new initiatives (e.g LEITI and REDD+). Sector trainings conducted for forestry, with over 100 trained on forest emissions</p>	<p>At least 300 MRV stakeholders equipped to use the established NDC transparency system</p> <p>At least 3 ToT workshops conducted</p>	<p>Output 1.3:1: Training for at least 300 stakeholders over the life of the project to utilize the NDC transparency system and manage relevant data conducted.</p> <p><i>At least 100 of participants are women</i></p> <p><i>Indicator 1.3.1: Number of technical staff from NDC sectors and stakeholders trained to effectively utilize the developed NDC transparency system</i></p> <p>Target 2. At least 30 Policy makers, 135 NDC sector institution staff, 60 staff from technical institutions/committees, 10 media, 30 academia, 20 CSOs, and 15 private sector) equipped to use the established NDC</p>

	responsible for international reporting to respond to the UNFCCC requirements.	processing and sharing data signed	Target: At least one GHGI and MRV system framework of cooperation (MoU) between EPA and NDC sectors for collecting, processing and sharing data signed.
Expected Outcomes and Indicators	Project Baseline	End of Project Target	Expected Outputs and Indicators
Indicator 1.4.3.: Number of in NDC sectors compliant with IPCC reporting requirements guidelines	Zero 4 NDC sectors 100% compliant with IPCC reporting requirements	At least 4 NDC sectors 100% compliant with IPCC reporting requirements	Output 1.4.3: NDC sector interactions and compliance with IPCC reporting requirements strengthened <i>Indicator 1.4.3.: Number of NDC sectors that are 100% compliant with IPCC reporting requirements</i> Target: At least 4 NDC sectors 100% compliant with IPCC reporting requirements
Component 2: Provide direct technical support to harmonize land use, agriculture, energy, transport and waste sectors collection and reporting through training and assistance			
<i>Outcome 2.1.: Capacity to measure and report land use, agriculture, energy, transport and waste sectors NDC improved</i> Indicator 2.1.1 No of protocols for measuring results related to the land use, agriculture, energy, transport and waste sectors effectively used by key MRV stakeholders	No protocols exist for measuring results from each of the NDC sectors Some staff received technical training in MRV, processing	At least one protocol for measuring results from each of the NDC sectors developed	Output 2.1.1 Processes and protocols for measuring results related to the land use, agriculture, energy, transport and waste sectors established <i>Indicator 2.1.1. No of processes and protocols for measuring results related to the land use, agriculture, energy, transport and waste sectors established</i> Target At least one protocol for measuring results from each of the NDC sectors developed Output 2.1.2.: Implementation plans developed and at least 200 stakeholders

Indicator 2.1.2.: Number of technical staff trained in NDC sectors (land use, agriculture, energy, transport and waste) and involved in GHG data collection, processing and reporting	and transmission based on domestic MRV and compliance to the IPCC and national requirements	At least 200 stakeholders trained and involved in implementing NDC plans	trained to incorporate land use, agriculture, energy, transport and waste sectors into the NDC. <i>At least 60 of participants are women</i> <i>Indicator 2.1.2. Number of stakeholders trained in implementing plans of NDC sectors (land use, agriculture, energy, transport and waste) - GHG data collection, processing and reporting</i>
Expected Outcomes and Indicators	Project Baseline	End of Project Target	Expected Outputs and Indicators
<i>Outcome 2.1 (con't)</i>			Target: At least 200 stakeholders (at least 60 women) trained and involved in implementing NDC plans
Component 3: Integrated Platform for Data Sharing and Policy Making			
<i>Outcome 3.1 Fully developed data integration and sharing procedure for use by stakeholders as a one stop source of information for transparency reporting</i> Indicator 3.1.1: Number of operational NDC sectoral GHGI and MRV data systems Indicator 3.1.2.: The Liberia national GHG inventory established and launched	Currently, no national GHG inventory and MRV system in place. The Liberia national GHG inventory has not been launched	At least 5 NDC sector GHG data and MRV information is aggregated and uploaded to the Global CBIT Coordination Platform managed centrally by the EPA At least one public event organized by the NCCSC for launching the national GHG inventory to the public	Output 3.1.1: Data for GHG inventory and MRV system aggregated from different sources, and included in the Global CBIT Coordination Platform <i>Indicator 3.1.1. Number of operational NDC sectoral GHGI and MRV data systems</i> Target: At least 5 NDC sector GHG data and MRV information is aggregated and up loaded into the Global CBIT Coordination Platform managed centrally by the EPA Output 3.1.2: National inventory of greenhouse gas emissions established and made publically available <i>Indicator 3.1.2. The Liberia national GHG inventory established and launched</i> Target At least one Public event organized by the NCCSC for launching the national GHG inventory to the public

APPENDIX III: Project Timeline

Activity Description	Year 1				Year 2			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component 1: Strengthen the capacity of national institutions to track NDC implementation and sustain transparency efforts over time								
Outcome 1.1: Procedures to measure, track and report mitigation and adaptation data from the land use, agriculture, energy, transport and waste sectors transparently strengthened								
Output 1.1.1: Protocol and methodology for data collection across multiple sectors established								
IA 1: A GHG Protocols Technical Committee is established (Expert contracted, committee meetings, orientation workshop)	X	X						
IA 2: Refine/develop protocols for data collection								
(i) Sector level meetings to prepare inventories (5 sectors)	X	X						
(ii) Joint meeting to review outcomes		X	X	X	X	X		
IA 3: Workshop on Gender disaggregated GHG data		X						
IA 4: Pre-test and certify the protocols and methodology								
(i) Sector level planning meetings (5ppx 5sectors)		X						
(ii) Sector level field pre-tests			X					
(iii) Sector level review meetings (2ppx 5sectors)			X	X				
(iv) Expert to finalize the protocols (contract)					X			
(v) Protocols certification					X			
IA 5: Publication of the certified protocols								
(i) Prepare protocols for publication (design layout, editing)					X			
(ii) Printing/production of the protocols					X			
IA 6: Needs Assessment and Compliance to IPCC requirements								
(i) Sector Expert (Contract)				X				
(ii) Technical meeting to review assessment outcomes				X				
Output 1.1.2 Technical guides on data transmission and communication in compliance with IPCC standards developed								
IA 1: Technical guides developed (Experts to develop the guides)					X			
IA 2: Production/publication of technical guides						X		
Outcome 1.2: NDC transparency system in place in accordance with the prescribed UNFCCC standard								
Output 1.2.1 Online system for collecting and managing all NDC information and data on transparency including GHG inventory in collaboration with Liberian Environmental Protection Agency developed								
IA 1: Review existing transparency data systems (meetings)		X						
IA 2: Develop an online system for NDC information								
(i) Content (data collection, processing, harmonization)			X	X				
(ii) System design and operational manual (contract)				X				
Output 1.2.2 NDC sectoral hubs strengthened to comply with NDC system requirements								
IA 1: Establish NDC sectoral Hubs (meetings to identify stakeholders, define cooperation/engagement mechanisms)		X						
IA 2: Procure GHG system technologies and equipment		X	X					

Activity Description	Year 1				Year 2			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Outcome 1.3: Capacity of key ministries and stakeholders to effectively utilize the developed NDC transparency system strengthened								
Output 1.3.1. Training for at least 300 stakeholders over the life of the project to utilize the NDC transparency system and manage relevant data conducted.								
IA 1: Training needs assessment + Manual (<i>contract, consultations</i>)			X					
IA 2: Training on the NDC transparency system			X	X	X	X		
IA 3: Specialized training (<i>data collection, processing, transmission</i>)					X			
IA 4: Exposure visits (<i>travels for EPA staff, NDC sector institutions staff and Media expert</i>)						X	X	
Output 1.3.2. Three Training of Trainers workshops to deepen and broaden the knowledge of professionals working in climate change on the transparency requirements conducted								
IA1: Preparations for Trainings			X					
IA2: Training manual and materials (<i>Contract expert, produce materials</i>)			X					
IA3: ToT workshops (<i>Delivery of the trainings</i>)			X	X				
Outcome 1.4: Coordination among key government agencies on NDC implementation enhanced								
Output 1.4.1: Liberia National Climate Change Steering Committee expanded and strengthened to include CSO, Private sector, Development partners and forest- dependent people representative								
IA 1: GHG stakeholders mapping	X							
IA 2: Sensitization workshops on stakeholder roles/responsibilities		X						
IA 3: Gender sensitization workshop		X						
IA 4: Cooperation frameworks developed (<i>Consultant contracted, review meetings held, guidelines prepared and launched</i>)			X	X				
IA 5: Communication strategy (<i>Consultant contracted, Communication products – design, produce and disseminate</i>)		X	X					
Output 1.4.2: NDC inter-sectoral arrangements strengthened								
IA 1: Orientation meetings and consultations					X			
IA 2: Cooperation frameworks developed and signed					X	X		
Output 1.4.3: NDC sector interactions and compliance with IPCC reporting requirements strengthened								
IA 1: Technical interactive platform created for NDC sectors				X				
IA 2: NDC sectoral meetings to share and exchange information					X	X	X	
IA 3: Recognition of performing NDC sectors by EPA						X		X

Component 2: Provide direct technical support to harmonize land use, agriculture, energy, transport and waste sectors data collection and reporting through training and assistance								
Outcome 2.1: Capacity to measure and report land use, agriculture, energy, transport and waste sectors NDC improved								
Output 2.1.1: Processes and protocols for measuring results related to the land use, agriculture, energy, transport and waste sectors established								
IA 1: Review the REDD+ MRV system								
(i) International Expert (contract process)			X					
(ii) Protocols Committee Meetings (2)			X					
(iii) Committee Orientation workshop (1 days)			X					
IA 2: Protocols and measurement frameworks								
(i) Sector level meetings to compile inventories			X	X				
(ii) Consultant to compile and document the frameworks			X	X				
(iii) Production of publication					X			
IA 3: Mechanisms developed for integration of REDD+				X				
IA 4: Capacity assessment of the NDC sectors					X			
IA 5: Training for NDC sector institutions (2 trainings/sector)					X	X		
IA 6: TA to Energy Sector (12months)				X	X	X	X	
Output 2.1.2 Implementation plans developed and at least 200 stakeholders trained to incorporate land use, agriculture, energy, transport and waste sectors into the NDC								
IA 1: Innovative/practical strategies for emissions reduction identified - Joint sector meeting (planning and post review)					X	X		
IA 2: Preparation of implementation plans and trainings						X	X	
Component 3: Integrated Platform for Data Sharing and Policy Making								
Outcome 3.1: Fully developed data integration and sharing procedure for use by stakeholders as a one stop source of information for transparency reporting.								
Output 3.1.1: Data for GHG inventory and MRV system aggregated from different sources, and included in the Global CBIT Coordination Platform								
IA 1: Mechanisms for GHG data aggregation (Contract consultant, technical review meetings, production of handbook)			X	X				
IA 2: Training workshop on the CBIT platform (2day x 6 institutions)					X	X		
IA 3: TA to EPA and sectors to input GHG data into the CBIT CP						X	X	
IA 4: Establish and operationalize the CBIT PMU and PSC	X	X	X	X	X	X	X	X
Output 3.1.2. National inventory of greenhouse gas emissions established and made publically available								
IA 1: TA to establish the GHGI system at EPA					X	X		
IA2: Quantification and Reporting Policy Impacts								
(i) Technical assistance to NDC sector institutions						X	X	
(ii) Sensitization/policy information dissemination workshop							X	X
IA 3: Policy Training (NCCSC and EPA)							X	
IA 3: National conference on GHGI and MRV systems								X

APPENDIX III: Project Results Monitoring Plan

Indicators	Metrics	Methodology	Baseline	Location	Frequency	Responsible Parties
Objective: To build and strengthen Liberia's national capacity to implement the transparency elements of the Paris Climate Agreement.						
Indicator 1: No. of NDC sectoral hubs equipped for collecting, tracking and reporting all NDC information transparently	% increase in timely reporting to EPA	Surveys of GHGI and NDC stakeholders	Currently, no mechanism for NDC inter-sectoral coordination	EPA	Annual	EPA
Indicator 2: No. of skilled staff and MRV implementation plans, processes and protocols in place harmonizing land use, agriculture, energy, transport and waste sectors collection and reporting	% Increase in NDC inter-sectoral interactions in data collection, analysis and reporting	Stakeholder surveys,	Low capacity to implement NDC plans and report in compliance to national and international requirements	EPA	Twice a year	EPA
Indicator 3: No. of NDC sector GHGI and MRV data collected, aggregated and available for national use and on the Global CBIT Coordination Platform	% increase in number of NDC sectors transmitting data for aggregation and upload into the CBIT CP	Sectoral surveys	Currently no NDC sectors is transmitting GHG data	EPA	Annual	EPA and NDC sectors
Component 1: Strengthen the capacity of national institutions to track NDC implementation and sustain transparency efforts over time						
Indicator 1.1.1.: No. of protocols to measure, track and report mitigation and adaptation data from NDC sectors developed, tested and certified	Number of protocols	Surveys of NDC sectors, Review of progress reports	Reporting according to tier 1	EPA and NDC sectors	Annual	EPA
Indicator 1.1.2.: No. of technical guides developed	Number of technical guides	<i>Observation, Review of progress reports</i>	Not available	<i>EPA and NDC sectors</i>	<i>Annual</i>	<i>EPA</i>
Indicator 1.2.1: Number of web based systems for managing all NDC information and GHG data	Number of online systems	Internet surveys, Review of progress reports	<i>n/a</i>	<i>Web</i>	<i>Twice a year</i>	<i>EPA</i>
Indicator 1.2.2.: Number of NDC sectoral hubs strengthened	Number of NDC sectoral hubs	Surveys of NDC sectoral hubs, Review of project reports	<i>n/a</i>	<i>NDC sector hubs</i>	<i>Annual</i>	<i>EPA</i>
Indicator 1.3.1.: Number of technical staff from NDC sectors and stakeholders trained to effectively utilize the developed NDC transparency system.	Number of technical staff	Review of training reports, Surveys of NDC sectors	Some staff have received trainings related to NDC implementation	<i>NDC sector hubs</i>	<i>Annual</i>	<i>EPA</i>
Indicator 1.4.1.: % Increase in number of GHGI and MRV non-state actors (e.g. CSO, academia, private sector, Development partners and forest dependent people) represented on the NCCSC	% increase in number of non-state actors	Review of progress reports, Surveys of non-state actors	Non-state actors have not been active	<i>NCCSC</i>	<i>Annual</i>	<i>EPA</i>

Indicators	Metrics	Methodology	Baseline	Location	Frequency	Responsible Parties
Indicator 1.4.2.: Number of NDC inter-sectoral arrangements on GHGI and MRV system	Number of MoUs	Review of project progress reports, Surveys of NDC sectoral hubs	Currently no MoUs	NDC sectoral hubs	Annual	EPA
Indicator 1.4.3.% Increase in number of in NDC inter-sectoral interactions on GHGI and MRV data collection and processing in compliance to Paris agreement and IPCC guidelines	% increase in networking	Surveys of state and non-state actors	<i>No clear mechanism for interaction</i>	EPA	Annual	EPA
Component 2: Provide direct technical support to harmonize land use, agriculture, energy, transport and waste sectors collection and reporting through training and assistance						
Indicator 2.1.1 No of protocols for measuring results related to the land use, agriculture, energy, transport and waste sectors effectively used by key MRV stakeholders	Number of protocols	Review of progress of project reports,	<i>Currently, protocols based on tier 1 are used</i>	EPA	Annual	EPA
Indicator 2.1.2.: Number of technical staff trained in NDC sectors (land use, agriculture, energy, transport and waste) involved in GHG data collection, processing and reporting	Number of staffs	Review of training reports, Review of project progress reports	<i>A few staff have been trained in related efforts</i>	EPA/ NDC sectors	Twice a year	EPA
Component 3. Integrated Platform for Data Sharing and Policy Making						
Indicator 3.1.1: Number of operational NDC sectoral GHGI and MRV data systems	Number of sectoral GHGI	Surveys of NDC sectoral hubs, Review of project progress reports	<i>N/a</i>	EPA and NDC sectors	Annual	EPA
Indicator 3.1.2.: The Liberia national GHG inventory established and launched	Number of systems	Surveys of NDC sectoral hubs, Review of project progress reports	<i>n/a</i>	EPA and NCCSC	Annual	NCCSC
Safeguard Plans:						
Indicator 2.x.:						
Indicator 1.1.: Cases reported	Number of conflicts and complaint cases reported to the CBIT Accountability and Grievance Mechanism Committee	Review of minutes of project Accountability and Grievance Mechanism	<i>n/a</i>	EPA	Annual	EPA

Indicators	Metrics	Methodology	Baseline	Location	Frequency	Responsible Parties
Indicator 1.2.: Justice	% of conflict and complaint cases reported and resolved	Review of minutes of project Accountability and Grievance Mechanism	n/a	EPA	Annual	EPA
Indicator 2.1.: Participation	Number of men and women represented on GHGI and MRV related committees	Review of training reports	Zero	EPA	Annual	EPA
Indicator 2.2.: Project planning considerations	Number of strategies, plans and policies derived from the CBIT that include gender considerations	Policy documents	Zero	EPA	Annual basis	EPA
Indicator 2.3.: Activities	Number of women trained to manage gender disaggregated data and participation in project planning and implementation (e.g. Co-opt women on PSC)	Training and project reports	Zero	EPA	Biennial	EPA
Indicator 2.4.: Existing gender capacity	Number of women engaged in CBIT Hubs and related activities	Surveys	n/a	EPA	Annual basis	EPA
Indicator 2.5.: Gender conscious	No of institutions with Gender FPs of relevance to the project	Surveys and project reports	n/a	EPA	Annual basis	EPA
Indicator 2.6.: Workplace	Gender disaggregated data collected and used by GHGI teams	Project reports, surveys	n/a	EPA	Annual basis	EPA
Indicator 3.1.: Institutional involvement	Number of government agencies, CSO, Private and other non-state actors involved in the project activities	Review of implementation project reports	n/a	EPA	Twice a year	EPA

Indicator 3.2.: Activities of engagement	Number of project activities (meetings, workshops, consultations) in which GHGI and MRV stakeholders are engaged CBIT	Review of project implementation reports	n/a	EPA	Twice a year	EPA
Indicator 3.4.: Individual Involvement	Number of GHGI and MRV stakeholders (sex-disaggregated) that provide feedback on project implementation	Review of project implementation reports	n/a	EPA	Twice a year	EPA

APPENDIX IV: GEF Core Indicators

- *Include the GEF Core Indicators*

APPENDIX V: Safeguard Screening Form and Analysis

CI-GEF PROJECT AGENCY

SCREENING RESULTS AND SAFEGUARD ANALYSIS

(To be completed by CI-GEF Coordination Team)

I. BASIC INFORMATION

A. Basic Project Data

Country: Liberia	GEF Project ID: 9923
Project Title: Building and strengthening Liberia's national capacity to implement the transparency elements of the Paris Climate Agreement	
Executing Agency: Conservation International (CI) and Environmental Protection Agency (EPA) of Liberia	
GEF Focal Area: Climate Change Mitigation	
GEF Project Amount: USD 1,344,495	
Reviewer(s): Ian Kissoon	
Date of Review: December 22, 2017	
Comments: Analysis completed and approved	

B. Project Objective:

To build and strengthen Liberia's national capacity to implement the transparency elements of the Paris Climate Agreement.

C. Project Description:

The project will build and strengthen Liberia's national capacity to implement the Paris Climate Agreement through the development of a robust transparency framework which measures and tracks mitigation, adaptation, financial, technology transfer and capacity building efforts. The long-term strategy of Liberia is to achieve carbon neutrality by 2050. It is essential that the Nationally Determined Contribution (NDC) process is transparent, so that stakeholders in Liberia can track progress and ensure that the country is meeting its stated goals. Through the proposed framework government of Liberia and other stakeholders will be empowered and capable of tracking impacts in the energy, waste, transport and land sector and provide a firm basis for the country to meet its mitigation and adaptation targets and achieve carbon neutrality. The project will help Liberia demonstrate to the world the important contribution Liberia is making to address climate change and meeting the important goals of the Paris Agreement.

The project will be executed under the following components:

- Component 1: Strengthen the capacity of national institutions to track NDC implementation and sustain transparency efforts over time
- Component 2: Provide direct technical support to harmonize land use, agriculture, energy, transport and waste sectors data collection and reporting through training and assistance
- Component 3: Establish an integrated platform for data sharing and policy making

D. Project location and biophysical characteristics relevant to the safeguard analysis:

Liberia is a least developed country that has recently emerged from an extended period of civil war. It has struggled through two civil wars, one from 1989-1996 and the second from 1999-2003. An estimated 64% of Liberians live below the poverty line, of whom 1.3 million live in extreme poverty. Food insecurity affects 41% of the population and chronic malnutrition is high. In addition, Liberia is faced with the growing impacts of climate change. Low-income countries like Liberia are on the frontline of human-induced climate change and may experience gradual sea-level rise, warmer days and nights, more unpredictable rains, and larger and longer heatwaves. These changes will have a negative impact on sectors of the Liberian economy that are only starting to recover, such as agriculture, forestry, health and energy. Liberia recognizes the current and future threats of climate change and has been taking initiatives toward addressing these threats.

In December 2015, the United Nations Convention on Climate Change (UNFCCC) Conference of Parties (COP) 21 in Paris agreed to an historic international climate agreement. The adoption of the Paris Agreement made vital progress toward meaningfully addressing climate change. Prior to reaching the Agreement, developed and developing countries submitted their national post-2020 climate action commitments, known as Intended Nationally Determined Contributions (INDCs). Liberia is categorized as a greenhouse gas (GHG) sink if the land use, land-use change and forestry (LULUCF) sector is considered. However, whilst overall Liberia's LULUCF net emissions represent a sink there is still potential to reduce gross emissions generated from deforestation and forest degradation in Liberia. Human activities in Liberia are starting to have a profound impact on terrestrial sinks and consequently, the exchange of CO₂ between the terrestrial biosphere system and the atmosphere is being altered. To support mitigation, Liberia will need to reduce gross emissions from the land sector (e.g., deforestation and forest degradation) as well as increase the potential for carbon storage (e.g., maintenance or enhancement of the LULUCF sink).

The project will not involve work with indigenous peoples, however, it will include the involvement of local communities in the stakeholder engagement work. The project will also support the development of government institutional capacities, which will strengthen the enabling environment to sustain decentralized implementation of sustainable forest sector management, with the engagement of local communities. Liberia's climate change Gender Action Plan (ccGAP) provides a space to ensure that gender equity is mainstreamed into climate change policies, programs, and interventions.

E. Executing Agency's Institutional Capacity for Safeguard Policies:

The EA is currently implementing another GEF funded project "Improve sustainability of mangrove forests and coastal mangrove areas in Liberia through protection, planning and livelihood creation – as a building block towards Liberia's marine and coastal protected areas" and therefore has the capacity and experience to comply with the requirements of the safeguard policies.

II. SAFEGUARD AND POLICIES

Environmental and Social Safeguards:

Safeguard Triggered	Yes	No	TBD	Date Completed
1. Environmental & Social Impact Assessment (ESIA)		X		
<i>Justification: No significant adverse environmental and social impacts that are sensitive, diverse, or unprecedented is anticipated</i>				
2. Natural Habitats		X		
<i>Justification: The project is not proposing to alter natural habitats</i>				
3. Involuntary Resettlement		X		
<i>Justification: The project is not proposing involuntary resettlement or restriction of access/use of natural resources.</i>				
4. Indigenous Peoples		X		
<i>Justification: The project does not plan to work in lands or territories traditionally owned, customarily used, or occupied by indigenous peoples</i>				
5. Pest Management		X		
<i>Justification: There are no proposed activities related to pest management</i>				
6. Physical & Cultural Resources		X		
<i>Justification: There are no proposed activities related to physical and cultural resources</i>				
7. Stakeholder Engagement	X			
<i>Justification: The project is required to engage stakeholders</i>				
8. Gender mainstreaming	X			
<i>Justification: The project is required to mainstream gender at all levels</i>				
9. Accountability and Grievance Mechanisms	X			
<i>Justification: As a publicly funded GEF project, a Grievance Mechanism is required.</i>				

III. KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

From information provided in the Safeguard Screening Form, this project has triggered three safeguard policies. These are:

- I. Stakeholder Engagement,*
- II. Gender Mainstreaming, and*
- III. Grievance Mechanism.*

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

No indirect and/or long term impacts due to anticipated future activities are foreseen at this time.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts:

The proposed approach of the project is expected to avoid or minimize adverse impacts. As such, no better alternative can be conceived at this time.

4. Describe measures to be taken by the Executing Agency to address safeguard policy issues.

I. Grievance Mechanism

To ensure that the project meets CI-GEF Project Agency's "Accountability and Grievance Mechanism Policy #7", the Executing Agency is required to develop an Accountability and Grievance Mechanism that will ensure people affected by the project are able to bring their grievances to the Executing Agency for consideration and redress. The mechanism must be in place before the start of project activities, and also disclosed to all stakeholders in a language, manner and means that best suits the local context.

In addition, the Executing Agency is required to monitor and report on the following minimum accountability and grievance indicators:

- 1. Number of conflict and complaint cases reported to the project's Accountability and Grievance Mechanism; and*
- 2. Percentage of conflict and complaint cases reported to the project's Accountability and Grievance Mechanism that have been addressed.*

II. Gender Mainstreaming

To ensure that the project meets CI-GEF Project Agency's "Gender Mainstreaming Policy #8", the Executing Agency is required to prepare a Gender Mainstreaming Plan.

In addition, the Executing Agency is required to monitor and report on the following minimum gender indicators:

- 1. Number of men and women that participated in project activities (e.g. meetings, workshops, consultations);*
- 2. Number of men and women that received benefits (e.g. employment, income generating activities, training, access to natural resources, land tenure or resource rights, equipment, leadership roles) from the project; and if relevant*
- 3. Number of strategies, plans (e.g. management plans and land use plans) and policies derived from the project that include gender considerations.*

III. Stakeholder Engagement

To ensure that the project meets CI-GEF Project Agency's "Stakeholders' Engagement Policy #9", the Executing Agency is required to develop a Stakeholder Engagement Plan.

In addition, the Executing Agency is required to monitor and report on the following minimum stakeholder engagement indicators:

- 1. Number of government agencies, civil society organizations, private sector, indigenous peoples and other stakeholder groups that have been involved in the project implementation phase on an annual basis;*
- 2. Number persons (sex disaggregated) that have been involved in project implementation phase (on an annual basis); and*
- 3. Number of engagement (e.g. meeting, workshops, consultations) with stakeholders*

during the project implementation phase (on an annual basis)

IV. PROJECT CATEGORIZATION

PROJECT CATEGORY	Category A	Category B	Category C
<i>Justification: The proposed project activities are likely to have minimal or no adverse environmental and social impacts.</i>			

V. EXPECTED DISCLOSURE DATES

Safeguard Plan	CI Disclosure Date	EA Disclosure Date
Environmental & Social Impact Assessment (ESIA)	NA	NA
Environmental Management Plan (EMP)	NA	NA
Voluntary Resettlement Action Plan (V- RAP)	NA	NA
Process Framework for Restriction of Access to Natural Resources	NA	NA
Indigenous Peoples Plan (IPP)	NA	NA
Pest Management Plan (PMP)	NA	NA
Stakeholder Engagement Plan (SEP)	<i>Within 15 days of CI-GEF approval</i>	<i>Within 30 days of CI-GEF approval</i>
Gender Mainstreaming Plan (GMP)	<i>Within 15 days of CI-GEF approval</i>	<i>Within 30 days of CI-GEF approval</i>
Accountability and Grievance Mechanism	<i>Within 15 days of CI-GEF approval</i>	<i>Within 30 days of CI-GEF approval</i>

VI. APPROVALS

Signed and submitted by:		
	Name: Free de Koning Sr. Director Project Development & Implementation	Date: 2018-01-03
Approved by:		
	Name: Ian Kissoon Technical Advisor (Safeguard Manager)	Date: 2017-12-22

APPENDIX VI: Safeguard Compliance Plans

A: Gender Mainstreaming Plan

1. Project Description

Liberia is a signatory to the Paris Agreement of the UNFCCC that was established to enable the tracking, comparing and understanding of national commitments worldwide to address the climate change. The Capacity-building Initiative for Transparency (CBIT) initiative was introduced to support countries to establish or strengthen their in-house capacity to track progress on national commitments made under the Paris Agreement. Countries are required under the “transparency framework”, to regularly provide: (i) A national inventory of greenhouse gas emissions (by sources) and removals (by sinks) (ii) Information necessary to track progress toward achieving their Nationally Determined Contribution (NDC) (iii) Information related to climate change impacts and adaptation (iv) information on financial, technology transfer and capacity building support needed and received and (v) information on any support they provide to developing countries.

The Liberia CBIT project identifies 3 components through which to build national capacity and strengthen efforts to meet its national commitments while improving compliance to the global reporting requirements on transparency in Liberia; Component 1: Strengthen the capacity of national institutions to track NDC implementation and sustain transparency efforts over time; Component 2: Provide direct technical support to harmonize land use, agriculture, energy, transport and waste sectors data collection and reporting through training and assistance; and Component 3: Integrated Platform for Data Sharing and Policy Making. The UNFCCC acknowledges the significance of gender issues in addressing climate change, and this is reaffirmed with the COP 22 that stresses the need to give more prominence to gender issues. Areas for gender mainstreaming identified include; the composition of the COP teams, staffing of the national institutions, and local actions, and more recent is the emphasis on climate change data, including analysis and disaggregation of impacts, beneficiaries and interventions by gender.

1. State of gender in Liberia

Gender mainstreaming is a global strategy to bring gender issues into the mainstream of society and is established as a tool for promoting gender equality. The attainment of gender equality is not only seen as an end in itself and a human rights issue, but as a prerequisite for the achievement of the 2030 Agenda for Sustainable Development. Throughout Liberia, gender inequality varies according to age, status, income levels, region, rural/urban areas, and traditional culture. Women in Liberia in general have limited access to education, healthcare and land. While women lag behind in many socio-economic indicators compared to men, some progress has been observed for women. The Government of Liberia acknowledges the role and contribution of women to development through the National Gender Policy (NGP) 2017. The NGP policy objective is ‘to reduce and eliminate gender inequality, discrimination, exclusion, and marginalization, by addressing the needs and concerns of women, girls, men and boys. The NGP is aligned to the Vision 2030 and the Pro-poor Agenda/Agenda for Transformation development frameworks, with the National Gender Forum recognized as the main institutional mechanism to promote and advance gender mainstreaming in Liberia.

The Climate Change Gender Action Plan (cc:GAP) is premised on the NGP and provides for gender equality in Liberia’s climate change policies, programs, and interventions. The plan aims to have present equal opportunities to men and women to implement and benefit from mitigation and adaptation initiatives in combating climate change. The cc:GAP identifies six priority sectors for gender mainstreaming in climate change; Agriculture and food security, the Coasts, Forestry and the REDD initiative, Health, Water and Sanitation, and Energy.

The GEF recognizes gender equality as an important social goal in and of itself, with associated implications for the projects that receive GEF support. This GMP has been developed following guidance provided by GEF Gender Equality Plan and the CI-GEF Environmental and Social Management Framework (ESMF-v06). The Liberia CBIT GMP ensures that the project meets the CI-GEF Project Agency’s “Gender Mainstreaming Policy #8” and also responds to the policy aspiration in the NGP and related strategies such as the cc:GAP.

The GMP also provides assurance that gender issues have been mainstreamed throughout the project. The objective of this GMP is to outline actions that will be undertaken in the course of the project, and assures the progressive and efficient mainstreaming of gender across the different activities of the project.

2. Gender considerations and strategies adopted

(i) Project design stage (PPG)

Women were targeted for the stakeholder consultations through the interviews, meetings and the workshops in accordance with the CI-GEF PPG guidelines on stakeholder engagement. The first stakeholder consultation workshop registered a ratio of 1:18 of women to men attendance. The CBIT project implementation arrangements have provided for the involvement of at least one representative of the National Gender Forum (NGF) on the Project Steering Committee. The participation of NGF in the project planning and oversight through the PSC provides the opportunity to influence and provide guidance on gender mainstreaming aspects in line with the national gender policy and the CBIT Project GMP. The PPG stage also made reference to key gender literature (policy documents, strategies and reports) to inform the elaboration and mainstreaming of gender in the Project Document.

(ii) Project Implementation – Components and activities:

- **Component 1: Strengthen the capacity of national institutions to track NDC implementation and sustain transparency efforts over time:** Under this project component, working committees will be created, trainings and networking sessions conducted, stakeholder cooperation frameworks across institutions, and communication products developed. A range of gender indicators will be used to measure performance and delivery of this component: Number of women represented on the GHG Protocols committee; Number of women that benefit from the trainings and networking sessions organized annually; and the number of technical guidelines and cooperation frameworks developed under the project that takes due consideration of the gender dimensions. The target indicators are elaborated in the Gender Action Plan presented as Table 1A.
- **Component 2: Provide direct technical support to harmonize land use, agriculture, energy, transport and waste sectors data collection and reporting through training and assistance:** This component also involves capacity building and training activities, as well as preparation of NDC implementation plans for the reduction of emissions. The performance measure for gender mainstreaming for the capacity building activity is the number of men and women that benefit from the trainings. For the NDC implementation plans, attention will be given to the number of plans that incorporate women development aspects.
- **Component 3: Integrated Platform for Data Sharing and Policy Making:** Under this component, the different sectoral data sets will be aggregated into one format for upload to the Global CBIT Coordination Platform. The unit of measure is the number of CBIT Hubs that collect and use gender disaggregated data in this process of transmission. The other key activities under this component is the establishment of the Project Management Unit and setting up the project execution arrangements. The number of women employed as part of the project team, and number of women

organisations represented on the Project Steering Committee (PSC) are considered measures of performance under this component.

(iii) Monitoring and Evaluation

The following GEF minimum gender indicators have been used to determine the performance indicators across the 3 components of the CBIT Liberia project: 1. Number of men and women that participated in project activities (e.g. meetings, workshops, consultations); 2. Number of men and women that received benefits (e.g. training, employment, leadership roles, etc.) from the project; and 3. Number of strategies, plans and policies derived from the project that includes gender considerations. A Gender Action Matrix has been prepared as a result, highlighting the project components and activities earmarked for gender mainstreaming, related performance indicators and responsibility. The Action Plan is aligned to the Project Results Monitoring Plan (Appendix III).

Table 1A: Gender Action Plan

Component and Output Area	Activity	Performance/Target Indicators	Responsibility
<i>Component 1: Strengthen the capacity of national institutions to track NDC implementation and sustain transparency efforts over time</i>			
Output 1.1.1: Protocol and methodology for data collection across multiple sectors established	Meetings and workshops related on protocols development and gender disaggregated GHG data	No of gender institutions that attended <i>At least 3 gender institutions in attendance</i> # of men and women that participated annually <i>At least 20 of the 100 participants are women</i>	EPA and PMU in cooperation with National Gender Forum
	GHG Protocols Technical Committee established	# of men and women represented on the committee <i>At least 3 women represented on 12 members committee</i>	EPA and PMU in cooperation with academia and CSOs e.g ESAL
Output 1.2.1: Online system for collecting and managing all NDC information and data on transparency including GHG inventory in collaboration with EPA developed	System operational manual developed	No of tools that support integration of gender disaggregated in the NDC system <i>At least one operational manual in place</i>	EPA and PMU
Output 1.3.1. Training for at least 300 stakeholders over the life of the project to utilize the NDC transparency system and manage relevant data conducted	Trainings and exposure visits	# of men and women that receive training to utilize the NDC transparency system and manage relevant data <i>At least 90 women are trained of a total of 300</i>	EPA and PMU
Output 1.3.2. Three Training of Trainers workshops to deepen and broaden the knowledge of professionals working in climate	Training of Trainers workshops	# of men and women that receive training on transparency requirements	EPA and PMU

change on the transparency requirements conducted.		<i>At least 100 women are trained of a total of 300</i>	
Component 2: Provide direct technical support to harmonize land use, agriculture, energy, transport and waste sectors data collection and reporting through training and assistance			
Output 2.1.2 Implementation plans developed and at least 200 stakeholders trained to incorporate land use, agriculture, energy, transport and waste sectors into the NDC	Innovative strategies and implementation plans for reduction of emissions	# of strategies focused on women and development (empowerment and mainstreaming aspects) <i>At least 1 strategy/plan focused on women development</i>	EPA, PMU, NFG and Sector CBIT Hubs
	Trainings	# of men and women that received training on implementation of NDC strategies annually <i>At least 60 women are trained of a total of 200</i>	EPA and PMU
Component 3: Integrated Platform for Data Sharing and Policy Making			
Output 3.1.1 Data for GHG inventory and MRV system aggregated from different sources, and included in the Global CBIT Coordination Platform	Trainings	# of men and women that received training on the Global CBIT Coordination Platform annually <i>At least 8 of the 25 participants are women</i>	EPA and PMU
	Operationalization of the PMU and project execution arrangements	# of men and women in management and or leadership roles at the PMU <i>At least 1 of the 3 PMU management/technical staff is a woman</i> # of women organizations represented on PSC <i>At least one women organization on PSC</i>	EPA and PSC EPA
Output 3.1.2. National inventory of greenhouse gas emissions established and made publically available	Trainings	# of men and women that received training on policy and reporting policy results annually <i>At least 20 women are trained of a total of 60</i>	EPA and PMU
	Policy sensitization workshops and conferences	# of men and women that received information on GHG and transparency developments in Liberia <i>At least 30 of 90 participants are women</i>	EPA, PMU, NFG and Sector CBIT Hubs

B. STAKEHOLDER ENGAGEMENT PLAN

Introduction

The Stakeholder Engagement Plan (SEP) is prepared in response to GEF Policy #7 requirement. The preparation of the SEP is guided by the CI-GEF ESMF framework that provides for the following as the minimum stakeholder engagement indicators that the project is required to monitor and report on; **1. Number of government agencies, civil society organizations, private sector, Forest Dependent peoples and other stakeholder groups that have been involved in the project implementation phase on an annual basis;** **2. Number persons (sex disaggregated) that have been involved in project implementation phase (on an annual basis);** and **3. Number of engagement (e.g. meeting, workshops and consultations) with stakeholders.** In addition to responding to the GEF policy requirement, the SEP is intended to strengthen the stakeholder engagement processes that started with the PPG phase, and define modalities to build, strengthen and sustain the stakeholder engagement processes through the implementation of this project.

Stakeholder consultations during the PPG stage

The project development process involved technical consultations with stakeholders at two levels; (i) Internal consultations with the project executing team, particularly EPA and CI-Liberia, and (ii) the external consultations that targeted project beneficiaries such as the NDC sector institutions, academia, private sector and CSOs. The internal consultations process involved physical meetings between the executing partners, complemented with online interaction via emails, skype and telephone discussions. The engagements were aligned to the ProDoc development process and included identification of relevant and supportive literature, preparations for the external stakeholder workshops, and technical meetings to reflect on key elements of the project such as the stakeholder mapping, project execution arrangements, and development of the project budget.

Consultations with the external audience was structured and designed to respond to unanswered questions related to the project context and situation analysis, institutional capacity assessment and information on the baseline projects. The stakeholders were engaged through two consultative workshops. The first workshop held in April 2018 targeted the core project beneficiaries and these include the NDC sector institutions and institutions that have been active in providing GHG data to inform EPA's reporting to the UNFCCC. The second stakeholder workshop held in June 2018 was broader in focus and attracted the participation of non state actors involved in GHG data collection in relation to other projects. A range of data collection tools and approaches were used to generate the required data and information that supported the preparation of the Project Document.

SEP by Project Component area

Component 1: Strengthen the capacity of national institutions to track NDC implementation and sustain transparency efforts over time

For Outcomes 1.1 and 1.2, the category of stakeholders is primarily Government technical agencies (e.g NDC sector institutions, sector/technical working committees, etc). The number of institutions involved in the activities related to the production of GHG data management tools, protocols and related processes will be monitored and reported annually. The structure and mode of engagement is through the CBIT Sectoral Hubs defined in the project execution arrangement, and the Protocols Technical Committee. Under Outcome 1.3, the focus is on individual users of the NDC transparency system. The number of individuals trained and involved across the different institutions will be monitored and reported using sex

disaggregated data. Under Outcome 1.4, the number of stakeholder institutions targeted will be monitored and the mode of engagement includes trainings and MoUs.

Component 2: Provide direct technical support to harmonize land use, agriculture, energy, transport and waste sectors data collection and reporting through training and assistance

This component focuses on developing standardized approaches for measurement and reporting information on emissions across the NDC sectors, and preparation of NDC implementation plans. A number of institutions will be involved as technical experts in the processes. The project will also build capacities of the technical teams across the NDC sectors and the REDD+ initiative. The number of individuals engaged through training annually will be monitored and reported.

Component 3: Integrated Platform for Data Sharing and Policy Making

The component is premised on two main activities; The aggregation of the sectoral data and upload onto the Global CBIT coordination Platform, and the popularization of the NDC system. External partners such as the CBIT Secretariat will be involved in building the capacity of the NDC sectoral hubs to aggregate and upload the GHG data through training. Information on the number of individuals trained will be compiled and disaggregated by sex.

CBIT Stakeholders and engagement plan for the Liberia GHGI and MRV System

Stakeholders	Sector	Interests in the project	Stakeholder influence on the project	Project Effect (s) on stakeholders	Mode of engagement	Related component
1. State Actors						
Environmental Protection Agency of Liberia	Environment	Lead project executing agency To improve national and institutional capacities for cost effective reporting to the UNFCCC; Tracking NDC implementation; and Creating a solid and functional GHGI and MRV system for Liberia	Designated National Authority (DNA) for the Clean Development Mechanism (CDM); GEF Focal Point for Liberia; Climate change focal point to the UNFCCC; Houses the Climate Change Unit and the Environment Sector Working Group responsible for GHG inventory activities	Capacity built for effective and efficient GHG data management, governance, and improved UNFCCC reporting	<ul style="list-style-type: none"> • PSC Chair • Monthly and quarterly meetings, • Training workshops • Exposure trips 	1,2,3
Environmental Sector Working Group	Environment	Improve GHG data and information gathering and reporting	Direct technical support to EPA	Awareness created and capacity built	<ul style="list-style-type: none"> • PSC member • Member GHG Protocols Technical Committee (PTC) 	1,2,3
Forest Development Authority (FDA)	Forest	CBIT Hub Lead Harmonizing GHG data management protocols; Enhance stakeholder participation in REDD+ initiative	Sector lead (policy and technical); and custodian of the protected forests areas network	Access to other sector data, Harmonized reporting, Capacity built, REDD+ implementation	<ul style="list-style-type: none"> • PSC member • Member GHG PTC • Meetings • Training workshops • Exposure trips 	1,2,3
Liberia Institute of Statistics and Geo-Information Services (LISGIS)	Cross cutting	Improving data collection and harmonization	Responsible for collecting, managing, coordinating, supervising, evaluating, analyzing, disseminating and setting quality standards for statistical and associated geo-information for overall national socio-economic reconstruction and development.	Capacity built; Increased engagement in CC/transparency policy dialogue, Data sharing and harmonization	<ul style="list-style-type: none"> • PSC member • Member GHG PTC • Meetings • Training workshops • Exposure/learning trips 	1,2,3
Ministry of Finance and Development Planning (MFDP)	National budget oversight	Revival of the NCCSC and operational support	Chair NCCSC and Responsible for tracking and reporting on performance of the Low Carbon Development Strategy and Pro-poor Agenda/Agenda for Transformation.	Capacity built, NCCSC revived, improved access to policy information for decision making	<ul style="list-style-type: none"> • Meetings • Training workshops 	1,2,3

Stakeholders	Sector	Interests in the project	Stakeholder influence on the project	Project Effect (s) on stakeholders	Mode of engagement	Related component
National Climate Change Steering Committee (NCCSC)	Environment	Co-execution of awareness activities and national conference, Active participation in transparency activities and NDC policy implementation Support inter-ministerial coordination activities,	Brings together policymakers from different sectors to discuss, review and approve climate change mitigation and adaptation measures in Liberia.	Implement its mandate and support NDC implementation and CC policy	<ul style="list-style-type: none"> • PSC member • Meetings • Training and sensitization workshops • Exposure/learning trips 	1,2,3
REDD+ Structures: <i>Technical Working Group (TWG); REDD+ implementation Group (RIG), and REDD+ Implementation Task Force (RITF) under the RIG</i>	Forestry	Harmonization of protocols and methodologies; Increased interaction with NDC sectors; capacity building	Implementing a forestry GHGI and MRV system, capacity strengthened for forestry actors, and in position to attract additional resources towards future developments in GHG and MRV systems	Capacity built, cooperation with NDC sectors strengthened, REDD+ MRV system integrated into the NDC system	<ul style="list-style-type: none"> • Meetings • Training workshops • Member FDA CBIT Hub • Member GHG PTC 	1,2,3
Ministry of Agriculture	Agriculture	CBIT Hub Lead Implement adaptation and mitigation projects in agriculture	Sector lead (policy and technical), and Implementing adaptation projects	Capacity built, access to up to date data management skills, knowledge and equipment, improved quality of sectoral data, share GHG data and knowledge, meaningful sectoral contribution to policy and decision making	<ul style="list-style-type: none"> • PSC member • Meetings • Training and sensitization workshops • Exposure trips • Member GHG PTC 	1,2,3
Ministry of Transport	Transport	CBIT Hub Lead Increase participation in NDC implementation	Sector lead (policy and technical); and Implementing climate change projects e.g the weather data initiative			
Ministry of Mines and Energy	Energy	CBIT Hub Lead Implement Energy Policy, streamline projects to respond to NDC implementation, and GHG data harmonization	Sector lead (policy and technical), and implementing mitigation projects			
Monrovia City Corporation	Waste	CBIT Hub Lead	Lead technical agency on waste			

Stakeholders	Sector	Interests in the project	Stakeholder influence on the project	Project Effect (s) on stakeholders	Mode of engagement	Related component
Monrovia CC (Cont)	Waste	Track NDC implementation, Access to information and technologies on waste management	Source of emissions data			1,2,3
Liberia's Rural and Renewable Energy Agency (RREA)	Energy	Track contributions to NDC	Source of data and information	Capacity built, and share GHG data	<ul style="list-style-type: none"> Meetings Training and sensitization workshops 	1,2,3
Liberia Petroleum Refining Company		Monitor emissions from petroleum products	Source of emissions data	Increased participation in transparency activity, capacity built		1,2,3
National Energy Committee Energy Sector Working Group		Implementation of the Energy Policy	Technical committee providing policy guidance	Capacity built		1,2,3
National Gender Forum	Cross cutting	Support to mainstreaming gender in climate change and transparency activities	Recognized as the national machinery to enhance gender mainstreaming	Awareness created, capacity built, increased attention to gender dimension in CC and transparency	<ul style="list-style-type: none"> Member PSC, Training and sensitization workshops 	1,2,3
Local Governments	Cross cutting	Implement adaptation and mitigation projects with co-benefits, contribute to and monitor NDC implementation	Translating environment policy priorities at lower government level Potential role in coordinating primary data collection activities	Awareness created, increased participation in environment and CC decision making	<ul style="list-style-type: none"> Training and sensitization Workshops 	1,2
Private sector						
National Charcoal Union of Liberia (NACUL)	Energy	Information and capacity building	Source of GHG data (<i>tracking biomass /production and emissions from wood</i>)	Awareness created, Capacity built, participate transparency activities	<ul style="list-style-type: none"> Sensitization workshops, Trainings Meetings Participate in field pre-test for protocols 	1,2
Liberia Chainsaw & Timber Dealers Union			Source of biomass data			
Firestone Sime Dabye	Agriculture	Information and capacity building	Data on sources of emissions in the agriculture sector			

Stakeholders	Sector	Interests in the project	Stakeholder influence on the project	Project Effect (s) on stakeholders	Mode of engagement	Related component
NC Sanitor	Energy	Tracking emissions and information on implementation of NDCs	Data source	Awareness created, Capacity built, participate transparency activities	Member GHG PTC	1,2
3. Academia						
University of Liberia	Cross-cutting	Improve academic programming on climate change and transparency requirements	Recognized for trainings on environment and climate change	Capacity built, Knowledge on transparency requirements	Sensitization and training workshops	1,2
Forestry Training Institute (FTI)	Forestry	Knowledge on transparency requirements	Recognized for trainings in forestry	Awareness created and capacity built	Trainings and workshops	1,2
Cuttington University	Cross cutting	Improve academic programming on climate change and transparency requirements	Recognized for trainings on environment and climate change	Capacity built, Knowledge on transparency requirements	workshops and trainings	1,2
4. NGOs and grassroots organizations						
Environmental Science Association of Liberia (ESAL)	Environment	Access to information on transparency requirements, and capacity building	Readily available pool of experts for engagement in project delivery and to build the framework for the sustenance of transparency efforts from the CBIT project	Awareness created and capacity built	Meetings Trainings and workshops	1,2
NGO Coalition						
Sustainable Development Initiative (SDI)	Forest	Capacity building in data collection, management and national reporting	Actively involved in forestry GHG data collection and management activities, and with direct access to communities of forest dependent persons	Strengthened networks with forest dependent communities, Capacity built,	Meetings Sensitization and training workshops	1,2
Society for Environmental Conservation (SEC)	Energy	Information and capacity building	Actively engaged in implementation of mitigation projects, source for emissions data	Capacity building		1,2
Liberia Oil and Gas Initiative (LOGI)	Energy	Integrity, transparency and accountability in the oil and gas sector Liberia	Activist and engaging public and private sector	Awareness raising and improving dialogue and collaboration with public sector		1,2

Youth Climate Change Initiative (YCCI)	Environment	Information and networks	Mainstreaming gender aspects	Awareness and capacity building	Workshops and trainings	1,2
-Community Forest Forums (CFFs) and -Community Forest Development Committees (CFDCs)	Forestry	Information, capacity building, networks and participate in decision making processes	Representatives of the forest dependent communities	Awareness, integration into transparency activities through NCCSC membership		1

C. Accountability and Grievance Mechanism (AGM)

Introduction:

CI-Liberia will ensure that the stakeholders are well informed, clearly understand the contents of the Accountability and Grievance Mechanism (AGM) throughout the implementation of the project at no cost to them. Potentially affected stakeholders will be informed by PMU about available entry points for submitting their concerns, inquiries, complaints or seeking clarifications regarding the implementation of the CBIT project using several methods. These include information booths, Stakeholder liaison officer to schedule regular visits to stakeholders, phone hotlines and open-door policies at PMU. Awareness creation of the AGM will be communicated early to the potentially affected stakeholders under the Information disclosure activity of the stakeholder engagement process. Where needed, CI and EPA will strengthen the Implementing Partners' capacities to address Project-related grievances.

Accountability and Grievance by Project Component area

Component 1

Under this component, Outcomes 1.3 and 1.4 will entail stakeholder engagement and defining roles and responsibilities for implementation of the NDC. The diversity of actors involved at this stage may create anxiety and the need for clear modes of engagement for each activity and the definition of roles and responsibilities. Grievances arising from the sectors will be received by the Focal Points at the CBIT Hubs and EPA and screened for eligibility and assessed based on the CI-GEF guidelines.

Component 2

Component 2 involves capacity building for a wide spectrum of stakeholders and provision of GHG equipment. Grievances may arise from the selection of participants by the CBIT Hubs for the trainings and exposure trips outside the country, with some level of dissatisfaction registered by beneficiaries. In this case the CBIT secretariat Project Manager will receive and assess the grievance for redress in accordance with the CI-GEF guidelines.

Component 3

This component will involve aggregation of sectoral data, some of which will come from non-state actors. Issues of sharing data may arise because key stakeholder groups are not contacted, or with the ways of information-sharing. The PSC will receive the grievance and advise/address based on the policy context such as the Freedom of Information Act and guided by the CI-GEF guidelines.

ACCOUNTABILITY AND GRIEVANCE MECHANISM (AGM)	
DEFINITIONS	
Grievance	An issue, concern, problem or claim (perceived or actual) that an individual or community group wants addressed by the company in a formal manner (e.g. sharing of MRV data).
Grievance Mechanism	Refers to formalised ways to accept, assess, resolve or transform complaints pertaining to the performance or behaviour of the project or its staff, or stakeholders. This includes adverse economic, environmental and social impacts.
Internal stakeholders	Groups or individuals within the project who work directly within the project, such as staff of the PMU and the CBIT Sectoral Hubs, and members the Project Steering Committee (PSC) and the GHG Technical Committee.
External stakeholders	Groups or individuals outside the project who are not directly employed or contracted by the CBIT project but are affected in some way from the decisions of the project, such as the

	Grantees (the sectoral institutions, government agencies, universities, private sector, community organisations and CSOs).
DESCRIPTION	<p>Grievance Redress Mechanism is recognised as a critical tool for promoting transparency and accountability in projects.</p> <p>The grievance mechanism policy is a system by which inquiries, complaints or clarifications regarding the project are received, responded to, problems with implementation are resolved, and complaints and grievances are addressed efficiently and effectively. This policy, therefore, will guide the CBIT project and will be adhered to during the project life.</p> <p>The following questions will help the teams assess whether the Grievance Redress Mechanism (GRM) associated with the CBIT project is functioning up to its full potential. If the answer to any of these questions is no, PMU should consider improving the project’s GRM.</p> <ul style="list-style-type: none"> ▪ does the project have clear, formal, and transparent internal mechanisms (e.g. a grievance redress unit, grievance redress committees, designated grievance redress officers) and rules for addressing grievances? ▪ do project officials responsible for grievance redress have the authority to take or demand remedial action? ▪ are officials responsible for grievance redress obliged to take action on all grievances? ▪ do project-affected people feel that they can lodge grievances without fear of retaliation? ▪ are project beneficiaries aware of their right to file a grievance and of the grievance redress process in general? ▪ are there internal processes in place to record, track, and monitor the grievances and the action taken on them? ▪ does the GRM provide timely feedback (written or otherwise) to the petitioner on actions taken? ▪ is there an appeal process in place that GRM users can access if they are not satisfied with how their grievance has been resolved? <p>An effective GRMs has the following characteristics:</p> <ul style="list-style-type: none"> ▪ Being available to all stakeholders for them to use; ▪ multiple grievance uptake locations and multiple channels for receiving grievances; ▪ fixed service standards for grievance resolution; ▪ clear processing guidelines; and ▪ an effective and timely grievance response system to inform complainants of the action taken <p>NDC transparency system Stakeholders must be made aware of existence of GRM through dissemination activities such as project brochures, emails, website publications and through verbal interactions during the CBIT project deliberations and stakeholder consultation workshops.</p>
PURPOSE	<p>The AGM is meant to have several purposes during the project implementation as outlined below:</p> <ul style="list-style-type: none"> • Responsive to the needs of beneficiaries and to address and resolve their grievances; • Serving as a conduit for soliciting inquiries, inviting suggestions, and increasing stakeholder participation; • Collecting information that can be used to improve operational performance; • Enhancing the project’s legitimacy among stakeholders; • Promoting transparency and accountability; • Deterring fraud and corruption and mitigate project risks.
	<p>By having the policy in place, the following advantages will accrue for the project:</p> <ul style="list-style-type: none"> • CBIT project staff will have a chance to gather practical suggestions/feedback that allows them to be more accountable, transparent, and responsive to beneficiaries during project implementation.

ADVANTAGES	<ul style="list-style-type: none"> • Trust is built with government and other project stakeholders when all grievances are resolved and the process on how the grievances were addressed are made public and available to all. • Data collected based on grievances received helps the project management with insights on the effectiveness of the implementation. • Proper and effective GMP will help in identifying problems before they become serious or widespread within the project and affect its implementation.
RISKS	<p>The following are possible risks associated with the GRM:</p> <ul style="list-style-type: none"> • If complaints and queries are not responded to in a timely manner and fails to produce results, beneficiaries or stakeholders may not take the GRM seriously and might not be willing to provide their feedback in future. • Without proper access to and means of providing their grievances, some stakeholders might face numerous barriers in accessing mechanisms for providing their grievances. Stakeholders may not voice grievances because of lack knowledge about their rights, mistrust government and fear retribution, transaction costs and cultural constraints. • Without providing enough feedback on how their grievances have been dealt with and the measures the project have put in place, stakeholders can sabotage the project.
GRM Framework	<p>The structure that GRMs will take has been adapted from World Bank guideline and its recommended that the grievance redress system be centralized for easy of addressing grievances. The GRM will follow cascade organizational, principles, people, processes and analysis.</p> <p>Organizational Commitment</p> <p>The Transparency project’s management and staff recognize and value the grievance process as a means of strengthening public trust, improving public relations, and enhancing accountability and transparency. Grievance redress functions will be integrated into the project’s core activities and project staffs’ job descriptions. Regular review of grievances data and trends will be conducted at project management meetings.</p> <p>Principles</p> <p>The following six core principles of grievance mechanism will be used to guide the practices:</p> <ul style="list-style-type: none"> • Fairness. Grievances are treated confidentially, assessed impartially, and handled transparently. • Objectiveness and independence. The GRM will operates independently of all interested parties to guarantee fair, objective, and impartial treatment to each case. GRM officials have adequate means and powers to investigate grievances and their decisions will be receiving the support of senior officials. • Simplicity and accessibility. Procedures to file grievances and seek action will be kept simple enough for project stakeholders and beneficiaries to easily understand them. The following means for filing a grievance will be followed; <ul style="list-style-type: none"> i.) Dedicated telephone number (preferably toll-free)- stakeholders can call the CBIT Secretariat office on +231886518635 and speak to Stakeholder liaison Officer to report their issues ii.) Dedicated e-mail address- grievances can be sent to natpolo2000@yahoo.com or nblama@epa.gov.lr iii.) Postal address (with contact person outlined) – grievances can be sent to: Stakeholder Liaison Officer, Environmental Protection Agency of Liberia (EPA) 4th Street, Tubman Boulevard, Sinkor P.O. Box 4024 Monrovia, Liberia iv.) Face to face - stakeholders can voice their grievance to any PMU staff who will then forward to the correct office for recording v.) Grievance to be done either in English or local language and GRM staff to translate accordingly vi.) No standard form for reporting or filing grievance

	<ul style="list-style-type: none"> • Responsiveness and efficiency. The CBIT project will develop specified timelines for responding to grievances received. These timelines will form part of the monitoring and evaluation performance of the project. • Speed and proportionality. All grievances, simple or complex, are addressed and resolved as quickly as possible. The action taken on the grievance or suggestion is swift, decisive, and constructive. • Participatory and social inclusion. The CBIT project will encourage people and all stakeholders to provide their feedback on the project. Special attention is given to ensure that stakeholders, including the non-state actors and those with special needs, can access the GRM. • People <i>The CBIT project will train some staff who will be tasked with addressing the grievances so that they can effectively carry out their roles. The training will cover, gathering feedback, analysing them, discussing them with management and providing feedback.</i> <p>Processes <i>Grievance redress processes play an important role in CBIT project activities and by following it, it will help in smoothing out the grievances being addressed.</i></p> <p>Analysis <i>Project management will regularly analyse reports and other monitoring and evaluation data on grievances generated by the GRM teams. The management will then make appropriate project decisions based on data received.</i></p>						
<p>GMP STEPS</p>	<p>The grievance redress process to be followed by the project will comprise six steps as outlined below:</p> <p>Uptake The project stage will involve the project receiving the grievances through email, SMS, telephone, postal or office report and documenting them. The uptake stage will be centralized for ease of operations and it's recommended that the CBIT Secretariat be responsible for hosting this process.</p> <p>Action: <i>Receive grievance and complete a Grievance Log Form (see Appendix 1) and pass it to stakeholder liaison officer for processing.</i></p> <p>Sorting and Processing At this stage, all grievances received are processed, categorised, assigned priority and routed to the appropriate entity. There will be a standardized system for grievances logging. All grievances will be filed systematically in hard copy with a soft copy file accompanying it.</p> <p>Some of them will require simple explanations which can be done instantly and if the person raising the grievance is satisfied, the grievance is documented and closed. For those that require more extensive investigations, they will be reassigned to actors at higher levels of management. Top management of the project will be responsible for monitoring the complaints- handling performance of grievances.</p> <p>Action: <i>The stakeholder liaison officer is responsible for assigning a project staff officer a grievance to liaise with the external stakeholder/s and work on a resolution. Grievances will be screened depending the level of severity in order to determine which staff will address it and how the grievance is approached as shown below:</i></p> <table border="1" data-bbox="430 1816 1404 1879"> <thead> <tr> <th>Category</th> <th>Description</th> <th>Project staff officer</th> </tr> </thead> <tbody> <tr> <td></td> <td>When an answer can be provided</td> <td>Stakeholder liaison Officer</td> </tr> </tbody> </table>	Category	Description	Project staff officer		When an answer can be provided	Stakeholder liaison Officer
Category	Description	Project staff officer					
	When an answer can be provided	Stakeholder liaison Officer					

Level 1	immediately	
Level 2	One off grievances that will not affect the reputation of project.	Supervisor level or above
Level 3	Repeated, extensive and high profile grievances that may jeopardise the reputation of the project	CBIT Secretariat level

Acknowledgment and Follow-up

Upon receiving the complaint, the GRM should acknowledge its receipt in a communication that outlines the grievance process; provides contact details and, if possible, the name of the contact person who is responsible for handling the grievance; and notes how long it is likely to take to resolve the grievance. Complainants should then receive periodic updates on the status of their grievances. It's recommended that the all complaints be acted upon in less than 1 month.

***Action:** A grievance will be acknowledged, by the project staff officer within five working days of a grievance being submitted. Communication will be made either verbally or in written form. The acknowledgement of a grievance should include a summary of the grievance, method that will be taken to resolve the grievance and an estimated timeframe in which the grievance will be resolved. If required, the acknowledgment provides an opportunity to ask for any additional information or to clarify any issues. The maximum timeframe for resolving any grievance which has been reported is one month. In cases where the time frame is not met, reasons for not resolving the grievance should be provided to the complainant and the matter reported to grievance committee.*

Verification, investigation, and action

Upon receiving the grievance, the issue will be investigated by gathering more information about the issue to determine its validity and resolving the grievance. The merit of grievances should be judged objectively based on the design of the project and its expected output.

For those grievances that are straightforward (e.g. queries, suggestions) they will be resolved quickly by contacting the complainant and informing them about the outcome of the grievance. CBIT Project staff should ensure that investigators are neutral and do not have any stake in the outcome of the investigation.

***Action:** The grievance owner is responsible for investigating the grievance. The investigation may require site visits, consulting staff, contacting external stakeholders etc. Records of meetings, discussions and activities all need to be recorded during the investigation. Information gathered during the investigation will be analysed and will assist in determining how the grievance is handled and what steps need to be taken in order to resolve the grievance.*

Monitoring and evaluation

In this stage, grievance reported are tracked and assessed on the extent to which progress in resolving them is made. The tracking of the grievances is meant to ensure that the reported cases are dealt in timely manner and resolved in order to that the project operations is not affected.

Evaluation of grievances involves analysing grievance data and using it to make policy and/or process changes to minimise similar grievances in the future. Therefore, reports on grievances data and trends (e.g. average time to resolve grievances, percentage of complainants satisfied with action taken, number of grievances resolved at first point of contact) should be submitted regularly.

Senior project management should monitor grievance resolution data and grievance trends in their

	<p>progress review meetings and should randomly call complainants from different areas and groups to get feed- back on whether the GRM is functioning effectively.</p> <p>Action: <i>The project staff will make contact with the external stakeholder after the grievance is resolved to determine if the resolution of the grievance was success or not. This should be done within a reasonable period of time.</i></p> <p><i>The grievance committee will receive quarterly updates on stakeholder grievances from Stakeholder Liaison Officer. Information outlining the number of grievances, time to resolution and outcomes of grievances will be communicated. The quarterly updates should include the following:</i></p> <ul style="list-style-type: none"> <i>i.) Number of conflict and complaint cases reported to the project’s Accountability and Grievance Mechanism</i> <i>ii.) Percentage of conflict and complaint cases reported to the project’s Accountability and Grievance Mechanism that have been resolved</i> <i>iii.) Number of grievances which were reported and resolved</i> <i>iv.) Number of grievances which was not been resolved within the mandatory timeframe of 30 days and reasons as to why they grievance was not resolved in time</i> <p>Provide Feedback</p> <p>The final step involves informing those who raised the complaint and the public at large about the issues which were brought up, results of their investigations and the actions taken. This process will ensure that trust is increased or maintained.</p> <p>The feedback can be provided by contacting the complainant directly (if his or her identity is known) and/or posting the results of cases in internal memos or leaflets which are sent to stakeholders.</p> <p>The project should also inform GRM users about their right to an appeal if they are dissatisfied with the decision.</p> <p>Action: <i>Stakeholder Liaison Officer will contact stakeholders who have raised grievances and inform them about the outcome of their grievances within a month</i></p> <p>Storing of Grievances</p> <p>All records, including grievance forms, investigation notes, interviews and minutes of meetings will be securely filed in CBIT Secretariat office to ensure privacy and confidentiality is maintained for all parties involved.</p>
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Roles and Responsibilities	
Position Title	Responsibility
Stakeholder Liaison Officer	Receive grievances and assign a grievance owner. Makes sure the grievance mechanism procedure is being adhered to and followed correctly. Maintains grievance register and monitor any correspondence. Monitor grievances/trends over time and report findings to the Sustainability Committee. Raise internal awareness of the grievance mechanism among employees and contractors.
Project Staff Officer (grievance owner)	Project staff who has been assigned the responsibility to investigate the grievance and liaising with the external stakeholder/s. Developing resolutions and actions to rectify any issues. Follow up and track progress of grievance. Document any interactions with external stakeholders.
Employees	Receive grievances in person. Report grievance to the Stakeholder Liaison Officer by lodging the Grievance Log Form. May provide information and assistance in developing a response and close out of a grievance.

Accountability and Grievance Compliance Mechanism

Compliance to safeguards is important because it could lead to improving the outcomes of the CBIT project activities. The grievances are likely to differ by component.

As a first step, grievances should be received by the designated office, who will be required to respond to them in writing within 15 calendar days of receipt. Claims should be filed, included in project monitoring, and a full copy of the grievance must in turn be forwarded to the CBIT Secretariat. If the claimant is not satisfied with the response, the grievance may be submitted to Conservation International who will respond within 15 calendar days of receipt, and claims will be filed and included in project monitoring. Grievances to CI should be submitted as follows:

- i.) Dedicated GCO office and the ethics hotline – aggrieved stakeholders can call the on **+231880987581** and speak to GCO Officer to report their issues;
- ii.) Dedicated e-mail address - grievances can be sent to, **pmulbah@conservation.org** or **pgmulbah.sads04@gmail.com**
- iii.) Postal address (Dr. Peter Mulbah) House#1 Johnson Compound, Congo Town, Tubman Boulevard, Adjacent to Musu’s Spot Opposite Total Filling Station P.O. Box 2074, Monrovia, Liberia

If this process does not result in resolution of the grievance, the grievant may file a claim through CI’s EthicsPoint Hotline at <https://secure.ethicspoint.com>

Through EthicsPoint, CI will respond within 15 calendar days of receipt, and claims will be filed and included in project monitoring processes.

Alternatively, the grievant may file a claim with the Director of Compliance (DOC) who is responsible for the CI Accountability and Grievance Mechanism and who can be reached at:

Mailing address:	Director of Compliance Conservation International 2011 Crystal Drive, Suite 500 Arlington, VA 22202, USA.
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APPENDIX VII: Detailed Project Budget

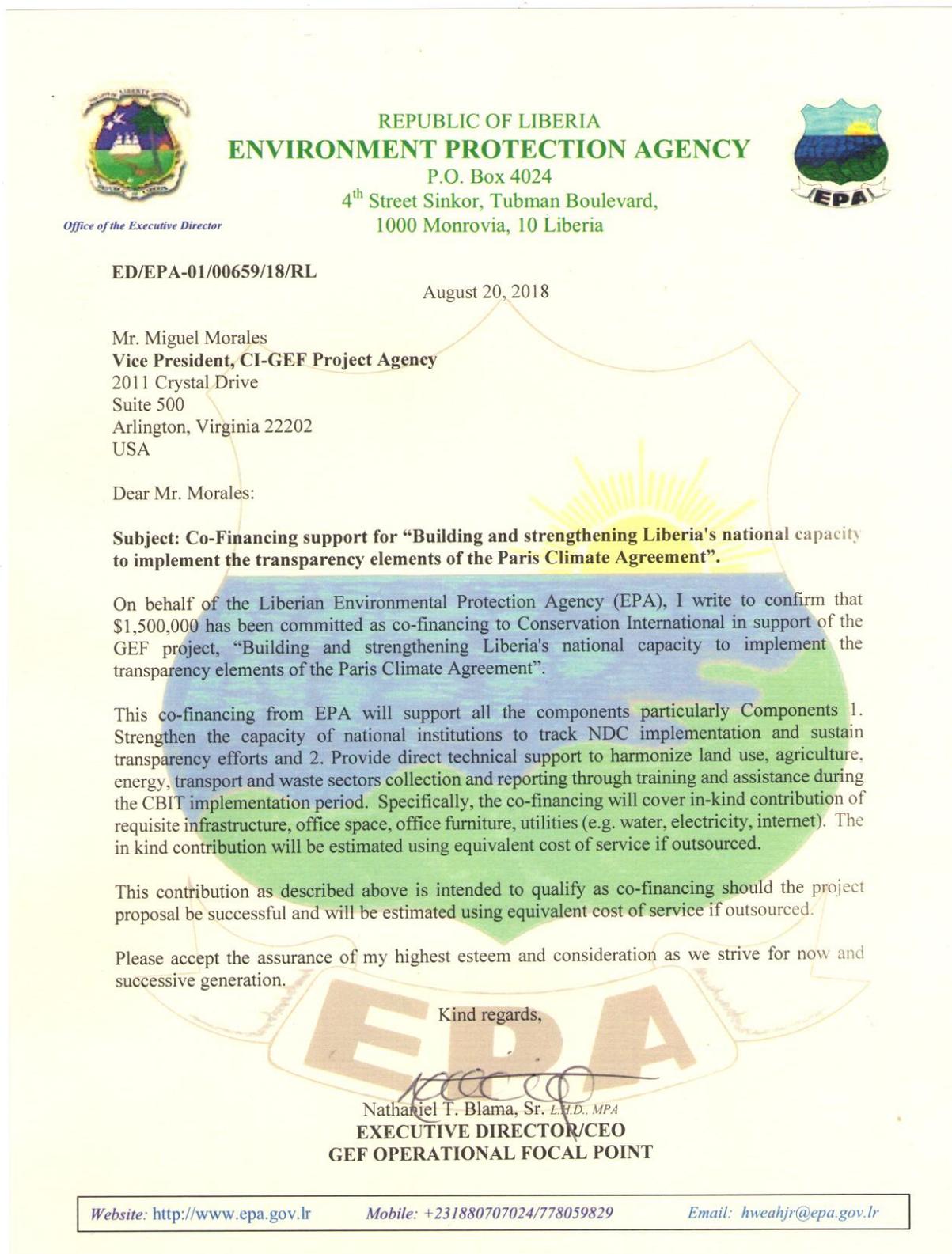
RPT Category	Comments/Justification	C1	C2	C3	PMC	Grand Total	Amount Year 1	Amount Year 2
01 Salaries & benefits	Deputy Country Director/Policy Expert (PGM)	12,532.25		30,927.53		43,459.78	27,849.44	15,610.34
	project implementation	12,732.09	6,366.05	35,013.26	19,098.14	73,209.54	35,452.55	37,756.99
	Country Director (JDA)/Overall Strategic Oversight			16,786.15		16,786.15	10,005.29	6,780.86
	Technical Director (GWI)/Technical backstopping/Oversight				22,412.55	22,412.55	13,244.23	9,168.32
	Finance Coordinator/finance support to the Policy Center			1,602.24		1,602.24	789.28	812.96
	GHG Coordinator - TBH	16,873.35		22,150.06		39,023.41	22,020.68	17,002.73
	Capacity Development Coordinator - TBH	16,873.35		22,150.06		39,023.41	22,020.68	17,002.73
	Sr. Director Climate Policy/Capacity Building Specialist			16,151.60		16,151.60	9,576.05	6,575.55
	Oversight and contract management				37,249.59	37,249.59	21,783.39	15,466.20
	manage the day to day financial operations under the GEF CBIT	12,011.48	22,030.68	14,273.51	8,678.17	56,993.84	32,369.73	24,624.11
	Country Director (JDA)/Overall Strategic Oversight: Income tax			2,316.25		2,316.25	1,380.59	935.66
01 Salaries & benefits Total		71,022.52	28,396.73	161,370.66	87,438.45	348,228.36	196,491.91	151,736.45
02 Professional services	Audit fees				4,060.00	4,060.00	2,000.00	2,060.00
	each post =\$400 per position	1,600.00				1,600.00	1,600.00	-
	Project Evaluation			18,540.00		18,540.00	-	18,540.00
	Protocol Consultancy (Technical Facilitator (LOE 15 days) and	24,192.00		25,000.00		49,192.00	49,192.00	-
	Assessment and Compliance Guidelines) oly fees included for	17,500.00				17,500.00	17,500.00	-
	development of Communication strategy (cost includes	19,742.00				19,742.00	19,742.00	-
	design expert (Data collection, analysis and system design) and	35,000.00				35,000.00	-	35,000.00
	equipped to support and utilize the NDC system (5 consultants	50,000.00				50,000.00	50,000.00	-
	days/over 10 months) includes cost for 3 trips to Liberia		51,935.17			51,935.17	27,878.00	24,057.17
	and guidelines (national consultant; only fees included)	10,000.00				10,000.00	10,000.00	-
	materials - TOT training (National consultant- only fees	10,000.00				10,000.00	10,000.00	-
	the REDD+ MRV system and compile and document the		16,439.00			16,439.00	16,439.00	-
	(Consultant to conduct Participatory capacity assessment of the		20,000.00			20,000.00	-	20,000.00
	Innovative and practical strategies for emissions reduction		2,000.00			2,000.00	2,000.00	-
	implementation plans and facilitating training on the plan -		12,000.00			12,000.00	12,000.00	-
	Mechanisms for GHG data aggregation (2 trips planned -			29,104.00		29,104.00	29,104.00	-
02 Professional services Total		168,034.00	102,374.17	72,644.00	4,060.00	347,112.17	247,455.00	99,657.17

03 Travel, meetings, and events	Fuel and vehicle maintenance cost			7,726.50		7,726.50	5,100.00	2,626.50
	Carbon Offset			70.47		70.47	69.43	1.04
	of hotel, meals and fuel)	10,500.00				10,500.00	10,500.00	-
	(assumed Kenya) - include cost of airtickets, hotel, meals, visa, days - includes hotel cost, meals and car rental and fuel)	3,742.00				3,742.00	3,742.00	-
	Technical assistance to EPA and sectors to input GHG data into and taxi for one CI staff)	3,200.00				3,200.00	3,200.00	-
	Kenya)- includes airticket, hotel, per diem, visa and taxi for one hall rental, stationery and transportation)			2,500.00		2,500.00	2,500.00	-
	transportation for 15 persons/5 meetings days) - includes cost of accommodation, meals, transportation, meetings - includes cost of meals, hall rental and transportation			10,649.38		10,649.38	5,246.00	5,403.38
	Committee) - Quarterly - includes cost of meals, hall rental and participants - ncludes cost of meals, hall rental, stationery and meals and transportation	3,766.00				3,766.00	-	3,766.00
	meals and transportation	3,600.00				3,600.00	3,600.00	-
	includes cost of meals, venue hire and transportation	3,000.00				3,000.00	3,000.00	-
	includes cost of meals, venue hire and transportation	7,000.00				7,000.00	7,000.00	-
	cost of meals, venue hire and transportation	3,000.00				3,000.00	3,000.00	-
	meeting - 30 participants includes cost of meals, stationery, trainings every Qtr over 4 Qtrs) includes cost of meals, aggregation - 25 participants - includes cost of meals, cost of meals, venue hire and transportation	3,636.00				3,636.00	2,400.00	1,236.00
	stationery, venue hire and transportation	2,300.00				2,300.00	2,300.00	-
	sustainability plan) - 15 persons includes cost of meals, venue responsibilities - 40 persons/2 days includes cost of meals, meals, stationery, venue hire and transportation	1,000.00				1,000.00	1,000.00	-
	persons includes cost of meals, stationery, venue hire and meals, stationery, venue hire and transportation and media	400.00				400.00	400.00	-
	persons includes cost of meals, stationery, venue hire and cost of meals, stationery, venue hire and transportation	1,400.00				1,400.00	1,400.00	-
	10 persons - includes cost of meals, stationery, venue hire and meals, stationery, venue hire and transportation	2,800.00				2,800.00	2,800.00	-
	meetings - - includes cost of meals, stationery, venue hire and 15 persons/ 3 meetings - includes cost of meals, stationery,	7,000.00				7,000.00	7,000.00	-
	Capacity assessment of the NDC sectors - 15 persons/2 days per persons/2 days per NDC Sector - includes cost of meals,	1,500.00				1,500.00	1,500.00	-
	persons- includes cost of meals, stationery, venue hire and days training/5 NDC sectors - includes cost of meals, stationery,	2,300.00				2,300.00	2,300.00	-
		5,700.00				5,700.00	5,700.00	-
		1,500.00				1,500.00	1,500.00	-
		3,000.00				3,000.00	3,000.00	-
			1,000.00			1,000.00	1,000.00	-
			750.00			750.00	750.00	-
			2,250.00			2,250.00	2,250.00	-
			2,925.00			2,925.00	2,925.00	-
			9,750.00			9,750.00	9,750.00	-
			9,750.00			9,750.00	9,750.00	-
			1,950.00			1,950.00	1,950.00	-
			26,247.90			26,247.90	12,930.00	13,317.90

	Mechanisms for GHG data aggregation - 5 meeting/15 persons -			4,875.00		4,875.00	4,875.00	-
	two day sessions includes cost of meals, stationery, venue hire			10,260.00		10,260.00	10,260.00	-
	sectors to input GHG data into the CBIT CP Meals during the			7,500.00		7,500.00	7,500.00	-
	document map data flows - 15 persons per sector/ 2 meetings			9,500.00		9,500.00	9,500.00	-
	Sector/ 2 meeting per sector includes cost of meals, stationery,			9,500.00		9,500.00	9,500.00	-
	meals, stationery, venue hire and transportation			3,400.00		3,400.00	3,400.00	-
	includes cost of meals, stationery, venue hire and			4,000.00		4,000.00	4,000.00	-
	includes cost of meals, stationery, venue hire and			6,600.24		6,600.24	-	6,600.24
	transportation)				4,484.40	4,484.40	2,960.00	1,524.40
	cost of meals and transportation)				6,181.20	6,181.20	4,080.00	2,101.20
	to Liberia, hotel, per diem, visa and taxi			4,202.00		4,202.00	4,202.00	-
03	Travel, meetings, and							
	events Total	124,484.00	54,622.90	80,783.59	10,665.60	270,556.09	215,439.43	55,116.66
08	Other expenses							
	Production/publication of guidelines	400.00				400.00	400.00	-
	Production/publication of Communication Strategy	15,000.00				15,000.00	15,000.00	-
	measuring results related to the land use, agriculture, energy,		2,521.00			2,521.00	2,521.00	-
	Printing of the GHG protocols - 25 copies estimated at \$50	1,250.00				1,250.00	1,250.00	-
	estimated at \$50	1,250.00				1,250.00	1,250.00	-
	Production of materials (booklets) - estimated at \$50	250.00				250.00	250.00	-
08	Other expenses Total	18,150.00	2,521.00			20,671.00	20,671.00	-
07	External grants							
	equipment (to detail later)	84,000.00				84,000.00	84,000.00	-
	institutions equipped to support and utilize the NDC system	50,000.00				50,000.00	50,000.00	-
	\$3k; printer \$1k, Desk \$2k)	6,000.00				6,000.00	6,000.00	-
	operations - 3mbps@ \$450 monthly			24,300.00		24,300.00	16,200.00	8,100.00
	communication) - 6 focal point person (Internet and			27,000.00		27,000.00	18,000.00	9,000.00
	(Monrovia to Bonn, Germany)			11,664.00		11,664.00	5,746.00	5,918.00
	(assumed Kenya) - 10 persons from 5 NDC Sectors (Monrovia to	36,320.00				36,320.00	-	36,320.00
	Capacity building grant to EPA	20,000.00				20,000.00	10,000.00	10,000.00
07	External grants Total	196,320.00		62,964.00		259,284.00	189,946.00	69,338.00
05	Equipment & furniture							
	Manager, GHG Coordinator and Capacity Development	8000				8000	8,000.00	-
	Printer, copier and scanner			1500		1500	1,500.00	-
	Office Desk and chairs - 4 units			4000		4000	4,000.00	-
05	Equipment & furniture							
	Total	8000		5500		13500	13,500.00	-
09	Shared Office Costs							
	CI Liberia SOC	19012.8	7454.21	35863.07	18604.52	80934.6	44,921.34	36,013.28
09	Shared Office Costs Total	19012.8	7454.21	35863.07	18604.52	80934.6	44,921.34	36,013.28
04	Occupancy							
	Policy Rent Allocation			1027.6		1027.6	595.00	432.60
	Building Specialist			1723.5	1458	3181.5	3,181.50	-
04	Occupancy Total			2751.1	1458	4209.1	3,776.50	432.60
	Grand Total	605,023.32	195,369.01	421,876.42	122,226.57	1,344,495.32	932,201.18	412,294.16

APPENDIX VIII: Co-financing Commitment Letters

- Attached here the co-financing commitment letters



REPUBLIC OF LIBERIA
ENVIRONMENT PROTECTION AGENCY
P.O. Box 4024
4th Street Sinkor, Tubman Boulevard,
1000 Monrovia, 10 Liberia



ED/EPA-01/00659/18/RL

August 20, 2018

Mr. Miguel Morales
Vice President, CI-GEF Project Agency
2011 Crystal Drive
Suite 500
Arlington, Virginia 22202
USA

Dear Mr. Morales:

Subject: Co-Financing support for “Building and strengthening Liberia's national capacity to implement the transparency elements of the Paris Climate Agreement”.

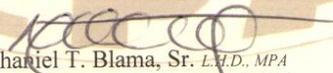
On behalf of the Liberian Environmental Protection Agency (EPA), I write to confirm that \$1,500,000 has been committed as co-financing to Conservation International in support of the GEF project, “Building and strengthening Liberia's national capacity to implement the transparency elements of the Paris Climate Agreement”.

This co-financing from EPA will support all the components particularly Components 1. Strengthen the capacity of national institutions to track NDC implementation and sustain transparency efforts and 2. Provide direct technical support to harmonize land use, agriculture, energy, transport and waste sectors collection and reporting through training and assistance during the CBIT implementation period. Specifically, the co-financing will cover in-kind contribution of requisite infrastructure, office space, office furniture, utilities (e.g. water, electricity, internet). The in kind contribution will be estimated using equivalent cost of service if outsourced.

This contribution as described above is intended to qualify as co-financing should the project proposal be successful and will be estimated using equivalent cost of service if outsourced.

Please accept the assurance of my highest esteem and consideration as we strive for now and successive generation.

Kind regards,


Nathaniel T. Blama, Sr. L.L.D., MPA
EXECUTIVE DIRECTOR/CEO
GEF OPERATIONAL FOCAL POINT

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Mobile: +231880707024/778059829

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2011 Crystal Drive, Suite 500, Arlington, VA 22202, USA
Tel: +1 703 341.2400
Fax: +1 703 553.4817
www.conservation.org



August 20, 2018

Dr. Miguel Morales,
Vice President, CI-GEF Project Agency
2011 Crystal Drive
Suite 500
Arlington, Virginia 22202
USA

Subject: Co-Financing support for "Building and strengthening Liberia's national capacity to implement the transparency elements of the Paris Climate Agreement" Project in Liberia

Dear Dr. Morales,

On behalf of Conservation International Foundation (CI), I am pleased to inform you that CI plans to contribute **USD 100,000** in co-financing from non-GEF funding in support of the GEF project titled 'Building and strengthening Liberia's national capacity to implement the transparency elements of the Paris Climate Agreement'.

This co-financing will support additional Project Management Costs (PMC) during the period of performance, currently estimated from October 2018 – September 2020. Specifically, the co-financing will cover staff salaries and related project office operating costs to support the implementation of the project activities.

This contribution as described above is intended to qualify as co-financing should the project proposal be successful.

We look forward to continued partnership for the implementation of this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Barbara DiPietro".

Barbara DiPietro
Chief Financial Officer
Conservation International Foundation

APPENDIX IX: List of Liberia's NDC Sector Institutions

<i>Institution</i>	<i>Sector</i>	<i>Category</i>	<i>Responsibilities</i>
Environmental Protection Agency of Liberia	Cross-cutting	Public	Consolidate and process sectoral GHG data, and UNFCCC reporting
Ministry of Finance and Development Planning (MFDP)	Cross-cutting	Public	Tracking and reporting on performance of the Low Carbon Development Strategy and Pro-poor Agenda/Agenda for Transformation
National Climate Change Steering Committee (NCCSC)	Cross-cutting	Public	Brings together policymakers from different sectors to discuss, review and approve climate change mitigation and adaptation measures in Liberia.
Liberia Institute of Statistics and Geo-Information Services (LISGIS)	Cross-cutting	Public	Collecting, managing, coordinating, supervising, evaluating, analyzing, disseminating and setting quality standards for statistical and associated geo-information for overall national socio-economic reconstruction and development
Ministry of Agriculture	Agriculture	Public	Sector lead on policy and technical aspects, and implementing adaptation projects
Firestone	Agriculture	Private	Supply emissions data
Sime Dabye	Agriculture	Private	Supply emissions data
Ministry of Transport	Transport	Public	Sector lead on policy and technical aspects, and implementing climate change projects e.g the weather data initiative
Ministry of Mines and Energy	Energy	Public	Sector lead on both policy and technical aspects, and implementing mitigation projects
Liberia's Rural and Renewable Energy Agency (RREA)	Energy	Public	GHG data and information suppliers
Liberia Petroleum Refining Company	Energy	Public	Supply emissions data
National Energy Committee	Energy	Public	Policy guidance
Energy Sector Working Group	Energy	Public	Technical guidance
NC Sanitor	Energy	Private	Supply emissions data
Society for Environmental Conservation (SEC)	Energy	CSO	Engaged in implementation of mitigation projects, and supply of emissions data
Liberia Oil and Gas Initiative (LOGI)	Energy	CSO	Activist and involved in processes aimed at engaging public and private sector
Monrovia City Corporation	Waste	Public	Lead technical agency on waste and supplier of emissions data

**The above list of the NDC institutions does not include the land use sector institutions that also include the forestry sector institutions. This is because the land use sector is currently not listed among Liberia's NDC sectors.

APPENDIX X: List of References

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