GAP ANALYSIS

LAWS AND POLICIES FOR MAINSTREAMING BIODIVERSITY IN LIBERIA

FINAL REPORT

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ANCRONYMS

AFDB	African Development Bank
CBD	Convention on Biological
CFDC	Community Forestry Development Committee
CITES	Convention on International Trade in Endangered Species
CRL	Community Rights Law
NFRL	National Forestry Reform Law
ENNR	East Nimba Nature Reserve
EPA	Environmental Protection Agency
EPML	Environmental Protection and Management Law of Liberia
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
FDA	Forestry Development Authority
FMC	Forest Management Contract
FPIC	Free, Prior, Informed Consent
FREL	Forestry Reference Emission Level
IFC	International Finance Corporation
IWT	Illegal Wildlife Trade
LRA	Land Rights Act
MFDP	Ministry of Finance and Development Planning
MME	Ministry of Mines and Energy
MOD	Ministry of Defence
MRV	Monitoring, Reporting and Verification
NaFAA	National Fishery and Aquaculture Authority
NBSAP	National Biodiversity Strategy and Action Plan
NDC	National Determined Contribution
NEAP	National Environmental Action Plan
NFMS	National Forest Monitoring System
NNL/NG	No Net Loss/Net Gain
NWL	National Wildlife Law
PES	Payment for Ecosystem Services
PUP	Private Used Permit
REDD+	Reducing Emission from Deforestation and Forest Degradation
	and enhancement of carbon stock
SEA	Strategic Environmental Assessment
TSC	Timber Sale Contract
UNEP	United Nations Environment Program
WB	World Bank

EXECUTIVE SUMMARY

Laws and policies provide an essential guide to assessing a country's approach or readiness to protect environmental resources while encouraging economic development. This report reviews Liberia's existing laws and policies that can support and form part of the framework for enabling or challenging the achievement of No Net Loss or Net Gain (NNL/NG) of biodiversity and the hierarchy of laws available to achieve NNL/NG during development. The term NNL/NG is not explicitly mentioned in any laws or regulations in Liberia. Instead, NNL/NG is considered as a "...goal for a development project, policy, plan or activity in which the impacts on biodiversity it causes are balanced or outweighed by measures taken to avoid and minimize the impacts, to restore affected areas and finally to offset the residual impacts, so that no loss remains. Where the gain exceeds the loss, the term 'Net Gain' may be used instead."¹

Applying mitigation measures is not just sufficient for achieving NNL/NG. An intentional effort must be made to adopt and use the mitigation hierarchy. NNL/NG can only be a guaranteed outcome when the mitigation hierarchy is applied. Simply, the term "mitigation hierarchy is defined as follows: "First avoid, then minimize, then restore, and finally as a last resort offset any significant residual negative environmental impacts."² This does not mean that every time the mitigation hierarchy is applied, a NNL/NG outcome will be realized. Notwithstanding, NNL/NG cannot be achieved without the application of the mitigation hierarchy.

Programmatically, one of the most attractive and widely acceptable ways of achieving NNL/NG is through biodiversity offset programs. The 'no net loss' or 'net gain' approach seeks to achieve positive outcomes for biodiversity and ecosystem services through the implementation of biodiversity offsets that deliver long-term conservation results for impacts that cannot be avoided or otherwise mitigated."3 Biodiversity offsets are defined as "measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken"4

To understand the regulatory environment enabling the sustainable management and conservation of biodiversity, a review of the legal landscape was conducted. This helped determine the extant rulesin Liberia regarding mainstreaming biodiversity into national planning processes with specific emphasis on the requirements for a NNL/NG outcome. While the Constitution of Liberia

http://www.foresttrends.org/documents/files/doc 3125.pdf.

¹ https://www.forest-trends.org/bbop/bbop-key-concepts/no-net-loss-and-net-gain-of-biodiversity/

² A National Biodiversity Offset Scheme: A Road Map for Liberia[®] S Mining Sector, World Bank, 2015

³https://wedocs.unep.org/bitstream/handle/20.500.11822/25692/Biodiversity_Offsets.pdf?sequence=1&isAllowe d=y

⁴ BBOP (Business and Biodiversity Offsets Programme) 2009. Business, Biodiversity Offsets and BBOP: An Overview. Washington, DC: Business and Biodiversity Offsets Programme.

provides for the participation of all Liberians in the management of the country's natural resources, the statutory framework authorizes a few agencies of Government, like the Environmental Protection Agency (EPA), the Forestry Development Authority (FDA), and the National Fishery and Aquaculture Authority (NaFAA), to lead on environmental management and biodiversity conservation. Mainstreaming biodiversity in decision-making and national planning processes in Liberia is, therefore, the responsibility of these agencies as regulators and pacesetters.

A. NNL/NG Triggers

The Environmental Protection and Management Law (EPML) of Liberia, which the EPA enforces, provides an opportunity for what may be the best trigger for a developer to consider the delivery of NNL/NG during development/investment through its Environmental and Social Impact Assessment (ESIA) as outlined in the ESIA Procedural Guidelines promulgated in 2017. This is not a direct trigger but in the case where an offset program is implemented by the developer as a mean of mitigating impacts to biodiversity, the possibility for a NNL/NG outcome could be achieved through the application of the mitigation hierachy.

Conducting an ESIA is a requirement for commencing development with potential impact on biodiversity in several sectors, including forestry, mining, and fisheries. As the controlling administrative law, the guidelines (or regulations)⁵ describes the process of conducting the ESIA and incorporation of mitigation strategies for biodiversity. If not followed, the project is not permitted and cannot be implemented. Failure to implement the approved mitgation measures in the ESIA report carries a fine and/or revocation of the environmental permit, which allows operation of the activity. The ESIA guidelines do not explicitly contain provisions appertaining to NNL as an outcome for biodiversity but mandate developers to "*identify impacts to biodiversity and critical habitat where appropriate*."⁶. Similarly, there is no specific mention of the term "mitigation hierarchy" in the guidelines for biodiversity management. However, the requirement for a developer is that "*mitigation and impact management action shall be taken to establish the measures that are necessary to avoid, minimize or offset predicted adverse impacts and, where appropriate, to incorporate these into an environmental management plan or system."⁷ This may not be required for biodiversity only but all other environmental aspects of the project.*

This review identifies no law, regulation, or policy that bars an instrumentality of Government (ministry or agency) from adopting the mitigation hierarchy of biodiversity protection and requiring a developer to be guided by such. The absence of a legal barrier provides an opportunity for the agency to use any laws or regulations enforceable in Liberia that enable the achievement of NNL/NG. Furthermore, the ESIA guidelines provide provisions for measuring impacts, whether direct, indirect, or cumulative.

⁵ Although titled as "guidelines" the ESIA procedural guidelines is actually a regulation promulgated by the EPA

⁶ Section 2 (4) (e), ESIA Procedural Guidelines, 2016

⁷ Section 1.2, ESIA Procedural Guidelines, 2016

The ESIA process, which applies to all projects with an impact on biodiversity (as listed in Annex III of this report), is an effective tool for mandating the application of the mitigation hierarchy with an opportunity for achieving NNL/NG, whether mining, forestry, petroleum exploration, etc. The ESIA guidelines serve as an essential tool of the statutory ESIA requirements under the EPML. However, other sector-specific tools like the regulations on mineral exploration have been developed to support the intent of the ESIA guidelines in delivering on the mitigation hierachy. In addition, international policies or standards, like International Finance Corporation Performance Standards (*IFC PS6) or* the Business and Biodiversity Offset Program (*BBOP*), are applicable where specific regulation is absent. There is no law requiring the EPA or other agencies of government to specificially adopt these standards. For instance, the EPML and the EPA Act do not explicitly authorize the EPA to adopt these standards. However, they mandate the EPA to take every reasonable and justifiable action to protect the environment and biodiversity. The EPA now uses that authority to inform developers, especially where there are no regulations on the particular subject, to take action using these international standards will be applicable to the project.

B. Land Tenure and NNL/NG

The nature and state of land tenure are essential for the achievement of NNL/NG. Liberia has a clear land tenure established under the Land Rights Act. The rights to land ownership, possession, and use are unequivocally established in the Land Rights Acts. The process of determining the actual demarcation of land across the country using the principles in the law has not been completed and may not be for the next few years due to challenges with enforcement. There is a concession cadastral that is not fully detailed due to financial and other enforcement challenges. However, there is available information for forestry, agriculture, and mining sectors. Four categories of land exist within Land Rights Act: Government Land, Public Land, Customary Land and Private Land. Within this tenure, a lease, through forestry, mining, and agriculture concessions, is the best option for accessing offsets for Liberian corporations and individuals. Other forms of tenure such as possessory right granted to the community through "community forestry" or "conservation areas"⁸ may be applicable for offset programs provided there is an adequate commitment from the community for protection. Additionally, right growing out of possessory or use rights inland, like an easement, are protected even after conveyance.

Protected Areas is a land category that may subsist with all of the ownership categories in Land, be it private communal or public/Government. Government Land currently has the best potential for offsets, but with inadequate management, measuring additionality is a challenge except where

⁸ Liberia is about to pilot the creation of conservations areas through regulations from FDA which will be different from the protected areas established through legislative enactment. The concept will follow the idea of ICCA which stands for "territories and areas conserved by indigenous peoples and local communities"

investors invest in protected areas and minimize the government fiscal bureaucracy. This is only because, currently and prior to the enactment of the Land Rights Act, all protected areas and concessions were located on Government Land. However, following the Land Rights Act, wherein concessions and protected areas can be established in Customary Land, this could present another suitable option for offset programs predicated upon the community's consent and desire. Both the forest and fishery sectors have statutory authority to establish protected areas. However, the forest sector is better situated for offsets programs which may qualify as a protected area. This is due to the increased presence of concessions and major developments (mining, agriculture, etc.) on land with huge impact on terrestrial biodiversity. A significant gap is the lack of a clear standard establishing a duty of care.

C. Economic Instruments and Tax Breaks

Relative to economic incentives, there are no tax breaks or subsidies for good environmental performance, including biodiversity offset—however, a plan to provide rebates for cleaner vehicles under a UNDP program. The EPML provides requirements for issuing bonds or pre-investment mitigation measures, restoration orders, insurance; however, there is no regulation or policy for their determination and execution. A similar bond requirement exists under the NFRL for forest concessions holders. Several gaps also exist within the legal framework that has an adverse impact on achieving NNL/NG. These include the lack of transparent processes for payment of ecosystem services and apportioning benefits from there, especially within the communal/customary land ownership category; a holistic framework for monitoring and evaluatingmitigation offsets, with only forestry currently having a framework. The National Wildlife Law provides for the FDA to establish a conservation and wildlife fund for "the administration of protected areas, wildlife conservation and management activities, and enforcement of the Wildlife Law."⁹ Even though not set up through regulations as required by the law, this fund could be a great opportunity to attract funding from private investors and the government to ensure biodiversity protection.

D. Gaps for NNL/NG

While conscious of the fact that Liberia's laws and regulations create a pathway for integrating biodiversity management into development, it is insufficient and limited in how these laws and regulations promote concepts like NNL/NG. As required by the EPML¹⁰, the EPA, by now, should have promulgated a biodiversity-specific regulation that will require developers to mainstream biodiversity but also mandate government agencies and other non-governmental organizations to take actions in promoting biodiversity conservation through NNL/NG. Similarly, the National Wildlife Law requires the FDA to promulgate regulations to set up and manage the conservation

⁹ Chapter 10, National Wilflife and Protected Area Management Law

¹⁰ Section 83 (1), Environmental Protection and Management Law of Liberia

and wildlife fund. To date, the regulations are yet to be developed, thereby preventing the establishment of the conservation and wildlife management fund.

An amendment of the Wildlife Conservation and Protected Area Management Law has been drafted. While this version is an improvement from the current law, there is a need to include biodiversity-specific considerations, including the mitigation hierarchy and requirement for NNL/NG outcomes. Should these be included, the soon to be amended wildlife law would contain tighter provisions for protecting and mainstreaming biodiversity.

Finally, one fundamental gap is the lack of explicit language in many of the sector-specific laws describing or requiring NNL/NG outcomes for development projects,. Save the ESIA guidelines, these laws contain ambiguous language which are subject to many interpretations. To ameliorate this gap, a recommendation is to amend some of the laws or promulgate a biodiversity specific regulations that captures all these issues with enforcement mechanism acrosss all sectors. A list of key laws to be amended and summary of gaps are presented in this report for review.

I. INTRODUCTION

Liberia is endowed with beautiful land, rich biodiversity, and bountiful natural resources. Simply, it is a biodiversity hotspot home to many species of conservation interest. However, due to its low economic development status and abundant resources, developers or project proponents are keen to push for the extraction/utilisation of these resources. These activities can be seen through the conversion of natural forests for monoculture agricultural production, mining for valuable minerals, fishing, and logging of forest areas for timber in a manner that is not always sustainable. All of these activities negatively impact biodiversity and can decrease the health of the environment through pollution when unmanaged. Biodiversity faces many direct threats in Liberia, including 1) Agro-industrial crop plantations, 2) logging concessions and related contracts, 3) Mining, 4)Invasive Alien Plants, 5)Shifting Cultivation, 6) uncontrolled hunting, and 7) unsustainable and destructive extraction and collection of firewood and the production of charcoal.¹¹ In this report, "**developer or project propopent**" means "*a person (s) proposing or executing a project, policy, program or an undertaking specified in the Annex I of the Environment Protection and Management Law and subject to an environment impact assessment process.*"¹²

¹¹ Section 3.1, National Biodiversity Strategy and Action Plan (NBSAP), 2017

¹² Section 1.3, ESIA Procedural Guidelines

Realizing the deleterious impact economic development is having on biodiversity, developers in Liberia are mandated to take adequate actions to avoid and mitigate their impacts (avoid and/or minimize impacts on biodiversity through comprehensive project design; restore biodiversity in the areas affected by the project; and, as a last resort, offset or compensate for any residual impacts on biodiversity). The desired outcome is often phrased in terms of achieving **No Net Loss** of biodiversity (NNL) or a **Net Gain** of biodiversity (NG) or simply **NNL/NG**.

The term NNL/NG is not explicitly mentioned in any laws or regulations in Liberia. No Net Loss is considered as a "goal for a development project, policy, plan or activity in which the impacts on biodiversity it causes are balanced or outweighed by measures taken to avoid and minimize the impacts, to restore affected areas and finally to offset the residual impacts, so that no loss remains. Where the gain exceeds the loss, the term 'Net Gain' may be used instead."¹³

Applying mitigation measures is not just sufficient for achieving NNL/NG. An intentional effort must be made to adopt and apply the mitigation hierarchy. Simply, the term "mitigation hierarchy is defined as follows: First avoid, then minimize, then restore, and finally, as a last resort, offset any significant residual negative environmental impacts."¹⁴ This does not mean that every time the mitigation hierarchy is applied, a NNL/NG outcome will be realized. Notwithstanding, NNL/NG cannot be achieved without the application of the mitigation hierarchy.

Programmatically, one of the most attractive and widely acceptable ways of achieving NNL/NG is through biodiversity offset programs. The 'no net loss' or 'net gain' approach seeks to achieve positive outcomes for biodiversity and ecosystem services through the implementation of biodiversity offsets that deliver long-term conservation results for impacts that cannot be avoided or otherwise mitigated."¹⁵ Biodiversity offsets are defined as "measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken"¹⁶

To understand the regulatory environment for the sustainable management and conservation of biodiversity, a review of the legal landscape was conducted to determine the rules extant in Liberia regarding mainstreaming biodiversity into national planning processes with specific emphasis on the requirements for a NNL/NG outcome.

¹³ https://www.forest-trends.org/bbop/bbop-key-concepts/no-net-loss-and-net-gain-of-biodiversity/

¹⁴ A National Biodiversity Offset Scheme: A Road Map for Liberia[®] s Mining Sector, World Bank, 2015

 $^{^{15}} https://wedocs.unep.org/bitstream/handle/20.500.11822/25692/Biodiversity_Offsets.pdf?sequence=1\&isAllowed=y$

¹⁶ BBOP (Business and Biodiversity Offsets Programme) 2009. Business, Biodiversity Offsets and BBOP: An Overview. Washington, DC: Business and Biodiversity Offsets Programme. http://www.foresttrends.org/documents/files/doc_3125.pdf.

I.I Liberia Legal/Regulatory and Policy Framework

Liberia's legal framework is organized under the common law system. The constitution is the country's organic law and supersedes all provisions of any law that is repugnant to it. Article 7 of Chapter II of the Constitution of Liberia provides for the maximum feasible participation of all citizens in the management of natural resorces. The preamble of the EPA Act recognizes this provision and emphasizes that this may be "interpreted to provide for full public participation of all citizens in the protection and management of the environment and natural resources of Liberia." ¹⁷

Below the constitution are statutes, the second hierarchy of laws which are only legislated by the concurrence of both houses of the National Legislature.¹⁸ Based on its common law designation, opinions of the supreme court, the highest court in Liberia, are treated on the same level as the statute except in cases where the opinion creates a new law rather than interprets the existing statute. In many instances, lower courts (trial courts)¹⁹ respect the supreme court's opinions, which has given interpretative effect to statutes, as the controlling law. Finally, below the statutes are the administrative laws such as regulations and guidelines issued by government ministries, agencies, and commissions in keeping with their mandates. These administrative laws typically give effect and meaning to the statutes. The regulations are enbforced by the administrative agencies similar to the statutes and are used by courts to grant interpretation and meaning to the statutes where required.

The controlling and framework legislation on environmental impacts, including impacts on biodiversity, is the Environmental Protection and Management Law of Liberia (EPML). It provides the mandate for ensuring that the potential impacts from any development are analyzed, and mitigations measures are developed to address the impacts. The ESIA Procedural Guidelines details the environmental impact study processes, the sectors to consider, the categories of impacts to be assessed, and the conditions for approval. The ESIA guidelines, which are regulations, came about due to the broad language noted in the EPML. Most sectorial laws, along with the corresponding regulations, including the Mining law, the Forestry law, Fishery law, and the Petroleum law, make direct reference to the EPML, its accompanying regulations, and tools as controlling and superior in evaluating and mitigating impacts to biodiversity.

Generally, an illegal act is punishable by the courts. Notwithstanding, most agencies have the authority to issue fines, revoke licenses, and halt operations of developers for actions deemed as contrary to the license or authorization granted. Typically, most regulations and statutes

¹⁷ Preamble, Environmental Protection Agency of Liberia Act, 2003

¹⁸ The bi-camera legislature comprises of the house of senate and a house of representatives

¹⁹ Courts below the supreme court including circuit courts, specialized courts and the magisterial courts

establishing government agencies will require that the administrative hearing be the first place to determine any alleged breach of any laws or regulations. Therefore, the administrative agencies ensure that the developers are aware of the laws and policies extant, any new changes, and plans to review/revise the laws and policies. When new policies or laws are issued, there is a general requirement for adequate consultation with stakeholders and thereafter, publication to ensure access.

Through its endorsement and ratification of the Convention on Biological Diversity (CBD) and the other Rio Conventions²⁰, Liberia has committed, to protecting its rich biodiversity, especially critical ecosystem, endangered, and threatened species. In addition to its action, the government has put in place several legislations, regulations, and policies towards requiring developers and the general public to take measures that avert or mitigate impacts on biodiversity. While recognizing its need to expand and grow economically and socially, this must be matched with consideration for sustainable biodiversity management.

1.2 Objectives of the Analysis

Mainstreaming biodiversity in decision-making and national planning processes catalyzes and promotes sustainable development. A government wishing to explore the different legal and policy options for mainstreaming biodiversity can usefully start by taking stock of the existing framework to determine which parts of it may: (a) already require implementation of the mitigation hierarchy to achieve NNL/NG; (b) facilitate but do not require NNL/NG; and/or (c) prohibit or establish obstacles to NNL/NG. To establish an effective, consistent policy on NNL/NG with any associated, necessary legal requirements for Liberia, this review and gap analysis was commissioned to identify:

- Existing (or draft) provisions in law and policy that can support and form part of the framework for NNL/NG through the implementation of the mitigation hierarchy;
- Gaps where new provisions may be needed to require and encourage the use of the mitigation hierarchy to reach NNL/NG planning and outcomes; and
- Existing provisions that may need to be repealed or amended.

To this end, to understand the regulatory environment for the sustainable management and conservation of biodiversity, the legal landscape has been reviewed to determine the rules extant in this jurisdiction regarding mainstreaming biodiversity into national planning processes. This report provides an analysis of the sets of pre-determined questions describing the legal, policy, and regulatory environment for mainstreaming and sustainably managing biodiversity in Liberia. Key provisions of laws, policies, and regulations are provided to elucidate and situate Liberia in this

²⁰ The United Nations Framework Convention on climate Change (UNFCCC) and the UN Convention to combat desertification (UNCCD)

regard. The analysis presents key gaps within the laws, policies, and regulations. The intent of describing these gaps is to either improve the laws and policies or recommend an amendment or repeal. In a few cases, recommendations are made for new policies or laws to be developed in advancing the idea of mainstreaming biodiversity into national planning and decision-making, especially during the approval of economic development projects.

II. ANALYSIS

In this section, we have provided direct responses to the questions captured in the Terms of Reference (TOR) regarding mainstreaming biodiversity or NNL/NG as required by national laws, regulations, and policies.

The below responses, in some instances, are based on direct quotations from the law, and, in a few cases, an attempt to give meaning to the various provisions.

I. Specific requirements related to NNL/NG:

1.1 Is there a clear 'trigger' for developers to deliver NNL/NG, (for instance, through Environmental Impact Assessments and/or planning requirements)? A typical trigger would be an administrative procedure (eg planning application) that requires a dialogue between applicant and the authorities which could lead to conditions related to NNL. If there is a trigger or requirement, and is it expressed in quantitative terms with a specific metric?

The Environmental Protection and Management Law (EPML) of Liberia, which the EPA enforces, provides an opportunity for what may be the best trigger for a developer to consider the delivery of NNL/NG during development/investment through its Environmental and Social Impact Assessment (ESIA) as outlined in the ESIA Procedural Guidelines promulgated in 2017. The ESIA process is "*a systematic process to identify, predict and evaluate the potential environmental and socio-economic effects of proposed projects, plans or policies applied prior to issuance of environment permits.*"²¹ The ESIA Procedural Guidelines, etched and developed out of the Environmental Protection and Management Law of Liberia (EPML), requires all developers/project proponents whose project is located in annex I of the EPML, as listed in Annex III of this report, to systematically evaluate impacts, including impacts on biodiversity, as part of the general assessment on the environment.²² This is not a direct trigger but in the case where the developer implements an offset program as a means of mitigating impacts on biodiversity, the

²¹ Section 1.1, ESIA Procedural Guidelines, 2016

²² Section 2.1, ESIA Procedural Guidelines, 2016

possibility for a NNL/NG outcome could be achieved. Excluding the ESIA guidelines, there is no such clear trigger noticed in the National Wildlife Law or other pieces of legislation extant in Liberia.

Specifically, the procedural guidelines require developers to "*identify impacts to biodiversity and critical habitat where appropriate.*"²³ This requirement is an offshoot of the broader requirements listed in the EPML that "*the Agency shall, in consultation with the relevant Line Ministry, issue guidelines and prescribe measures necessary for the conservation of biological diversity*"²⁴ In the absence of a separate regulation on the protection of biodiversity, key references and provisions within the ESIA guidelines, as provided in different segments of this report, are generally used to require developer to deliver on biodiversity protection.

Additionally, the National Forestry Reform Law of Liberia, 2006 (NFRL) provides that "*the Authority shall manage all Forest Resources in a manner consistent with the Environment Protection Agency Act of November 26, 2002, the Environment Protection Law of November 26, 2002, and all other applicable environmental laws.*"²⁵ This allows for the ESIA procedure to take precedence during the issuance of forest contracts (Forest Management Contracts or FMCs²⁶, Timber Sales Contracts or TSCs, Private Use Permits or PUPs, etc.)²⁷. The NFRL also provides that "*No provision of this Law limits the requirements or coverage of the environmental impact assessment laws of the Republic.*"²⁸ Similarly, Section 4.18 of the Fishery Act requires all activities with potential impacts on fish resources in Liberia to conduct an impact assessment and propose mitigation measures in line with the EPML. Additionally, the Petroleum Law requires, in many parts,²⁹ that "an environment and social impact assessment of petroleum activities, in line with the EPML and the ESIA procedural guidelines are the controlling legal instrument that provides a trigger that could lead to a developer being required to deliver NNL/NG.

1.2 Is there currently any requirement for a NNL outcome for biodiversity? (Or is the requirement for implementation of general mitigation measures on with no specific outcome?)

There is no legal requirement for a NNL/NG outcome for biodiversity. Notwithstanding, while none of the sector policies and laws explicitly contains a provision requiring a NNL outcome, the intent for NNL/NG is somewhat captured within the ESIA procedural guidelines. For instance, there is a requirement in the ESIA procedural guidelines and the EPML to ensure that the impacts

²³ Section 2 (4) (e), ESIA Procedural Guidelines, 2016

²⁴ Section 83 (1), Environmental Protection and Management Law of Liberia, 2002

²⁵ Section 4.1 (c), National Forestry Reform Law of Liberia, 2006

 $^{^{\}rm 26}$ Section 5.3 (b)(iv), National Forestry Reform Law of Liberia, 2006

²⁷ Forest Management Contracts (FMC), Timber Sale Contract (TSC) and Private Use Permit (PUP)

²⁸ Section 8.1 (e), National Forestry Reform Law of Liberia, 2006

²⁹ Section 25 (b), Section 49 (b), Section 11.2 (f) and Section 12.8 (a), Petroleum (exploration and production) Act, 2014

of any project on biodiversity are mitigated. This is done through the environmental migtation plan. The EPML provides that "the developer or project proponent, shall provide an environmental mitigation plan"³⁰ while the ESIA guidelines states that the purpose of the mitigation plan is "to establish the measures that are necessary to avoid, minimize or offset predicted adverse impacts and, where appropriate to incorporate these into an environmental mitigations measures are all-encompassing. They must be developed for all impacts that have been identified for the project. The generally applicable rule is that "mitigation measures are required for all potential impacts identified including those identified on biodiversity."³² Although not explicitly provided, the specific reference for the inclusion of biodiversity in the mitigation measures, noted in the ESIA procedural guidelines, is an opportunity for mainstreaming biodiversity protection during project development even though this does not directly lead to a NNL/NG outcome. Similarly, when developing the EMP (environmental management plan) or ESMP (environmental and social management plan), the developer is required to provide a summary of all impacts and mitigations measures³³, including those addressing the potential impacts on biodiversity.

Additionally, the EPML sets a requirement that may present an opportunity for NNL/NG outcome by mandating the application of the law under the principle of sustainable development, polluter pays principle, and the precaution principle.³⁴ It may not be a direct mandate to include NNL/NG outcome. However, it contributes to the protection of biodiversity by ensuring that the mitigation measures are inclusive of the impacts on biodiversity.

1.2.1 Are biodiversity and ecosystem services defined in the relevant legislation and if so how?

Biodiversity and Ecosystem are defined in relevant legislations in Liberia. Ecosystem services are not mentioned in any sector-related laws save the National Wildlife Law of 2012, where the concept is mentioned twice but not defined. Below are direct quotes from the various sources:

"**Biological Diversity**" means the variability among living organisms from all sources including into alia terrestrial ecosystems and aquatic ecosystems and the ecological habitants of which they are part and includes genetic diversity within species, between species and ecosystems."³⁵ Part VII, Sections 83, 84, & 85 of the EPML deals with the management and protection of biodiversity.

³⁰ Section 15 (1), Environmental Protection and Management Law of Liberia, 2002

³¹ Section 1.2, ESIA Procedural Guidelines, 2016

³² Section 2 (5), ESIA Procedural Guidelines, 2016

³³ Section 3.2.9, ESIA Procedural Guidelines, 2016

³⁴ Section 4 (a)(b)(c), Environmental Protection and Management Law of Liberia, 2002

³⁵ Section 3, Environmental Protection and Management Law of Liberia, 2002

"Ecosystem: a dynamic complex of plant, animal, and micro-organism communities and their non-living environment interacting as a functional unit."³⁶

"Biodiversity: The varying number and forms of living things and their interaction within their habitats."³⁷

1.2.2 Is there a specific requirement for NNL/NG of biodiversity, including offsets and/or compensation, whether for biodiversity in its entirety or for some subset of biodiversity (e.g. forests or some other component of biodiversity)?

There is no specific requirement in any laws or regulations for NNL/NG of biodiversity. The general requirement for ensuring adequate protection for biodiversity during project development, particularly for offset programs, is provided in the ESIA procedural guidelines. In the procedural guidelines, there is a strong requirement for mitigation and impact management which means "*to establish the measures that are necessary to avoid, minimize or offset predicted adverse impacts and, where appropriate to incorporate these into an environmental management plan or system.*"³⁸ The mitigation and impact management requirements in the guidelines cover biodiversity and not a particular component. This general requirement for mitigating impacts on biodiversity has been implemented in a few major projects in Liberia. For example, the steel giant ArcelorMittal implemented a Biodiversity Offset Program in and around and East Nimba Nature Reserve (ENNR)³⁹ contiguous to its mining concession. While the ESIA requires an offset program sto responsibly manage the impacts from their operations even where such effects have not been detailed and recorded.

The EPML requires that the developer must compensate for any potential or actual loss of biodiversity. It specifically provides that *"Forest utilization agreements shall incorporate measures for rehabilitation and restoration requirements for:*

a) Afforestation and reforestation;
b) Deposit bonds paid before the issuance of the exploitation licenses to ensure compliance with any conditions or performance of obligations for rehabilitation and restoration;"⁴⁰

The bond is intended to bind the developer to specific requirements, especially for environmental and biodiversity protection. The National Forestry Reform Law of 2006 (NFRL) and the National Wildlife Conservation and Protected Area Management Law or National Wildlife Law of 2012 (NWL) are uncleared regarding compensation for biodiversity loss. However, with a clear

³⁶ Article 1.3, National Wildlife Conservation and Protected Area Management Law, 2012

³⁷ Article 1.3, National Wildlife Conservation and Protected Area Management Law, 2012

³⁸ Section 1.2, ESIA Procedural Guidelines, 2016

³⁹ ENNR is a protected area gazette by the Government of Liberia

⁴⁰ Section 77 (6)(a)(b), Environmental Protection and Management Law of Liberia, 2002

reference to the EPML, which addresses the issue of offset and bonds, the Forestry Development Authority (FDA) may invoke the provisions under the EPML to ensure that developers are held to such standards.

1.2.3 What exactly does the law say with respect to applying the mitigation hierarchy (i.e. steps to avoid, minimize, restore, offset/compensate impacts on biodiversity)? Have you any observations on how these requirements compare with best practice standards such as IFC PS6, BBOP Standard, etc?

There is no specific mention of a "mitigation hierarchy" for biodiversity in the EPML or any other law. Notwithstanding, most of the requirements for protecting biodiversity are tied to the development of guidelines by the Environmental Protection Agency (EPA). The term "mitigation hierarchy is defined as follows: First, avoid, then minimize, then restore, and finally, as a last resort, offset any significant residual negative environmental impacts."⁴¹While there is no mention of the term mitigation hierarchy, the requirement for the developers in the ESIA guidelines is that "*mitigation and impact management action shall be taken to establish the measures that are necessary to avoid, minimize or offset predicted adverse impacts and, where appropriate, to incorporate these into an environmental management plan or system."⁴² This may not be required for biodiversity only but all other environmental aspects of the project. It goes on to state that project proponents must describe the "<i>measures to avoid, minimize or manage*", the EPA, in practice, requires the developers to avoid impacts to biodiversity and where such is not possible, it must design measures to minimize the impacts and as a last resort, compensate for the impacts including an offset program.

Similarly, the Minerals and Mining Law of 2000 requires that the holder of a mineral right "shall take reasonable preventative, corrective, and restorative measures to limit the pollution or the contamination of, or damge to, streams, water bodies, dry land surfaces, or atmosphere as a result of exploration or mining."⁴⁴ It also requires that license holders shall take reasonable steps to "restore the terrain of any land disturbed by exploration or mining to its prior state"⁴⁵ and "ensure that water polluted by its exploration or mining is restored to its prior state."⁴⁶ In Addition, the Mineral Exploration Regulations promulgated by the Ministry of Mines and Energy provides that "a Licensee must in any event take preventive or corrective measures to ensure that all streams and water bodies within or bordering Liberia, all dry land surfaces, and the atmosphere, are protected from pollution, contamination or damage resulting from Exploration operations pursuant to its License, and shall construct its access roads and other facilities so as to limit the scope for erosion and the felling of mature trees. If the Exploration operations of a Licensee violate

⁴¹ A National Biodiversity Offset Scheme: A Road Map for Liberia[®] s Mining Sector, World Bank, 2015

⁴² Section 1.2, ESIA Procedural Guidelines, 2016

⁴³ Section 3.2.9, ESIA Procedural Guidelines, 2016

⁴⁴ Section 8.1, Minierals and Mining Law, 2000

⁴⁵ Section 8.2, Minierals and Mining Law, 2000

⁴⁶ Section 8.3, Minierals and Mining Law, 2000

any requirement referred to in this Section or otherwise damage the environment, the Licensee must proceed diligently to mitigate and/or restore the environment as much as possible to its original and natural state and to take preventive measures to avoid further damage to the environment."⁴⁷The 2000 Mining Law is being amended with a first draft incorporating more references to the ESIA process and the EPML.

The NFRL requires FDA, within two years of the passage of the law, to "(*i*) *identify suitable sites for reforestation and afforestation and (ii) Develop a national strategy to address deforestation and promote silvicultural practices that will expand and enrich the national forest endowment.*"⁴⁸ The entire chapter 4 of the Fishery and Aquaculture Development and Management Law of 2019 provides a requirement for the creation of a Fishery management plan incorporating measures to restrict and prohibit dangerous and unauthorized fishing practices, ban the harvesting of endangered and threatened fish species as well as the introduction of deleterious and hazarudous substances in fishery waters, declaration of special management areas for fish protection, and requires the conduct of an ESIA for fishing activities in conformity with the EPML. All these provisions do not mention the mitigation hierarchy but make references to required actions to be taken by the developers to avoid, minimize, restore or compensate for any impacts on biodiversity.

Nothing bars an instrumentality of government (ministry or agency) from adopting the mitigation hierarchy and requiring its application by a developer. In fact, the instrumentality of government can, at the onset of the approval process, communicate its preferred method of protection for biodiversity, especially where the laws are silent. In practice, the EPA has requested developers to use international standards, including the World Bank Standards (Environmental and Social Safeguard), the African Development Bank Standards, International Finance Coporation performance standards (*IFC PS6*) or the Business and Biodiversity Offset Program (BBOP) and several others international instruments, especially where one is lacking in Liberia, to ensure adequate biodioversity protection.

There is no law requiring the EPA or other agencies of government to adopt the standards specifically. For instance, the EPML and the EPA Act do not explicitly authorize the EPA to adopt these standards. However, they mandate the EPA to take every reasonable and justifiable action to protect the environment and biodiversity. The EPA now uses that authority to inform developers, especially where there are no regulations on the particular subject, to take action using these international standards. In practice, during the ESIA process, the EPA must inform the developer that such standards will be applicable to the project.

⁴⁷ Section 10.1, Regulations governing Exploration under A Mineral Exploration License of the Republic Of Liberia

⁴⁸ Section 8.3, National Forestry Reform Law, 2006

1.2.4 Are direct, indirect and cumulative impacts considered when analyzing impacts and their mitigation?

There is a requirement to include direct and cumulative impacts. The EPML provides that where the EPA determines that the project requires ESIA, an environmental impact statement must be submitted stating the "environmental impact of the proposed activity or project including its direct, indirect, cumulative, short-term and long-term effects on both the natural and built environments and on public health and safety."⁴⁹ In addition to the provisions of the EPML, the ESIA guidelines provides that "first, an exhaustive list of all impacts including minor/major, short/long term, moderate, direct and indirect, is drawn up."⁵⁰ Although not stated in the ESIA guidelines, cumulative impacts are required by the EPA to be assessed and recorded in the impacts identification matrix.

1.2.5 Are relevant provisions integrated into other areas of law and policy (as described above in the briefing), including those listed below. If so, what are the requirements? Please identify and provide the precise clauses in the law:

The section below addresses specifically how the issues presented are treated in local legislation, policies, and regulations.

• EIA, and does this apply to all sectors or just certain developments?

The EPML addresses this issue by stating that "an environment impact assessment license or permit shall be required prior to the commencement of all projects and activities specified in the Annex I to this Law"⁵¹ The general categories of projects for which ESIA is required can be found in Annex I of the EPML which are contained in Annex III of this report. A majority of Part III of the EPML deals with the EIA (now changed to ESIA and updated in the 2016 procedural guidelines) and the application process, which includes 1) Notice of Intent⁵², 2) Submission of Project Brief, ⁵³ 3) Scoping⁵⁴ 4) Development of the ESIA report⁵⁵ 5) Consultation and Decision⁵⁶. The ESIA requirement for projects is widely adopted in other legislations in Liberia. The NFRL reemphasizes this position by requiring holders of FMC to conduct an ESIA and be bound by its requirements. It states specifically that "the contract⁵⁷ must require the Holder to prepare all environmental impact assessments required under the laws governing environmental protection."⁵⁸ In practice, the absence of an environmental clearance is grounds for denying the

⁴⁹ Section 14, Environmental Protection and Management Law of Liberia, 2002

⁵⁰ Section 3.2.6, ESIA Procedural Guidelines, 2016

⁵¹ Section 6, Environmental Protection and Management Law of Liberia, 2002

 $^{^{\}rm 52}$ Section 7, Environmental Protection and Management Law of Liberia, 2002

⁵³ Section 8, Environmental Protection and Management Law of Liberia, 2002

⁵⁴ Section 11, Environmental Protection and Management Law of Liberia, 2002

⁵⁵ Section 13, Environmental Protection and Management Law of Liberia, 2002

 $^{^{\}rm 56}$ Section 17, Environmental Protection and Management Law of Liberia, 2002

⁵⁷ Referring to Forestry Management Contract or FMC

⁵⁸ Section 5.3 (b)(iv), National Forestry Reform Law of Liberia, 2006

license to operate an FMC. More so, the failure to comply with environmental audit conditions after two years of operations could lead to revocation of the license to operate an FMC.

Furthermore, the NFRL provides that "no Person shall waste Forest Resources, expose natural resources to damage, destroy the long-term productivity of Forest Land, or significantly harm the forest Environment unless the action has been approved under the environmental impact assessment laws of the Republic."⁵⁹

The Amended Fisheries Act requires that before the issuance of a license or where required by the EPML, ESIA must be conducted and approved in keeping with the rules of EPA.⁶⁰ If a developer does not complete the ESIA report and secure an environmental permit, the National Fishery and Aquaculture Authority cannot grant a fishing license within the designated area. Essentially, the requirement for ESIA is heightened and well established across all sectors, especially the extractive industry contains high environmental risk.

The term ESIA or EIA was first introduced in Liberia's legal parlance when the EPML was enacted. All previous legislations, including the Minerals and Mining Laws, make attempt to require the developer to take actions for environmental protection but do not include the methodical ESIA/EIA. For example, the current mining law provides that the holder of a mineral right *"shall take reasonable preventative, corrective, and restorative measures to limit the pollution or the contamination of, or damage to, streams, water bodies, dry land surfaces, or atmosphere as a result of exploration or mining."*⁶¹ The Mining Law is being revised with an entire part (Part VI) dedicated to environmental protection and inclusion of an ESIA prior to mining operations. As this draft is going through many changes, until a final draft is produced, there can be no assurances of what will be presented to the legislature for enactment.

• SEA

There is no reference in any legislation in Liberia regarding strategic environmental assessment. Notwithstanding, the EPA, the FDA, and other agencies responsible for ensuring biodiversity protection may adopt the SEA approach during the development of any significant policy. Speaking with some of the interviewees, none could cite an instance where SEA was used during the development of or amendment to a policy. Before adopting this approach, which will improve policy design and implementation, there is a need to conduct an institutional-level capacity building and understanding of SEA integration and application.

• Threatened / protected species legislation

⁵⁹ Section 8.1 (d)(ii), National Forestry Reform Law of Liberia, 2006

⁶⁰ Article 4.18, Fishery and Aquaculture Development and Management Law of Liberia 2019

⁶¹ Section 8.1, Minierals and Mining Law, 2000

The issues relating to threatened or protected species are addressed in multiple legislations. To demonstrate its importance, several legislations in Liberia make reference to the need for and threats to these critical natural resources and therefore lay down rules and mandates for their protection and sustainable management. Prior to the passage of the National Wildlife Act, the EPML was the controlling legislation. It provides that "all wild animals and birds and in particular, rare, threatened and endangered species and their habitats shall be preserved and protected in accordance with the guidelines and recommendations made by the Agency after consultation with the Line Ministry."⁶² In addition, the EPML provides that the EPA shall issue guidelines for protecting biological diversity and shall "determine which components of biological resources are endangered, rare or threatened with extinction."⁶³ Unfortunately, no guidelines or regulations have been promulgated under the law since 2003. Plans are underway for the development of several new regulations and standards, including the regulations on biodiversity.⁶⁴ The EPA uses the provisions in the ESIA procedural guidelines to enforce the protection of threatened, rare, endangered, or protected species.

Following its passage as the controlling legislation on wildlife, the National Wildlife Law establishes several requirements for managing and protecting threatened/protected species. Few of the pertinent provisions are listed herein. The law provides that it is a policy of the government to "protect, preserve and manage wildlife that are endemic, rare, threatened or endangered by *extinction*;"⁶⁵ Also, the NWL provides that the FDA shall at least once every year conduct species classification to "review the population, distribution, and status of Liberia's wildlife and identify categories of animals and plants that are threatened with or in danger of extinction;"⁶⁶ There is also a requirement for the FDA to promulgate regulations to (ii) "establish a procedure and criteria for listing and delisting threatened and endangered species, including CITES Appendix I and II species."⁶⁷ The specific objective of creating PA is to "ensure that viable populations of all indigenous wild species including migratory species are adequately conserved and that rare, endangered and endemic species are specially protected;"68 Whereas the objective of providing protection for wildlife outside the PA is to "ensure that viable populations of all indigenous wild species including migratory species, marine species, and mangrove species are adequately conserved, and that rare, endangered and endemic species are specially protected;"69 In the end. The law requires that "no Person shall export, re-export, or attempt to export or re-export any protected wildlife species in Liberia, or as listed in Appendix I or II of the Convention on

⁶² Section 80 (1), Environmental Protection and Management Law of Liberia, 2002

⁶³ Section 83(1)(c), Environmental Protection and Management Law of Liberia, 2002

⁶⁴ Response provided by EPA biodiversity officer during interview

⁶⁵ Article 2.2 (4)(c), National Wildlife Conservation and Protected Area Management Law, 2012

⁶⁶ Article 6.3 (b), National Wildlife Conservation and Protected Area Management Law, 2012

⁶⁷ Article 6.3 (c)(ii), National Wildlife Conservation and Protected Area Management Law, 2012

⁶⁸ Article 5.1(b), National Wildlife Conservation and Protected Area Management Law, 2012

⁶⁹ Article 6.1.2 (a), National Wildlife Conservation and Protected Area Management Law, 2012

International Trade in Endangered Species of Wild Fauna and Flora (CITES), except for purposes of scientific research, including breeding in captivity."⁷⁰

• Planning law

The EPA Act defines environmental planning, which encompasses biodiversity, to mean "both long-term and short-term planning that takes into account environmental issues"71 As indicated, environmental issues are defined to include biodiversity management. The EPML requires the EPA to provide the national environmental action plan (NEAP) every five years. The plan shall " contain all matters affecting the environment and provide general guidelines for the management and protection of the environment and natural resources of Liberia as well as the strategies for preventing, controlling, or mitigating any deleterious effects;"⁷² The NEAP is the overarching planning document which describes actions, programs, interventions and targets for maintaining ecosystem balance, promoting environmental sustainability and conserving biodiversity. The plan is prepared in consultation with other line ministries and agencies and, once approved, becomes the central environmental planning document for the timeframe for which it was established. Other than the NEAP, which is the main national environmental plan, agencies of government may be required to develop sector-specific plans or strategies. An instant case is the FDA which is required to "prepare, and from time to time revise, a National Forest Management Strategy reflecting the Policy mandated under Section 4.3 of this Chapter and any national land, economic, or development plans in effect."73 The national forest management strategy contains a section on planning for terrestrial wildlife (biodiversity) and the key actions envisaged to enhance protection and/or management. However, this does not remove the obligations and aspirations/commitments set in the NEAP for general environmental protection and biodiversity.

• Sectoral policies (eg mining, o,il and gas, forestry, agriculture, infrastructure development, fisheries)

There are few sectoral policies describing environmental sustainability and, by extension, biodiversity protection. Broadly, these policies address the overarching issue of natural resources management and, specifically, sustainable biodiversity management. We have listed a few of these policies for consideration:

i. National Petroleum Policy

In the preamble of **chapter 9** of the national petroleum policy of Liberia, the government expresses concerns and provides that *"petroleum exploration and exploitation is fraught with significant*"

⁷⁰ Article 8.2 (i), National Wildlife Conservation and Protected Area Management Law, 2012

⁷¹ Section 3, Environmental Protection Agency Act

⁷² Section 30(2)(a), Environmental Protection and Management Law of Liberia, 2002

⁷³ Section 4.4 (d), National Forestry Reform Law of Liberia, 2006

risks to health, safety, and the environment. It is the responsibility of licensed oil companies, their agents, and contractors, to protect the environment where they work or any areas in the country that could be impacted by their operations; the Government shall legislate, regulate and monitor compliance. If not properly regulated and safeguarded, the sector can adversely impact the health and safety of the country's citizens and communities, customary land use patterns, and the long term social and environmental sustainability of the nation." While not specifically mentioning biodiversity, this commitment, likely demonstrates a willingness to include all aspects of the environment, including protecting critical habitats, minimizing impacts on endangered and threatened species, compensating for biodiversity loss, etc. This policy affects both terrestrial and aquatic wildlife.

ii. Fisheries and Aquaculture Policy and Strategy

This policy addresses aquatic biodiversity and recognizes the value of conserving aquatic ecosystems associated with fish production. One of the significant interventions listed in the policy is to "*monitor aquatic biodiversity and key habitats through periodic assessments so as to identify critical changes and their origin.*"⁷⁴ Unlike others, this policy specifically addresses the need to ensure that project impacts on biodiversity are mitigated through assessments and monitoring of critical habitats and biodiversity.

iii. Food and Agriculture Policy and Strategy (FAPS)

The Food and Agriculture Policy and Strategy (FAPS) was designed to bolster food security and increase agricultural self-sufficiency. While its focus is not on promoting biodiversity conservation, there are general references to forest resources and requirements and support for the environmental impact assessment process, which, when enforced, will lead to indirect protection of biodiversity.

It is noted that "the Food and Agriculture Policy and Strategy will complement and reinforce the new National Forestry Policy as in a synergistic manner towards the effective management and sustainability of Liberia's forest resources."⁷⁵ A reference and commitment to reinforce the National Forestry Policy provides an opportunity to incorporate biodiversity issues during the implantation of the FAPS.

Within "Strategy 5: Ensuring Sustainable management of forest resources" of "Policy 3: Strengthened Human and Institutional Capacities", there is an intervention to "support participatory Environmental Impact Assessment (EIA) in agricultural and forestry concessions;"⁷⁶ Under its cross-cutting issue of "Agriculture and Environment", a policy has been designed to ensure "Nationwide awareness and mainstreaming environmental considerations in all agricultural activities: production, processing, manufacturing, value addition and marketing"

⁷⁴ Section 3.2.2, Fisheries and Aquaculture Policy and Strategy, 2014

⁷⁵ Section 4.3, Food and Agriculture Policy and Strategy of Liberia

⁷⁶ Section 2.3.5, Food and Agriculture Policy and Strategy of Liberia

with an attending strategy to "support measures to subject all sector policies and plans to Strategic Environmental Assessments (SEAs) and projects to Environmental Impact Assessments (EIAs);"⁷⁷

iv. **REDD+** Strategy

The Government of Liberia, over the last year, has been engaged in a few activities towards enhancing its preparedness for developing major REDD+ (reducing emissions from deforestation and forest degradation and enhancement of forest carbon stock) programs. Because, sometimes, the objective of REDD+ is contrary to logging concessionaires, the need to design a strategy on how the program will be advanced was essential. Also, the impacts of logging were identified as a threat to conserving biodiversity and critical ecosystem. As a result, under Strategic Priority 2 of the National REDD+ strategy, there is a commitment to "*ensure that all industrial logging is practiced to high conservation standards, so that loss of forest and biodiversity is minimized.*"⁷⁸ Also, in Strategic Priority 4, there is a commitment to "*ensure that mining result in zero-net deforestation, through mechanisms such as biodiversity offsets.*"⁷⁹ These commitments are intended to mitigate the impact of developers on biodiversity.

v. National Forest Policy

Because terrestrial biodiversity is predominantly found in the vast area of Liberia forest, the National Forest Policy sets the roadmap for protecting terrestrial wildlife. To this end, the FDA is the main government entity authorized to ensure the protection of terrestrial biodiversity⁸⁰ thereby facilitating the application of the concept of NNL/NG outcome. It works with the EPA in delivering these objectives. In the national forest policy, the government, through FDA, defines forest conservation to "include biodiversity conservation (at the landscape, site and species level) and maintenance of the other environmental functions of forests (e.g., soil and water protection)."81 Clearly, while recognizing the value of sustainable logging and other concession activities, the policy places emphasis on biodiversity protection. More besides, the policy acknowledges Liberia's biodiversity potential and significance and lists the following activities to be implemented toward the protection of biodiversity within forested landscapes: "Collect and analyze biological and socio-economic information to determine the status of existing and proposed protected areas and finalize the establishment of an appropriate protected areas network; Increase community participation in wildlife management in all forest areas and, in particular, through collaborative management of protected areas; and Strengthen and improve alternative livelihood opportunities to reduce rural dependence on forests and wildlife."82

⁷⁷ Section 6.2.3, Section 2.3.5, Food and Agriculture Policy and Strategy of Liberia

⁷⁸ Section 3.3, REDD+ Strategy, Republic of Liberia, 2016

⁷⁹ Section 3.3, REDD+ Strategy, Republic of Liberia, 2016

⁸⁰ Section 3.1, National Wildlife Conservation and Protected Area Management Law of Liberia

⁸¹ Section 3.1, National Forest Policy and Implementation Strategy, 2006

⁸² Section 7.1, 7.2, & 7.4, National Forest Policy and Implementation Strategy, 2006

vi. Mineral and Mining Policy

There is no mention specifically of biodiversity or species management. However, the policy makes reference to environmental protection under its environmental stewardship chapter that "*no significant mineral operation will be permitted without an environment and social impact assessment having been conducted, evaluated and approved by the Liberia Government. Plans for managing environmental and social impacts must be incorporated into the assessment reports.*"⁸³ The environmental assessment referenced in the policy is the environmental and social impact on biodiversity are evaluated, and mitigation measures to avoid, minimize, and compensate are considered. The Ministry of Mines and Energy refers all environmental assessment issues, prior to the issuance of licenses, to the EPA for determination. Until the EPA grants such an environmental permit, the Ministry does not issue the final mining license to operate.

vii. National Biodiversity Strategy and Action Plan (NBSAP)

In 2017, with funding from the Convention on Biological Diversity, the government completed its NBSAP, a roadmap for reducing the impact of biodiversity loss. Set as a five-year strategic action plan, NBSAP identified several sources of biodiversity loss, including unsustainable logging, traditional shifting cultivation farming practice, mining, use of agro-chemical, etc. The five strategic goals and accompanying targets which present an opportunity for facilitating a NNL/NG outcomes are listed below:

Goal I: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society;

Goal II: Reduce the direct pressures on biodiversity and promote sustainable use;

Target 2.1: By 2024, the rate of loss and degradation of natural habitats outside protected areas serving ecological corridors or containing key biodiversity areas or providing important ecosystem services is minimized by 3% through integrated land use planning.

Target 2.2: By 2023, at least 20-25% of living marine and aquatic resources are managed sustainably and guided by the ecosystem approach.

Goal III: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity;

⁸³ Section 7, Mineral Policy of Liberia, 2010

Target 3.1: By 2020, at least 4% of existing terrestrial protected areas (national parks, nature reserves, conservation areas set aside in community forests, etc.) are conserved, effectively and equitably managed, within an ecologically representative and well-connected system, and by 2022, at least 5% of coastal and marine areas of particular importance to biodiversity and ecosystem services, are identified, assessed and measures taken for their protection.

Target 3.2: By 2018, threatened and vulnerable species lists are updated and measures effected by 2019 to improve their conservation status

Goal 4: Enhance the benefits to all from biodiversity and ecosystem services;

Goal 5: Enhance implementation through participatory planning, knowledge management and capacity building;

Speaking to Mr. Duatama Cammue, the EPA Biodiversity Officer, it was uncovered that an evaluation of the success of the NBSAP and assessment of the national threat to biodiversity had not been undertaken. As a result, enforcement of the policy is weak and requires a relook to understand the gaps and successes if any.

1.3 Has government issued guidelines to give effect to the law and policy described in 1.1 and 1.2 above? In the absence of government guidelines, are other sets of guidelines (eg IFC PS6, BBOP, industry guidelines e.g CSBI) being used to support company efforts to deliver NNL/NG? Please list and provide these.

As stated supra in this report, the EPML, in particular, uses the terms guidelines and regulations interchangeably to mean the same thing. For all other legislations, regulations and guidelines do not carry the same meaning and enforcement mandate. Generally, regulations carry a greater weight and enforcement mandate compared to guidelines.

In some cases, regulations are developed to give effect to the laws. For example, the EPA has issued the ESIA Procedural Guidelines, which broadly provide for incorporating the potential impacts of a project on biodiversity during the environmental impact study. There is a regulation on minerals exploration etched out of the Mining and Mineral Law of Liberia. A draft regulation on the wildlife and Protected Areas Management law is being prepared. FDA has issued a few regulations for forest management with provisions on biodiversity protection. However, there is a requirement in the EPML for EPA to promulgate biodiversity-specific guidelines. Up to the compilation of this report, the EPA had not drafted and published the guidelines on the protection of biodiversity. Speaking to the Biodiversity Officer at the EPA, it was gathered that the EPA has not set in motion a plan for the issuance of regulations/guidelines on biodiversity protection as

required in the EPML for developers. This is one area where technical support could be provided to the EPA to address this issue.

The EPA has promulgated a noise regulation that addresses noise from mining, quarry, demolition, and construction on fauna and flora. While there is no specific biodiversity regulation, this noise regulation sets an allowable limit for developers in different environments and during different times of the day. The purpose of the noise regulation is to mitigate the impact to people but, most importantly, to avoid/minimize the impact on biodiversity.

As already discussed in this report, the EPA has issued an ESIA procedural guidelines that provide the specific requirement of mitigation measures to protect biodiversity. The regulation on exploration for mineral resources does not reference NNL/NG except that it makes reference to the EPA processes of assessing environmental impacts, which may allow for incorporation of the ESIA tool. It provides a platform whereby developers are subjected to the rules of the ESIA procedural guidelines and the mitigations measures required therein. Notwithstanding, the exploration for mineral resources regulation needs updating to include specific requirements on NNL/NG and strengthening requirements to apply the mitigation hierarchy.

It does not matter whether the country has acceded to a particular international protocol, as long there is an absence of a regulation on a particular issue affecting biodiversity, in practice, the government adopts the international principle or rule. For example, the EPA generally adopts the WHO water quality standard to measure impacts on water bodies. In addition, the National Oil Company of Liberia adopted the entire IFC performance Standards for its upstream oil and gas program. In other circumstances where the project is being supported by the international finance corporation (IFC), AfDB, etc., the developer is obligated to adopt these principles or rules. Most times, where the regulation is absent and the government is aware of these policies, it will not be illegal to require a developer to adopt these rules as long as adequate notice is provided in advance. The Assistant Manager for ESIA at EPA, Mr. Daoda Karlon, noted that there are few instances where the government required developers to adopt international standards and/or rules regarding NNL/NG even though he did not specify the particular standard being used.

1.4 Please list (i) the relevant laws, policies, guidelines and sources consulted and (ii) identify which departments of government, agencies or institutions are responsible for preparing and enforcing the policy.

Please see the source documents in **Annex-I** for ease of reference. The list includes all statutes, regulations, policies, and strategies that have been reviewed. It also contains legislations that are being developed with high anticipation of approval.

I.5 Land tenure:

1.5.1 Is there clear land tenure in Liberia and a spatially explicit cadastral plan so it is possible to tell who has rights to each parcel of land? (In the context of mitigation including biodiversity offsets, we need to establish how areas of land designated for development and designated

for avoidance and biodiversity offsets can be clearly identified, recorded and contribute to enforcement.)

A clear land tenure system exists under the Land Rights Act of Liberia (LRA). The LRA, enacted in September 2018, is the first instrument to holistically clarify rights to land in Liberia. The rights to land ownership, possession, and use are unequivocally established in the Land Rights Acts. However, the process of determining the actual demarcation of land across the country using the principles in the law has not been completed and may not be for the next years due to challenges with enforcement. Article 7 of the Act establishes categories of land ownership and names four categories of land: Public Land, Government Land, Customary Land, and Private Land.

Protected Areas is a land category that may subsist with all of the ownership categories in Land, be it private communal, or public/Government. Therefore, in the context of biodiversity offsets, any of the four categories may serve as offsets for biodiversity. Currently, most protected areas are within the Government Land Categories, accounting for about 4.1% of Liberia's landmass; this provides the best alternative for land designated for avoidance due to its high protection status and overarching conservation objective.

Government Land currently has the best potential for offsets, but with inadequate management, measuring additionality is a challenge except where investors invest in protected areas and minimize the government fiscal bureaucracy. Within this tenure, through forestry, mining, and agriculture concessions, a lease is the best option for accessing offsets for Liberian corporations and individuals. This is only because, currently and prior to the enactment of the Land Rights Act, all protected areas and concessions were located on Government Land. However, following the Land Rights Act, wherein concessions and protected areas can be established in Customary Land, could present another suitable option for offset programs predicated upon the community's consent and desire. Both the forest and fishery sectors have statutory authority to establish protected areas. However, the forest sector is better situated for offsets programs which may qualify as a protected area. This is due to the increased presence of concessions and major developments (mining, agriculture, etc.) on land with huge impacts on terrestrial biodiversity. A significant gap is the lack of a clear standard establishing a duty of care.

Other forms of tenure, such as possessory right granted to the community through "community forestry" or "conservation areas"⁸⁴ may be applicable for offset programs provided there is

⁸⁴ Liberia is about to pilot the creation of conservations areas through regulations from FDA which will be different from the protected areas established through legislative enactment. The concept will follow the idea of ICCA which stands for "territories and areas conserved by indigenous peoples and local communities"

adequate commitment from the community for protection. Additionally, right growing out of possessory or use rights inland, like an easement, are protected even after conveyance.

A concession cadastral portal is available to improve transparency and improve land use. It currently focuses on land use rather than land ownership. The focus on land use and not land rights was due to the absence of the Land Rights Act during the development of the system. The cadastral is a cooperative venture of Government of Liberia agencies, including the Forestry Development Authority, Ministry of Mines and Energy, Ministry of Agriculture National Oil Company of Liberia, the National Bureau of Concession, and Liberia Land Authority. However, the cadastral falls short of being designated a detailed plan since it has not fully incorporated all of the land uses and has not provided information on how the various categories of land may intersect and impact investment or biodiversity offsets growing from investments.

1.5.2 What are the mechanisms for securing long-term commitments on land, how do they work and which are most commonly used? (eg land-use planning, zoning, leases, title deed restrictions, covenants under other statutes etc).

Developers may secure long-term commitments on land depending on the land categories. Government Land leased through concessions is the commonly used mechanism for securing commitments. Generally, four types of licenses can be issued under the mining law, with the mineral development agreement or Class A being the secure long-term license.

Licenses	Description	Validity
Prospecting license	It is granted when an area has not already been subject to a valid mineral right granted to another person; the area granted shall not exceed one hundred (100) acres. The holder shall file and submit a proposed work plan for the prospection to the Minister of Land, Mines, and Energy. The prospecting license does not give the right to conduct commercial mining.	Six (6) months, renewable once for a further period of six (6) months, provided that the holder meets his obligations under the law
Exploration license	It is granted when the area has not already been subject to a valid mineral right granted to another person; the exploration area shall be contiguous and shall not exceed one thousand (1000) square kilometers. The holder is	Not more than three (3) years, and it may be extended for a single two (2) year term upon written application of a holder

	to submit a proposed exploration program to the Minister of Land, Mines, and Energy within ninety (90) days after the issuance of the exploration license and shall commence exploration within one hundred and eighty (180) days after the issuance of an exploration license unless the	
Class C mining license	Minister agrees to a longer period. The production area covered by this license shall be not more than twenty-five (25) acres. One person may hold up to four (4) class C mining licenses at the same time. Holders of a class C mining license shall conduct mining predominantly as a small- scale operation.	One (1) year, renewable for further terms of 1 year each, if the holder has met all of his legal obligations
Class B mining license	Holders of a class B mining licenses can conduct mining as industrial operations. The production area is twenty-five (25) acres.	Five (5) years, renewable for not more than five (5) years.
Class A mining license	It is granted during or at the end of the exploration period of discovery of exploitable deposits and is materially in compliance with a Mineral Development Agreement, which has become effective, permitting mining in the proposed production area.	Not be more than twenty-five (25) years and may be extended for consecutive additional terms not exceeding twenty-five (25) years each.

 Table One showing mining license. Table Sourced from https://link.springer.com/article/10.1007/s11356-017-9647-4/tables/2

In addition to mining, the petroleum law provides that "the duration of an exclusive exploitation authorization shall be provided in the petroleum agreement for a maximum of twenty-five years from the date of issue of such authorization."⁸⁵ Even though this has not happened in practice, for any petroleum development on land, the long-term commitment will not exceed 25 years.

For Forestry, the most commonly used mechanisms are lease through concessions. For example, the Forest Management Contract has the most extended secure term of 25 years. Similarly, for Agriculture, the best option for long-term commitment and most commonly used is through concession. For customary land, the maximum time for executing a lease through agricultural concessions or other means is fifty (50) years⁸⁶. Private developers may also enter agreements with

⁸⁵ Section 21.4, New Petroleum (Exploration and Production) Reform Act, 2014

⁸⁶ Section 49 (4), Land Rights Act

communal communities, where a community forest has been granted, through community forest management agreements, which have 15 years subject to unlimited extension.

1.5.3 Is there a system of covenants/easements/servitudes that allows conservation obligations to run with the land even if the original landowner sells the land to a successor in title? If so are there provisions that require disclosure to successors?

A system that allows for the respect of rights growing out of an agreement or other means established by law does exist. There are four modes for the creation of an easement, namely⁸⁷:

- i. Express conveyance: through a deed, written agreement, or testamentary grant
- ii. Pre-existing use that is well known, not temporary, and as reasonably necessary for the enjoyment of the property.
- iii. Necessity
- iv. Prescription

The enjoyment of a right to an easement, including those of a conservation easement that vest before a title is transferred, will continue to exist with the new landowners as long as the conditions above persist and may only be terminated by mutual agreement, abandonment, or the merger of the property.⁸⁸ Article 63 (1) of the Land Rights Act provides that *"if an easement existed on Land prior to any subsequent division of the ownership of the Land, the prior use of the Land will continue unless a contrary intent is clearly expressed or may reasonably be implied."* However, the existence of an easement by implication from pre-existing use is a factual matter. Therefore, applying such a right to existing conservation obligations is reasonable and extends to parties acquiring rights due to the conveyance of the property/land.

1.5.4 Can these systems be applied to 'public' and as well as 'private' land? If not, are there other systems that apply to public land?

While the statute does not list the categories of lands that an easement may be exercised on, it generally establishes that easement may attach to all categories of land, public, private, government, or customary lands. ⁸⁹ The reference to Land under the Liberia Land Act encompasses all the categories, and the application of the principle therein relative to an easement affects private, public, government, and public Land subject to their limitation on ownership and possession under the Land Rights Act.

1.5.5 Can you suggest whether ownership, leasehold and/or other forms of tenure or arrangement could best be suited to long-term offset arrangements (whether on public or private land)?

⁸⁷ Article 61, Liberia Land Rights Act Creation of Easement

⁸⁸ Article 66, Liberia Land Rights Act, Termination of Easement

⁸⁹ Article 61, Liberia Land Rights Act, Creation of Easement

The best-suited offset arrangements, whether on private, public, government, or communal land, are dependent on the person's (corporate or natural) eligibility to own land in Liberia. The Constitution of Liberia limits ownership of Land to Liberian citizens.⁹⁰ Partnership, sole proprietorship, and corporation organized under Liberian laws consisting entirely of Liberians or corporations with Liberians owning all corporate shares are eligible for ownership.

All other persons seeking interest in land, private or public, may do so through a lease agreement, an easement, or a license.⁹¹ Given this, ownership is best suited for long-term offsets for Liberians and those eligible; otherwise, a lease presents the best option in the case of investment involving non-Liberians. On public or government land, the best lease options have been for 25year.⁹² On private and customary land, there are statutory restrictions, but they provide favorable options for leasehold up to 25yrs depending on the investment amount.⁹³

I.6 Protected area and wildlife legislation:

1.6.1 What different protected area categories exist in Liberia? Are there community protected areas (as well as government ones) and do these have legal standing?

Protected areas are categorized as multiple sustainable use reserves, national parks, nature reserves, protected landscape/seascape, and strict nature reserves. Further, Game Reserves, Controlled Hunting, Communal Forests, Communal Forests, multiple sustainable use reserve, national forest reserves, national monuments, habitat/species management areas, Protected Landscape/seascape, traditional bush schools/sacred society bush, ancestors' homes, and Special Management Areas are other forms of protected areas.

Multiple sustainable use reserves, national forests, national parks, protected landscape/seascape, nature reserves, and strict nature reserves are established only by legislative actions⁹⁴ and have strict protection from external activities, including farming, extractive activities, housing development, logging, etc. For example, in the case of multiple sustainable use reserves, there might be categories of the protected area utilized for agriculture purposes. In contrast, the core area is prevented from any external use save research and tourism activities. Protected areas created by legislation are required to be co-managed between the FDA and the community.⁹⁵ Other protected areas including Buffer Zones, Communal Forests (as defined in this Act), Community Resource Management Area, Community Wildlife Management, Conservation Corridor, Controlled Hunting Area, Game Reserves, Marine Reserves or Park, Multiple Sustainable Use

⁹⁰ Article 22, Constitution of the Republic of Liberia (1986)

⁹¹ Article 6, Liberia Land Rights Act

⁹² Both Agricultural, Forestry and Mining Concession on public lands have been limited to 25yrs.

⁹³ Article 60(4), Liberia Land Rights Act, Nature, Creation and Extinction of Leases

⁹⁴ Section 5.3.1, National Wildlife and Protected Area Management Law of Liberia

⁹⁵ Section 5.4.1 & 5.9.2, National Wildlife and Protected Area Management Law of Liberia

Management Area, Wildlife Sanctuary are established by regulations⁹⁶ issued by the FDA and may have some human interference based on the land-use plan established during the establishment of the protected areas or conservation areas.

The National Forestry Reform Law (NFRL) of 2006, the Environmental Protection and Management Law (EPML) of Liberia, The National Wildlife Conservation and Protected Areas Management Law, Fisheries Aquaculture Management and Development Law, the Community Rights Law with Respect to Forests Land, and the Land Rights Act all provide for the establishment of protected areas. The instruments, as mentioned earlier, authorize the establishment of protected areas within different environments. However, the EPML serves as a significant bridge considering the broader management authority of the Liberia Environmental Protection Agency.

The laws mandate the scope and categorization of protected areas. For example, the forest sector is governed by the NFRL, CRL, and the Wildlife Law; hence, these instruments generally categorize protected areas in the forest sector. In addition, the New Fisheries Law governs the fisheries sector, and it provides for the establishment of protected areas. Below is a detailed assessment of the sectoral scope of protected areas categorization.

A. Forest Sector

Chapter Nine of the NFRL mandates Liberia Forestry Development Authority to establish a protected areas network to cover at least thirty percent of Liberia's forest areas. These protected areas are proposed and enacted as either national forests, national parks, nature reserves, or strict nature reserves.⁹⁷ Further, the NFRL recognizes the establishment of other protected categories within the protected area network. These include but are not limited to Game Reserves, Controlled Hunting, Communal Forests, Communal Forests, and other Buffer Zones as conservation areas.

The Wild Life Law provides an expanded categorization of protected forest areas to include protected areas established through legislative action (gazettement), regulations, and traditional protected areas.⁹⁸ Protected areas designated by legislative actions include; multiple sustainable use reserve, national forest reserve, national parks, nature reserve, strict nature reserve, national monument, habitat/species management area, Protected Landscape/seascape, and other protected areas by regulations include; Buffer zones, communal forests, community resource management areas, community wildlife management areas, conservation corridors, controlled hunting areas, game reserves, marine reserve park, multiple sustainable use management areas, and wildlife sanctuary. Traditional Protected Areas include traditional bush schools/sacred society bush, ancestors'

⁹⁶ Section 5.3.2, National Wildlife and Protected Area Management Law of Liberia

⁹⁷ NFRL 9.3 & 9.5

⁹⁸ Wildlife Law Section 5.3.1; Section 5.3.2; Section 5.3.3

homes, areas left for a windbreak, and watershed protection on community forest lands. The Wildlife Law is up for Amendment and Restatement, and Part One of the Bill categorize forest similar to the categorization of the current wildlife law, except that it recognizes the role of the National Fisheries and Aquaculture Authority is the Establishment of Marine Protected Areas.⁹⁹

The Community Rights Law (CRL) with Respect to Forest Lands recognizes the tenure rights of communal communities to forest resources on communal forest lands. In addition, it recognizes the protection and conservation of natural resources, biological diversity, ecosystems, and habitats.¹⁰⁰

B. Land Management

The Land Rights Act of Liberia is the first statutory instrument that comprehensively addresses land ownership issues in Liberia. It identifies four categories of land ownership in Liberia: public land, Private Land, Government Land, and Communal Land. The recognition of communal land as a category provides an expanded role for communities owning communal forests in Protected Area Management. It gives them opportunities to use their forests for conservation through protected area establishment¹⁰¹, which could be utilized as an offset. Additionally, Article 7.3 of the Act recognizes Protected Areas as a land category that may subsist in any four-ownership types.

C. Fisheries Management

The Fisheries and Aquaculture Management and Development Law of 2019 (Fisheries Act) provides statutory authority for the conservation and protection of marine and aquatic environments through the establishment of Special Management Areas.¹⁰² The Act mandates a collaborative process with the Forestry Development Authority, the Environmental Protection Agency, the Ministry of Mines and Energy (MME), and the Ministry of Defense (MOD) as appropriate to establish Special Management Areas. Section 4.17 of the Fisheries Act also mandates the establishment of rivers as Protected Areas consistent with Section 75(3) of Liberia's Environmental Protection and Management Law.

D. Protected Area Categories under the EPML

Under the EMPL, a lake, river, or wetland may be declared a protected area^{.103} Further, the EPML authorizes the EPA to protect natural environments by declaring protected natural habitats¹⁰⁴. The

⁹⁹ Amended Wildlife Bill Part I, Sections 2.4.6, 2.4.7, and 2.4.8

¹⁰⁰ CRL Section 2.2g

¹⁰¹ Article 42.2, Land Rights Act

¹⁰² Fisheries Act 4.16

 $^{^{103}\,}$ Section 75(3), Environmental Protection and Management Law of Liberia, 2003

¹⁰⁴ Section 79(1), Environmental Protection and Management Law of Liberia, 2003

EMPL categorizes protected areas as a national park, wildlife reserve, and nature reserve specific to wildlife protection.¹⁰⁵

1.6.2 Are there rules prohibiting economic development within all or some categories of protected area and what are these rules?

There are rules governing the protection of protected areas. However, these rules are general and not specific or detailed because they are based on a general framework established by the statutes instead of regulations. For example, relative to forest-based protected areas, the NFRL provides: "No Person shall: In a Strict Nature Reserve, pursue activities other than Conservation management and research. (ii) In a National Park, Nature Reserve, or Game Reserve, prospect, mine, farm, hunt, fish, extract Timber or non-timber Forest Products, or take any other action except those for management or non-consumptive uses, such as tourism, recreation, and research. (iii) In Communal Forests, prospect, mine, farm, or extract Timber or non-timber Forest Products. (v) In Cultural Sites, prospect for minerals, undertake Class B or C mining, or farm. (vi) In a Multiple Sustainable Use Reserve, farm or extract Timber for Commercial Use."¹⁰⁶

Despite these statutory prohibitions, both the NFRL and the Wildlife Law authorize the FDA to develop regulations establishing rules for protected areas based on their level of protection.¹⁰⁷ The EPML and the Fishery Act mandate the establishment of various categories of protected areas; there are currently no detailed rules.

Protected Forest Area	Protected Forest Area Prohibited Activities Statutory Reliance		
Categories	I I OIIIDITEU ACUVITIES	Statutory Kenance	
Strict Nature Reserve	All activities prohibited except conservation management and research	NFRL 9.10(i)	
National Park	Prospection, mining, farming, hunting, fishing, timber, and non-timber forest products extraction or any other action (economic included) except for the management of non- consumptive uses like tourism recreation, and research	NFRL 9.10(ii)	
Nature Reserve	Prospection, mining, farming, hunting, fishing, timber, and non-timber forest products	NFRL 9.10(ii)	

Table showing prohibited activities in protected forests areas

¹⁰⁵ Section 80.4, Environmental Protection and Management Law of Liberia, 2003

¹⁰⁶ Section 9.10(b), National Forestry Reform Law of Liberia, 2003

¹⁰⁷ Section 5.2 of the National Wildlife Law and Section 9.10(A), NFRL

	extraction or any other action (economic included) except for the management of non- consumptive uses like tourism recreation, and research	
Game Reserve	Prospection, mining, farming, hunting, fishing, timber, and non-timber forest products extraction or any other action (economic included) except for the management of non- consumptive uses like tourism recreation, and research	NFRL 9.10(ii)
Communal Forest	Prospect, mine, farm, or extract timber for commercial use	NFRL 9.10(iii)
National Forest	Prospect for minerals, undertake Class B or C mining or farming.	NFRL 9.10(v)
Multiple Sustainable Use Reserve	Farm or extract timber for commercial purposes	NFRL 9.10(vi)

1.6.3 Are there any barriers to establishing offsets in existing protected areas? (E.g. any rules prohibiting the linking of protected area conservation to private sector investments? And how could Liberia demonstrate the principle of 'additionality' had been satisfied with a justification for offset activities in protected areas (i.e protected areas that already exist or are already planned)?

There are limited barriers to establishing offsets in existing protected areas, with the first enabler being the clarity in ownership of existing protected areas. The existing protected areas exist on government land with limited conflict with private interest, making negotiation less complex. There is no specific rule prohibiting the linking of protected area conservation to private sector investment, but a critical barrier would be the achievement of additionality. The government supports protected areas through budgetary allotments from the Ministry of Finance and Development Planning (MFDP). With the competition from service and other sectors, government support to protected areas has not been adequate, with donor support being the principal lifeline for managing protected forests areas. Ensuring a framework that provides direct offset benefit to protected areas will facilitate the creation of additionality through effective protected area management rather than channel offsets funding through the Government consolidated account. One proposal from a study conducted with support from the World Bank¹⁰⁸ recommended the "potential of using a conservation trust fund (CTF) to finance an offset scheme for Liberia"¹⁰⁹ with an emphasis on the mining sector.

¹⁰⁸ The National Biodiversity Offset Scheme: a roadmap for the mining sector in Liberia, 2015

¹⁰⁹ Chapter 5, pg 57, The National Biodiversity Offset Scheme: a roadmap for the mining sector in Liberia, 2015

Areas established for mitigation measures, including avoidance areas (set-asides) and offsets, could qualify for protected areas. There could be several options available, including the use of communal land and the engagement with Authorized Forest communities under third-party conservation agreements. There would be no difference in protection as mitigation measures with protected areas' conservation corridors could qualify for designation under the current Wildlife Law.

The National Wildlife Law of 2012 provides that "the Authority shall, in a transparent and participatory manner and in consultation with communities to be affected, identify and target areas for protection and establish Protected Forest Areas Network and Conservation Corridors, designating protected area management categories appropriate to the sustainable forest and wildlife management in Liberia while taking into account rural communities needs, rights to community forest lands and forest resources, wildlife management and related ecotourism activities."¹¹⁰ The law defines conservation corridors as "the use of a Game Reserve, Multiple Sustainable Use Reserve, *community wildlife management areas, communal forests* or any other Protected Area category or wildlife management area category to ensure that large blocks of the protected Forest areas remain contiguous for the purpose to permit wildlife migration and maximum generic exchange between blocks."¹¹¹

1.6.4 Could areas established for mitigation measures including offsets be given the status of protected areas? Does designation of protected areas in Liberia vary with the type of protected area in question and if so how does it vary?

Yes, areas established for mitigation measures could be given protected areas status if they meet the requirement of protected areas established under any mentioned statute. For this purpose, there are two kinds of PAs proposed within the Wildlife Law: 1) PA by legislative action (Gazettement)¹¹² and 2) PA by regulations¹¹³. Prior to the creation of PAs by legislative enactment, the FDA "shall undertake surveys of areas of aesthetic, ecological or scientific interest and shall in collaboration with relevant line ministries and agencies, and in consultation with forestdependent communities and civil society, based on agreed criteria, select and propose for presidential and legislative approval appropriate conservation and wildlife management categories."¹¹⁴ These may include

¹¹⁰ Section 5.2, National Wilidlife and Protected Area Management Law of Liberia

¹¹¹ Section 1.2, National Wilidlife and Protected Area Management Law of Liberia

¹¹² Section 5.3.1, National Wilidlife and Protected Area Management Law of Liberia

¹¹³ Section 5.3.2, National Wilidlife and Protected Area Management Law of Liberia

¹¹⁴ Section 5.3, National Wilidlife and Protected Area Management Law of Liberia

- 1. Multiple Sustainable Use Reserve
- 2. National Forest Reserve
- 3. National Parks
- 4. Nature Reserve
- 5. Strict Nature Reserve
- 6. NaturalMonument
- 7. Habitat/Species Management Area
- 8. Protected Landscape/Seascape.

In the case of PA by regulations, the law provides that the FDA "at its own initiative and/or in collaboration with or at the requests of communities and private land owners and relevant agencies identify and by Regulation establish, permanently or temporarily, within the Protected Areas management framework, conservation and wildlife management areas categories other than those listed in Section 5.3.1."¹¹⁵ These include:

- 1. Buffer Zones
- 2. Communal Forests (as defined in this Act)
- 3. Community Resource Management Area
- 4. Community Wildlife Management
- 5. Conservation Corridor
- 6. Controlled Hunting Area
- 7. Game Reserves
- 8. Marine Reserve or Park
- 9. Multiple Sustainable Use Management Area
- 10. Wildlife Sanctuary

Protected areas under the Land Right Act of Liberia¹¹⁶ may subsist with any land category. Therefore, any offsets or mitigation measures that meet the requirements may be made a protected area.

1.6.5 Are there any listed habitats or species (other than protected areas) on which development impacts are regulated? How are these regulated?

There is no legally binding list of habitats on which development impact may be regulated outside of protected areas. All of the laws mentioned required the designation of habitats as protected areas to regulate them. However, informally, the Environmental Protection Agency generally prohibits development in wetlands. However, there is a designated list of protected species whose prevalence in a given habitat may impact development based on Section 6.3 of the Wildlife Law and NFRL 9.12 a. ¹¹⁷ Development activities at locations with significant populations of

¹¹⁵ Section 5.3.2, National Wilidlife and Protected Area Management Law of Liberia

¹¹⁶ Article 7.3, Liberia Land Rights Act

¹¹⁷ The list designates species based on their vulnerability and should be informed by survey.

vulnerable (threatened or endangered) species and of critical importance may be subjected to more regulatory scrutiny despite the lack of protection status of the habitat.

For example, the National Forestry Reform law provides that "the Authority shall identify and protect Wetlands and areas with fragile soils on Forest Lands, and require every Holder to identify and protect Wetlands and areas with fragile soils where that Holder is conducting Operations."¹¹⁸ In response to this, the FDA issued the Revised Code of Harvesting Practices in which exclusion zones were listed. Exclusion zones in commercial forests "are areas where logging is strictly prohibited for the purpose to protect environmental and social interests."¹¹⁹ The main biodiversity-related exclusions zones that are listed in the Code of Harvesting Practices are

- 1. Soil Protected Area
- 2. Riparian Buffer Protected Area
- 3. Ecosystem protection Area
- 4. Water Supply Protection Area
- 5. Plant and Animal Protection Area
- 6. Protected Area Buffer Protection

1.7 Indigenous peoples' rights and rights of local communities:

1.7.1 Are there provisions for free prior and informed consent (FPIC) for indigenous peoples and other communities with respect to projects (eg a mine, road or agricultural expansion) taking place on or having an impact on their lands or areas on which they obtain their livelihoods needs or practice cultural activities?

Yes, the Liberia Constitution provides that "The Republic shall... manage the national economy and the natural resources of Liberia in such manner as shall ensure the maximum feasible participation of Liberian citizens under conditions of equality as to advance the general welfare of the Liberian people and the economic development of Liberia"¹²⁰. This sets the tone for inclusive management of resources, especially those associated with land, thereby requiring indigenous people and local communities' involvement in decisions making about projects commencement.

The EPML 86(1) b requires the prior informed consent of communities before bioprospecting. The EPML also requires broad participation in the management and decision-making affecting natural resources.¹²¹

FPIC and communities' rights in forestry are protected under the NFRL, Community Rights Law (CRL), and the Forestry Development Authority Ten Core Regulations. Chapter 10 of the NFRL

¹¹⁸ Section 8.3 (b), National Forestry Reform Law, 2006

¹¹⁹ Section 2.5.1, Revised Code of Harvesting Practices, 2016

¹²⁰ Article 7, Constitution of Liberia, 1986

¹²¹ Section 4(2)(g), Environmental Protection and Management Law of Liberia, 2003

obligates the FDA to establish a clear mechanism for informed community participation in forest decision-making.¹²² The NFRL also obligates the FDA to take actions to institutionalize community participation in forest-related development and management.¹²³ The FDA Ten regulations also address FPIC relative to indigenous peoples or forest-dependent communities and requires the free prior and informed consent from Community Forestry Development Committee (CFDC)¹²⁴ before any forest operations may proceed.¹²⁵ Section 2.2 of the CRL also requires the free prior and informed consent of communities before a decision affecting community forest resources is made.

The Land Rights Act also provides FPIC requirements for accessing customary land for development. Article 33 grants communities a bundle of rights to their communal land. The exercise of those rights includes the right to exclude others not part of the community; therefore, development partners wanting to invest must consult with the community through their leadership as established under Article 36 of the Land Rights Act.

1.7.2 What rights have communities living in proximity to or potentially affected by a proposed development to object to the development, and/or to make comments on alternatives analyses and proposed mitigation measures, including offsets?

Wherein the land is declared a customary land with ownership to the community, the right of exclusion¹²⁶, objection, and approval rests with the community, save for mineral rights and concession predating the passage of the Land Rights Act. In the event where the land belongs to the Government, the law is unclear about the power of the community to reject development on the land. In the case of protected areas establishment, the law requires that the FDA "shall establish a Protected Area Network, together with corridors and incorporating existing national forests and community forest lands with the consent of the community"¹²⁷ while transmitting the proposal to the president for PA establishment the FDA shall provide "indication of prior, free, informed consent of the community Where Community Forest Lands are affected."¹²⁸

The ESIA Procedural Guidelines and the EPML do not provide any opportunity for the community to consent to development or offer rejection. Instead, the guidelines and the law allows developers to provide adequate consultation during the ESIA process and provide evidence of community engagement. In practice, the EPA uses the consultation report to determine community-level acceptance or objection for the project. The challenge with this approach is that the information from the ESIA evaluator is not reaffirm, in most cases, therefore leaving room for misinformation.

¹²² Section10.1(b)(ii), National Forestry Reform Law of Liberia, 2006

¹²³ Section 5.1(f), National Forestry Reform Law of Liberia, 2006

¹²⁴ The CFDC is the representative of leadership of forest dependent communities (with 3km distance)

¹²⁵ FDA Regulation 102-07, Part 6, Section 61C (3)

¹²⁶ Article 33 (2)(i), Land Rights Act

¹²⁷ Section 5.2.1, National Wilidlife and Protected Area Management Law

¹²⁸ Section 5.4.1, National Wilidlife and Protected Area Management Law

I.8 Economic incentives:

1.8.1 Are there any tax breaks, subsidised loans, subsidies, grants or other economic instruments in place that promote (or hinder) good environmental performance in different sectors (eg mining, oil and gas, forestry, agriculture, infrastructure development, fisheries)?

There are no tax breaks or subsidies for good environmental performance in relation to biodiversity. A new program has been initiated by the Government of Liberia to provide rebate for cleaner vehicles with support from the United Nations Environment Program (UNEP). However, this program has not advanced to the operational stage. As envisaged in the EPML, the use of clean and renewable energy sources should be promoted and incentivized. It is required that the EPA shall promote the use of renewable sources of energy by "…*creating economic incentives for the use and promotion of renewable sources of energy*."¹²⁹ While the law doesn't describe what kind of incentives should be provided, the EPA has not developed any system for delivering on this objective. The EPA has been promoting the use of renewable energy sources but has not incentivize any company or agency working on these kinds of projects. No regulation is in place to provide incentives for renewable projects.

There is a reduction in the withholding tax rate for both non-residents and resident taxpayers engaged in renewable projects with environmental benefits. In all other sectors, the general withholding tax for non-residents and residents for services performed is 15% and 10%, respectively,. However, for services performed on renewable energy projects, the withholding rate for both non-residents and residents 6%.¹³⁰

I.9 Liability regimes and trust funds:

1.9.1 Are there are any regimes setting out bonds, or other measures for prior investment for mitigating any impacts on biodiversity?

The EPML provides a clear requirement for the issuance of bonds or pre-investment mitigation measures, restoration orders, insurance, etc. However, there is no regulation or policy on how these bonds, restoration orders, and/or insurance are determined and executed. In particular, the EPML provides that "the Agency shall issue to any person, in respect of any matter relating to the management of the environment and natural resources, and environmental restoration order for the following purposes: g) levy a charge, or bond which represents a reasonable estimate of the cost of any action taken by an authorized person or organization to restore the environment to the state in which it was before the taking of the action which is the subject of the order."¹³¹ Note that the

¹²⁹ Section 81 (1)(b), Environmental Protection and Management Law of Liberia, 2003

¹³⁰ Section 806(f) & 905(h), Revenue Code of Liberia, 2011

¹³¹ Section 90 (1)(g), Environmental Protection and Management Law of Liberia, 2002

term "biodiversity is not specifically mentioned, however, it is captured under "natural resources" in accordance with the intent and spirit of the law as well as the definition of natural resources.

Similarly, the forestry law (NFRL) did not mention any specific bonds or insurance to be paid by developers. Nevertheless, there is a significant mention of joint and several liability imposed on the developer and its sub-contractors for any act that contravenes the law. When multiple persons jointly hold a Forest Resources License, their liability for acts or omissions pertaining to the license is joint and several. This, to a large extent, relate to acts repugnant to the provisions protecting biodiversity. The NFRL states that "holders of Forest Resources Licenses and Persons having permits or licenses under Chapter 9 of this Law are liable to the Republic for acts committed in contravention of this Law by themselves, their Operators, employees, agents, contractors, or subcontractors."¹³² Other than these two provisions, there is limited provisions in the laws regarding pre-investment mitigation actions, bonds, or insurance.

The National Wildilife Law provides for the FDA to establish a conservation and wildlife fund for "the administration of protected areas, wildlife conservation and management activities, and enforcement of the Widlife Law."¹³³ Even though not set up through regulations as required by the law, this fund could be a great opportunity to attract funding from private investors and the government towards ensuring protection for biodiversity.

1.9.2 Are there any regimes setting out bonds, compensation, restoration or other measures of redress for any environmental damage (eg oil spills, pollution events or illegal clearing of forests)?

A few legislations address the issue of restoration, bonds, compensation, etc. in the unlikely case of environmental damage or illegal clearing of forests. However, the overarching provision to ameliorate such damage is found in the EPML and states that "the Agency shall issue to any person, in respect of any matter relating to the management of the environment and natural resources, an environmental restoration order for the following purposes: "(a) to restore the environment or natural resources as near as it may be to the state in which it was before the taking of action which is the subject of the order; (b) restore land, including the replacement of soil, the replanting of trees and other flora and outstanding geological, archaeological or historical features of the land or the area contiguous to the land specified in the order."¹³⁴

In addition to the EPML, the regulations appertaining to class A exploration provides that "notwithstanding any finding of financial capacity of a Licensee under Section 4.2(c), a Licensee must before beginning Exploration provide security for its performance of its obligations under Section 10.1 equal to 15% of the budget for its approved work program, or such greater amount as may be required by the EPA. The security must be provided as a letter of credit substantially in

¹³² Section 20.3 (a) (b), National Forestry Reform Law of Liberia, 2006

 $^{^{\}rm 133}$ Chapter 10, National Wilflife and Protected Area Management Law

¹³⁴ Section 90 (1)(b), Environmental Protection and Management Law of Liberia, 2002

the form of Schedule 10.3 or in another form satisfactory to the Minister of Finance."¹³⁵ This falls within the overall picture of the environmental protection (and biodiversity conservation) requirement in section 10 of the regulations for Class A exploration. The performance security requirement in the regulation does not only affect technical completion of the exploration exercise but to ensure that any environmental liabilities is within the delimited or project area.

In some instances, like the mining regulations, the bond requirement goes beyond the technical completion of the work and applies to other areas, including biodiversity loss, where applicable. The reason for this comprehensive language for bond and security or compensation is to ensure that in any event of damage or lack of performance, the government can take actions to reverse or mitigate the impacts. Within this approach of establishing regimes, the NFRL provides that "the Authority shall require Persons involved in activities regulated by the Authority to post bonds to assure performance of work, and the Authority shall further require that the performance bonds assure payment of fees, redress of injuries, compensation of employees, reclamation of land, and return of property, subject to the conditions of Paragraphs (i) and (ii) of this Subsection."¹³⁶ It is noticed in this provision that the performance bond is not restricted to payment or fees or compensation of employees but also "reclamation of land" which demonstrate that the destruction of critical habitat with cascading impact to biodiversity could be reversed or mitigated or compensated using the bond. Another regime for the institution of bond for biodiversity protection is the fishery Act. Section 5.4 of the National Fishery Amended Act authorizes the Director-General of the National Fishery and Aquaculture Authority (NaFAA) may prescribe, as a prerequisite for the issuance of a fishing license, a performance bond that serves as a financial assurance to meet the obligations (including compensation) for the license. This broad language is subject to many interpretations and could refer to all the "obligations" in the law on the Licensee, including protecting biodiversity.

1.9.3 Have there been examples of mechanisms employed in COUNTRY to secure land for conservation through easements or other similar approaches to managing land?

Working through one of its agencies or ministries, the Government of Liberia has not granted any land for conservation under an environmental easement. However, the authority and right to do so have been enshrined in the EPML. It provides that the EPA may establish conservation areas or allow private property owners to manage their property as an environmental easement which shall be intended and used to "Preserve flora and fauna."¹³⁷Speaking to the interviewees from EPA and the FDA, no conservation areas have been created via easement since the passage of the environmental-related legislation. However, the Government has taken steps in establishing protected areas, including PAs with a coastal component. It has established five PAs, including

¹³⁵ Section 10.3 (a), Regulations governing Exploration under A Mineral Exploration License of the Republic Of Liberia

¹³⁶ Section 5.1 (e), National Forestry Reform Law of Liberia, 2006

¹³⁷ Section 42(2), Environmental Protection and Management Law of Liberia, 2002

Sapo National Park, Grebo Krahn National Park, East Nimba Nature Reserve, Gola National Park, and Lake Piso Multiple Sustaianble Use Reserve. These PAs are established in areas of high biodiversity importance. To improve the PAs establishment process, the FDA has prepared a draft national guideline detailing a methodological approach for creating PAsacross Liberia.

1.10 In answering the questions above, please mention which departments of government, agencies or institutions are responsible for preparing and enforcing the policy.

Depending on which regime or legislation requires the bond, the entity with the authority to enforce such law will impose the bond. The EPA is responsible for the enforcement of the environmental easement through the Court system in Liberia. It has to be issued by the court and enforced by EPA. By law, EPA cannot issue the easement. The Bond, described in the EPML, is imposed /levied and managed by EPA.

Similarly, the security for restoration which is required for mining companies under the mining regulations, is managed by MME. Likewise, the performance bond mandated for licensee in the NFRL is issued and managed by the FDA. In essence, no one entity of government is authorized to issue bonds for environmental protection or biodiversity conservation. Therefore, there is a need to harmonize all these bonds, compensations, and pre-investment mitigation programs into a single comprehensive system that is easily monitored and enforced.

1.11 Baseline duty of care: Does the law already stipulate a minimum duty of care for managing natural assets (e.g. on agricultural land/ plantations and forest lands)? (NB this will be important for establishing 'additionality', since conservation activities can only be counted as 'gains' for offsets if they take place in addition to any activities that are already required under the law.)

The laws do not establish a minimum duty of care except for government gazetted protected areas, where minimum standards are established under NFRL Section 9.10 (b). The NFRL 9.7 provides minimum safeguard by prohibiting the abolishment, alienation, or modification of a protected area boundary except through legislative actions and following consultations with the Forestry Development Authority.

1.12 Does Liberia use a principles-based approach (setting out principles and associated standards to follow) in other areas of environmental policy?

Yes, Liberia uses the principle-based approach in its established environmental policies. For example, section 2.2 of the Environmental Policy of Liberia establishes five principles informing Liberia's National Environmental Policy. The five principles are the polluter pay principle, the precautionary principle, individual responsible, considerations for neighbors, and promoting sustainable development. They are restated in full or partially in most policies impacting the environment.

1.13 Are there laws and policies in COUNTRY on other environmental offsets (e.g. carbon, water, social issues) and Payments for Ecosystem Services? Do you think these could be relevant in the context of NNL/NG policy objectives and to delivering multiple benefits within a landscape?

No law or Policy addresses environmental offsets and payment for ecosystems services relative to carbon, water, or social issues in detail; however, the National Environmental Policy of Liberia identifies the polluter pay principle as one of the underlying principles of the Policy. Additionally, it mandates that environmental costs or benefits foregone as a result of environmental damage /degradation be included in public and private sector planning.¹³⁸Also, Liberia's Revised National Determined Contribution (NDC) provides policy guidance on incentivizing mitigation activities in agriculture and coastal zones (water).¹³⁹

Yes, the guidance provided by the mentioned policies is essential in the context of NNL/NG. It provides an essential framework that can be used to develop sector-specific policy(ies) that considers environmental offsets and Payments for Ecosystems Services (PES).

1.14 Monitoring and enforcement: What is the record in Liberia of monitoring and enforcement of law and policy, including those mentioned above? What are the limitations, for example, in terms of capacity? Is there any supporting evidence for this?

Generally, law and policy enforcement is weak. This weakness is enabled by corruption and the limited capacity of responsible institutions. Most Government institutions are underfinanced, limiting their outreach, monitoring, ability to attract skilled staff; hence their enforcement capability is not strong.

1.14.1 Is there a requirement for expert monitoring and evaluation of mitigation and offset implementation?

Yes, the EPA Act requires the entity to designate its officers and duly qualified public officers/civil servants to be environmental inspectors¹⁴⁰ who shall monitor and inspect all programs including mitigation and offset programs. The EPA may use its employees or designate experts from other agencies or government offices to conduct the monitoring exercise.

In addition, the Liberia Monitoring Reporting and Verification (MRV) system, though not fully expanded to cover all environmental resources and sectors, provides expert monitoring and mitigation evaluation, including offsets.¹⁴¹ In forestry, there is a forest reference emission level (FREL), National Forest Monitoring System (NFMS), amongst others, that require expert monitoring. Similar approaches may be replicated and made sector-specific for monitoring and

¹³⁹ Liberia's Revised National Determined Contribution, available @ http://extwprlegs1.fao.org/docs/pdf/lbr206208.pdf

¹³⁸ Section 2.4(h) National Environmental Policy of the Republic of Liberia

¹⁴⁰ Section 20, Environmental Protection Agency Act, 2003

¹⁴¹ Section 4.0 of Liberia's Revised National Determined Contribution. Available @ <u>http://extwprlegs1.fao.org/docs/pdf/lbr206208.pdf</u>

evaluating mitigation and offsets implementation. As indicated previously, this approach generally covers all environmental monitoring efforts and is not specific to offset programs.

1.14.2 Is there a requirement for quantified assessment of effectiveness of mitigation and offset implementation?

Except for the forest sector, as indicated above, there is no established requirement for quantified assessment of the effectiveness of mitigation and offsets implementation. The ESIA guidelines require that "a detailed environmental monitoring programme/plan should be defined to identify the necessary monitoring activities to ensure proper process and performance efficiency of the project."¹⁴² While there is no quantified assessment requirement set, the monitoring mandate in the ESIA guidelines is to ensure "compliance with mitigation measures including information on location, time schedule, periodic reporting, audit/review results, implementation of mitigation measures."¹⁴³ Similarly, the EPML establishes a requirement for a "periodic environmental audit of all projects and activities"¹⁴⁴ but does not provide any quantified requirement or methodology to be adopted.

1.14.3 What are the mechanisms for ensuring transparency of monitoring and evaluation methodology and outputs and for their feedback into management (to project proponent) and oversight bodies (to regulators)?

As unquantified assessments of the effectiveness of offset programs are carried out, the transparency of the data is not an explicit requirement within the legal and regulatory system in Liberia. EPA mandates, through the ESIA procedural guidelines, that the developer ensure adequate monitoring and describe the process during the ESIA process. However, due to capacity constraint and weakness in enforcement, it is difficult to determine if the information provided is accurate.

Data collection, sharing, management, and interagency/ministerial agency data sharing memorandum are vital mechanisms for ensuring transparency of monitoring and evaluation of Liberia's domestic MRV.¹⁴⁵ Externally, a technical assessment of reports processes is done under the monitoring and evaluation of the Forest Sector MRV.

¹⁴² 3.2.12, ESIA Procedural Guidelines

¹⁴³ Ibid

¹⁴⁴ Section 24, Environmental Protection and Management Law of Liberia

¹⁴⁵ See Figure 5, Page 110 of ¹⁴⁵ Liberia's Revised National Determined Contribution, available <u>https://unfccc.int/sites/default/files/resource/BUR1.pdf</u>

III. GAPS

Most of the laws, as stated in this report, affecting biodiversity—*marine and terrestrial*—were developed after Liberia signed and ratified the convention on biological diversity (CBD). Thus, the concept of NNL/NG is not mentioned in any legal or policy instrument in Liberia. Mainstreaming biodiversity into national planning was not heightened until 2012 and therefrom. The 2006 ESIA Procedural Guidelines had limited provisions requiring developer to take concrete actions in protecting biodiversity. In the mining sector, pressure was mounting from international conservation groups to mandate major mining projects to take concrete steps towards establishing offset programs or compensation for loss of biodiversity within their concession areas. There were few conservation agreements¹⁴⁶ signed between the companies, communities, and conservation groups for the conservation and management of community forest.

Notably, in 2004, EPA was struggling to finalize its biodiversity action plan. As required in the EPML for a specific guideline or regulations to be developed mandating developers to integrate the mitigation hierarchy for biodiversity management, the government could not deliver. By 2004, there was a situation of zero national policy on biodiversity management, no regulations for a developer to integrate biodiversity in their environmental planning process, and no specific law legislated for mainstreaming biodiversity. As citizens and policymakers became more aware of the significance of biodiversity and considering that Liberia's rich biodiversity is mainly located within the forested landscapes, a new wildlife law was passed in 2016. Similarly, in 2017, the ESIA Procedural Guidelines were revised with the inclusion and consideration of biodiversity during impact identification and mitigation. However, the new guidelines is limited in scope relative to biodiversity and contain no requirement for NNL/NG. A year later, in 2017, the National Fishery Act was passed, providing limited provisions for protecting marine biodiversity with no reference to NNL/NG considerations. Just on the margins of the national elections in 2017, the EPA issued the National Biodiversity Strategy and Action Plan (NBSAP), a document that was expected to elevate actionable interventions for mainstreaming biodiversity.

The following gaps have been identified based on the review of the laws and policy extant in Liberia and interaction, through interviews, with key policy experts within the Government of Liberia.

i. Lack of a Biodiversity-Specific Regulation/Guidelines

While these laws offered a glimpse of hope for mainstreaming biodiversity, some critical issues were missing. First, the ESIA Procedural Guidelines, even though they contained few provisions regarding biodiversity management, provided inadequate protection. As mandated by the EPML,

¹⁴⁶ https://www.greencommodities.org/content/gcp/en/home/media-centre/conservation-agreements-signedwith-concession-communities-in-li.html . Also see https://frontpageafricaonline.com/news/conservation-intlliberia-communities-sign-deals-to-protect-coastal-ecosystem-in-grand-bassa-county-%EF%BF%BC/

there is a need for the EPA to promulgate a specific guideline integrating biodiversity management during the development of major capital projects, national development planning process, issuance of licenses for concessions, management of community forest and customary land, extraction of minerals and petroleum resources, and any other activity with potential negative externality on biodiversity. The new and specific regulations will provide strong, targeted, and adequate protection for biodiversity in Liberia with specific requirements/targets for NNL/NG of biodiversity. It should be designed following a review of the efficacy of all biodiversity-related policies and laws over the last 20 years and stocktaking of the current impacts from economic and other activities on critical species and habitats. Following such assessment, the new regulations will then provide clear direction on the rationale and requirements for all activities conducted within the borders of Liberia or supported by Liberian companies towards mainstreaming biodiversity.

ii. Absence of NNL/NG targets/requirements in the Amended Wildlife Law Following a review of the current national wildlife and protected area management law, conservation organizations and the government of Liberia agreed that an amendment was necessary to develop more robust measures/requirements for developers to protect both marine and terrestrial wildlife (biodiversity). While the new law has addressed the issue of biodiversity management, including conserving critical habitats, minimizing direct impacts to wildlife, and discouraging illegal wildlife trade (IWT), there is no requirement for developers to take actions to mitigate their impacts on biodiversity in terms of NNL/NG. Therefore, an update of the new law is required to ensure that specific requirements are given to developers to mainstream biodiversity management by assessing the impacts, providing mitigations strategies, and creating offset/compensation schemes. Thereafter, the new law should be supported by parliament.

iii. Absence of NNL/NG in NBSAP

The NBSAP was developed as a document from which the Government of Liberia, through the EPA and its partners, will take "sustained action towards a responsible and credible governance and sustainable management and use of Liberia's critical natural resource base which is the single most important challenge the country faces and meeting this challenge must begin with addressing the causes of the loss of biodiversity of the various ecosystems." Again, the NBSAP does not use or mention the term NNL/NG and has no measurable targets for measuring impacts on biodiversity from development projects.

Speaking to the coordinator of biodiversity at EPA, much has not been done in this regard. In fact, he noted that limited awareness and consultation has been conducted on the strategy, thereby limiting its implementation. Furthermore, the strategy does not put pressure on the developer to take action, even where there is an unknown impact, to protect biodiversity within their landscape. As the only biodiversity strategy for Liberia, companies should be encouraged to contribute to some of the strategic interventions designed by the government to promote and improve biodiversity management across the country.

iv. Conservation and Wildlife Fund Regulations

Chapter 10 of the National Wildilife Law establishes a conservation and wildlife fund for the administration of protected areas, wildlife conservation and management activities, and enforcement of the wildlife law. Since the passage of the law in 2016, the FDA has not set up the wildlife fund and/or promulgated the regulations guide the process of contribution, management, and disbursement of funds for PA management, conservation activities, and enforcement of the law. When promulgated and the fund becomes operational, this regulation could be an avenue for promoting offset programs within PAs and other conservation areas by developers.

v. Lack of key legal/policy provisions affecting NNL/NG

As mentioned previously and throughout this report, Liberian jurisprudence contains no mention or reference to NNL/NG. Even though there are few provisions that may in a way be related to the concept of NNL/NG such as requiring the mitigation hierarchy for biodiversity, allowing for offset programs and compensation schemes, the lack of specific reference and requirement for NNL/NG in any law, regulations, guidelines and policy document demonstrates a major gap. In addition to developing a biodiversity-specific regulations, requiring developers to support the implementation of the NBSAP, and updating and promoting the passage of the revised wildlife law, there is a need to improve the provisions of some of the existing laws and policies. The table below details the summary of the gaps that have been identified and recommendations for mainstreaming NNL/NG biodiversity

Summary of Gaps

NO	Laws/Policies	Key Issues	Description	Gaps	Amend/Review
I	All Laws	Mitigation Hierarchy	Mitigation hierarchy for biodiversity should be stated boldly and unequivocally in all legislations describing and mandating developer mainstream biodiversity protection.	Liberia's jurisprudence is uncleared about integrating the mitigation hierarchy for biodiversity. In fact, most laws sparsely mention mitigation measures. There is no explicit language on offset requirements or compensation rules.	Review the ESIA procedural guidelines ¹⁴⁷ and other sectoral laws to include the mitigation hierarchy as a mandatory management tool. To include avoid, minimize, restore and, where necessary, compensate/offset
2	Biodiversity Regulations	Biodiversity Protection	The EPML requires the EPA to promulgate a biodiversity-specific regulations mandating all developers to take concrete actions in managing and protecting biodiversity within their project landscape and beyond.	NO biodiversity-specific regulations exist	Promulgate a new regulation/guidelines specifically addressing the issues of biodiversity in addition to the few provisions noted in the ESIA procedural guidelines. This will include a NNL/NG requirements and targets
3	Environmental Protection and Management Law of Liberia (EPML), 2003	Ecosystem services	Ecosystem services is a key concept that needs to be defined in order to demonstrate the value of environmental protection to human existence.	There is no definition of the term "ecosystem services" in the EPML. In fact, there is no mention of the phrase "ecosystem service" in the entire law. As the framework legislation of environmental protection, there is a need to ensure such a concept is captured.	Revise/Amend the EPML and include the definition and value of ecosystem services to the environment and humanity.

¹⁴⁷ As stated previously, these are regulations and the EPA uses the word interchangeably with guidelines.

4	Environmental Protection and Management Law of Liberia (EPML), 2003	Requirements for NNL/NG	There is a need for a specific requirement for a developer to take actions towards NNL/NG for biodiversity. Clear obligations on biodiversity management must be set national and communicated to developers as part of the pre- deployment planning process	There is no specific requirement or clear obligation for project proponents or developers to take action towards NNL/NG for biodiversity. The framers anticipated that this would have been included in the biodiversity guidelines required in the law. However, in the absence of this regulation, the law is unenforceable.	If the regulations cannot be developed, an amendment of the laws should be requested. Typically, because the amendment is tedious compared to regulations, the recommendation is to fast-track the regulations instead of including a provision in the law.
5	Mineral Policy	Biodiversity Inclusion	Most, if not all, of Liberia's minerals, are found in biodiversity-rich environments. Exploration or extraction cannot be conducted without some impact to biodiversity. Therefore, any such policy must detail the requirements for developer to take actions in protecting biodiversity.	There is no mention of biodiversity or the impact of mining on biodiversity. Furthermore, the policy does not mandate or set requirements for developers to take concrete actions toward integrating biodiversity in their planning and project delivery cycles.	Amend the Policy to include consideration and requirements for biodiversity mainstreaming in the form of NNL/NG
6	Mineral Policy	Offset Program	Offset and compensation schemes are significant components of a successful biodiversity program, especially for mining projects. A description of a clear system in the policy will catalyze biodiversity protection as developers will understand and integrate the requirements in their planning process.	Needs clarity on the offsetting program, especially for a major mining operations in light of the constitutional arrangement whereby no private/customary rights extend to the mineral resources.	Amend the policy and clarify how offsetting programs can occur on customary land or government land.
7	EPML	Offset requirement	An offset program is a crucial mechanism for managing residual impacts identified by the ESIA or other biodiversity studiesfrom the project.	As important as this is, the EPML does not provide any requirement for developers to design offset programs for managing residual impacts.	Amend the EPML and include specific requirements for developers to design offset programs especially

0	Deculations on	Conceptioned	Concerning funds and of the		where residual impacts on biodiversity exist. This will encompass projects related to forestry, agriculture, mining, and other extractive operations.
8	Regulations on Conservation and Wildlife Fund	Conservationand Wildllife Fund for offset program	Conservation funds are one of the ways to promote offset programs if well managed and regulated. Based on its significance in promoting the conservation of biodiversity, it was included in the wildlife law	The FDA has not passed a regulation describing the processes and requirements for the conservation and wildlife fund	Promulgate a new regulations appertaining to the set up, processes, requirements and operations of the conservation and wiuldlife fund management.
9	National Forest Policy and Implementation Strategy	Biodiversity conservation	Liberia's rich biodiversity is found in forest environments. Therefore, the overarching policy for forest management should include clear definitions and provisions for NNL/NG for biodiversity and establish options for developers to adequately ensure biodiversity protection.	The policy fails to establish any broad of specific requirements for NNL/NG or offsetting rules for biodiversity protection. There is a lack of an overall intent for biodiversity conservation.	Revise the policy and include rules for offset programs, compensation, and a general consideration for NNL/NG
10	Minerals and Mining Law	NNL/NG requirements	NNL/NG requirements/targets are important for consideration by mining development projects in consideration that majority of impacts therefrom affect biodiversity.	The current mining law provides no mention or reference for NNL/NG of biodiversity	In addition to inclusion of the hierarchy iof mitigation for biodiversity as stated supra, there is a need to include in the revised mining law ¹⁴⁸ requirements and targets for NNL/NG including offset program.
11	Exploration Mining Regulations	Biodiversity Inclusion	As stated previously, mining operations are predominately	The regulations does not include any requirement for a	Revise the policy and include strong

¹⁴⁸ There are multiple drafts of the current mining law in circulation. The government has not officially released the official draft for comments.

			based in biodiversity rich environments and therefore any regulations for exploration mining should have clear rules on mainstreaming biodiversity.	mitigation program for biodiversity including offsetting, avoiding critical hotspot, compensation, etc, netiher does it include any NNL/NG requirements/targets.	commitments to mainstreaming biodiversity with consideration of NNL/NG
12	National Wildlife Law, 2016 (NWL)	Wildlife (Biodiversity) Offset/Compensation	As the main legislation protecting terrestrial wildlife, and by extension biodiversity on land, an inclusion of the offset and compensation extremely important. This is especially where the forestry law and some other legislations do not provide adequate protection for biodiversity	There is no requirement on developers for offset programs or compensation for wildlife (biodiversity) loss created by a concessionaire.	There is an opportunity to include some of these requirements in the current draft amended wildlife law.
13	National Wildlife Law, 2016 (NWL)	Mitigations for Biodiversity Loss	Wildlife (Biodiversity) law needs clear roadmap and provision on mitigations strategies. There must be an inclusion of NNL/NG. The mitigation hierarchy (avoid, minimize, restore, offset/ compensate) must be required.	There is no requirement on developers or concessionaires to minimize impact to biodiversity/wildlife or to take actions or mainstream biodiversity during their operations. Similarly, there is no NNL/NG requirement. While there is a reference to the EIA, this applies only for the creation of PA. More so, most language in the law is broad and subject to interpretations.	In the draft amended wildlife law, include clear and specific requirements for mainstreaming biodiversity for developers with an objective of NNL/NG.
14	National Forestry Reform Law (NFRL), 2006	Biodiversity Inclusion	The governing forestry law of every country needs to have tighter requirements for license holders to mainstream biodiversity in their operations. A reference to the ESAI procedural	There is no requirement for licensees to mainstream biodiversity during the execution of their forest contract. A reference to the ESIA process is insufficient	The ideal approach is to amend the forestry law and improve provisions on biodiversity management or revise the ESIA procedural

			guidelines is not a bad idea, but wherein such approaches have a limitation, it affects biodiversity in the forestry sector.	because the guidelines are limited with respect to offset programs, compensation, and the clear mandate on hierarchy of biodiversity mitigation.	guidelines, whichever is more manageable.
15	National Forestry Reform Law (NFRL), 2006	Bond	Bond, particularly performance bond within the forestry sector, should encapsulate all of the issues that could result into a negative impact. This include loss to biodiversity as a result of the project.	The language captured in section 5.1 of the NFRL is limited and does not seem to include compensation for biodiversity loss. The bond appears to address incomplete operational activities or failure to meet contract obligations.	Amend to include language that Performance Bond should affect compensation, or reversion of the impact to biodiversity. Alternatively, include a separate environmental bond to address impacts, especially residual impacts, to the environment and biodiversity.

IV. CONCLUSION

Using the principle of NNL/LG as the methodological lens, this review has shown the gaps in the legal framework to protect the environment and, by extension, biodiversity, particularly as it relates to the extractive industry. While provisions in the law aim to mitigate or prevent adverse impacts on biodiversity, challenges with enforcement, lack of regulations or clear guidelines, limited capacity and resources, and absence of a robust monitoring and evaluation mechanism mean that these are mostly not enforced.

Furthermore, with specific reference to NNL/NG, there is no explicit legal requirement for this for extractive projects or activities to ensure that the negative impacts on biodiversity from these undertakings are balanced or outweighed by measures taken to avoid and minimize these impacts, to restore affected areas, or to offset the residual effects. However, it is worth noting that a legal instrument requiring NNL/NG, with straight adherence to the mitigation hierarchy, will help to preserve and enhance the functionality of existing areas of high biodiversity value and, where applicable, create new or increase the extent of ecologically important areas.

Finally, while this study establishes an important baseline on the state of the legal environment as it relates to NNL/NG, more studies will be needed to investigate this further from an economic, ecological, and social perspective to demonstrate to the government in concrete terms why this should be pursued and adopted as a policy goal. These studies will also clarify whether NNL/NG should be adopted for all development projects or if this should be restricted to projects in a particular ecosystem (e.g., forests, wetlands, etc.). A more overarching approach could be to aim for a framework that balances the loss of high conservation value (HCV) areas due to economic development with reclamation, mitigation, and restorations efforts so that the total size of important ecological acerage in the country does not decrease, but remains constant or is increased. It is worth noting that ultimately, to achieve NNL/NG, the government could utilize several different environmental policy tools that legally protect HCV, provide rules and regulations for corporations interacting with these areas, and introduce incentives for the preservation and conservation of these areas.

V. ANNEXES

i. Policies and Laws Consulted

NO	Laws/Regulations/Policies	Focus	Year	Agency responsible for enforcement or reporting
1	Constitution of Liberia	Organic Law	1986	All MACs (ministries, agencies and commissions)
2	National Forestry Reform Law	Forestry and Terrestrial Wildlife	2006	FDA
3	National Wildlife Conservation and Protected Area (PA) Management Law,	Terrestrial Wildlife ¹⁴⁹	2016	FDA (the amended law will be enforced primarily by FDA/NaFAA
4	Environmental Protection and Management Law of Liberia	Environmental Protection	2002	EPA
5	Land Rights Act	Land tenure and management	2018	LLA
6	Fisheries and Aquaculture Management and Development Law	Fish & Aquatic resources (wildlife) management	2019	NaFAA
7	Minerals and Mining Law	Minerals	2000	MME
8	Community Rights Law with Respect to Forest Lands	Forestry and Community ownership	2009	FDA
9	New Petroleum Reform Law	Petroleum exploration/extraction	2016	LPRA
10	Amended Penal Law regarding extortion, Environmental Crime and Illicit trafficking	Environmental crime	2012	MoJ (primarily) and EPA
11	ESIA Procedural Guidelines	Environmental and social impact assessment	2017	EPA
12	FDA Regulations No. 113-08- Regulation on Environmental Impact Assessment	ESIA in forestry sector	2008	FDA/EPA ¹⁵⁰
13	FDA Regulations No. 102 -08- Regulation on Forest Land Use Planning	Forestry	2008	FDA
14	FDA Regulations No. 105-07- Regulation on Major Pre-felling Activities	Forestry	2007	FDA
15	Liberia Code of Harvesting Practices	Forestry	2017	FDA

¹⁴⁹ An amended Wildlife Law is being drafted for legislative action that incorporates aquatic and terrestrial wildlife

¹⁵⁰ There is a cooperation MoU between FDA and EPA

16	Liberia Exploration Regulation	Minerals	2010	MME
17	National Biodiversity and Strategic Action Plan	Biodiversity	2017	EPA
18	National Climate Change Policy and Response Strategy	Climate Change	2018	EPA
19	Fisheries and Aquaculture Policy	Fish & Aquatic resources (wildlife) management	2014	NaFAA
20	National REDD+ Strategy	Forestry	2016	FDA/EPA
21	National Forestry Policy and Implementation Strategy	Forestry	2006	FDA
22	National Environmental Action Plan (NEAP)	Environmental Protection	2019	EPA
23	Mineral Policy of Liberia	Minerals	2010	MME
24	Food and Agriculture Policy and Strategy	Agriculture	2008	MoA

ii. LIST OF INTERVIEWEES

NO	INTERVIEWEES	Title	Agency/Institution
1	Joseph Tally	Deputy Managing Director for Operations	Forestry Development Authority
2	Duatama Cammue	Biodiversity Officer	Environmental Protection Agency
3	Blamah Goll	Technical Manager for Conservation	FDA
4	Shadrach Kerwillain	Project Manager, Sapo Landscape	Fauna & Flora International
5	Dauda Karlon	Asst. Manager for ESIA	EPA
6	Ben Toejay	Asst. Director of Mines	MME
7	Hawa Walker	Asst. Manager for Conservation	EPA
8	William Boeh	Deputy Director General for Technical Services	NaFAA
9	Peter Mulbah	Country Director	Conservation International

iii. <u>PROJECTS/ACTIVITIES REQUIRING AN ENVIRONMENTAL</u> <u>IMPACT ASSESSMENT MANDATORY LIST</u>

1) Agriculture

- Cultivating natural and semi-natural not less than 50ha;
- Water management projects for agriculture (drainage, irrigation);
- Large scale mono-culture (cash and food crops)
- Pest control projects (i.e. tsetse, army worm, locusts, rodents weeds) etc;
- Fertilizer and nutrient management;
- Agricultural programmes necessitating the resettlement of communities:
- Introduction of new breeds of crops;
- Arial spraying

2) Livestock and range Management

- Large scale livestock movement
- Livestock market
- Introduction of new breeds of livestock
- Introduction of improved forage species
- Fencing
- Provision of public water supply (water points, wells)
- Ectoparasite management (cattle dips, area treatment)
- Intensive livestock rearing units
- Livestock routes

3) Forestry Activities

- Timber logging and processing
- Forest plantation and afforestation and introduction of new species
- Selective removal of single commercial tree species
- Pest management

4) Fisheries Activities

- Medium to large scale fisheries
- Artificial fisheries (aqua-culture for fish, algae, crustaceans, shrimps, lobster or crabs)
- Introduction of new species in water bodies

5) WILDLIFE

- Creation of national parks and game reserves
- Introduction of new species
- Wildlife catching and trading
- Hunting
- Wildlife ranching and farming
- Zoo and sanctuaries

6) Tourism and Recreational Development

- Construction of resort facilities or hotels along the shorelines of lakes, river, islands and oceans
- Hill top resort or hotel development
- Development of tourism or recreational facilities in protected and adjacent areas (national parks, marine parks, forestry reserves etc.) on islands and in surrounding waters
- Hunting and capturing
- Camping activities, walk ways and trials etc
- Sporting and race tracts/sites

• Tour operations

7) Energy Industry

- Production and distribution of electricity, gas, steam and hot water
 - ♦ Storage of natural gas
 - ♦ Thermal power development (i.e. coal, nuclear)
 - ♦ Hydro-electric power electric power
 - ♦ Bio-mass power development
 - ♦ Wind-mills power development
- Solar (i.e. impact due to pollution during manufacture of solar devices, acid battery spillage and improper disposal of batteries).
- Nuclear energy

8) Petroleum Industry

- Oil and gas exploration and development, including seismic survey
- Construction of offshore and onshore pipelines
- Construction of oil and gas separation, processing, handling and storage facilities
- Construction of oil refineries
- Construction of product depots for the storage of petrol, gas, diesel, tar and other
- products within commercial, industrial or residential areas
- Transportation of petroleum products

9) Food and Beverage Industries

- Manufacture of vegetable and animal oils an fats
- Oil refinery and ginneries
- Processing and conserving of meat
- Manufacture of dairy products
- Brewing distilling and malting
- Fish meal factories
- Slaughter-houses
- Soft drinks
- Tobacco processing
- Caned fruits an sources
- Sugar factories
- Other agro-processing industries

10)10) Textile in Industry

- Cotton and synthetic fibers
- Dye for cloth
- Ginneries

11)11) Leather Industry

- Tanning
- Tanneries
- Dressing factories
- Other cloth factories

12) 12) Wood, pulp and paper industries

- Manufacture veneer and plywood
- Manufacture of fibre board and of particle board
- Manufacture of pulp, paper, sand-board, cellulose-mills

13) Building and Civil Engineering Industries

- Industrial and housing estate
- Major urban projects (multi-storage building, motor terminals, markets etc)
- Tourist installation
- Construction and expansion/upgrading of roads, harbours, ship yards, fishing harbours, air fields and ports, railways an pipelines
- River drainage and flood control works
- Hydro-electric and irrigation dams
- Reservoir
- Storage of scrap metal
- Military installations
- Construction and expansion of fishing harbours
- Developments on beach fronts

14) Chemical Industries

- Manufacture, transportation, use and storage of pesticide or other hazardous and or toxic chemicals
- Production of pharmaceutical products
- Storage facilities for petroleum, petrochemical and other chemical products (i.e. filling stations)
- Production of paints, vanishes, etc.

15) Extractive Industries

- Extraction of petroleum
- Extraction and purification of natural gas
- Other deep drilling bore-holes and wells
- Mining
- Quarrying
- Coal mining
- Sand dredging

16) Non-metallic Industries (products)

- Manufacture of cement, asbestos, glass,-fibre, glass-wood
- Processing of rubber
- Plastic industry
- Lime manufacturing, tiles, ceramics

17) Metal and Engineering Industries

- Manufacture and assembly of motor-vehicles
- Manufacture of other means of transport (trailers, motor-cycles, motor-vehicle, bicycles-cycles)
- Body-building
- Boiler-making and manufacture of reservoirs, tanks and other sheet containers
- Foundry and forging
- Manufacture of non-ferrous products
- Iron and steel
- Electroplating

18) Waste Treatment and Disposal

a. Toxic and Hazardous Waste

- i. Construction of Incineration plants
- ii. Construction of recovery plant (off-site)
- iii. Construction of waste water treatment plant (off-site)
- iv. Construction of secure land fills facility
- v. Construction of storage facility (off-site)
- vi. Collection of transportation of waste

b. Municipal Solid Waste

- i. Construction of incineration of plant
- ii. Construction of composting plant
- iii. Construction of recovery/re-cycling plant
- iv. Construction of municipal solid waste landfill facility
- v. Construction of waste depots
- vi. Collection of transportation

c. Municipal Sewage

- i. Construction of waste water treatment plant
- ii. Construction of marine out fall
- iii. Nigh soil collection transport and treatment
- iv. Construction of sewage system

19) Water Supply

- Canalization of water courses
- Diversion of normal flow of water
- Water transfer scheme and reservoirs
- Abstraction or utilization of ground and surface water for bulk supply
- Water treatment plants

20) Health Projects

• Vector control projects (malaria, bilharzias, trypanosomes etc)

21) Land Reclamation and Land Development

- Rehabilitation of degraded lands
- Coastal and land reclamation
- Dredging of bars, greyones, dykes, estuaries etc.
- Spoil disposal

22) Multi-sectoral Projects

- Agro-forestry
 - Dispersed field-tree inter-cropping
 - Alley cropping
 - Living fences and other linear planting
 - Windbreak/shelter belts
- Integrated conservation and development programmes e.g. protected areas
- Integrated Pest Management (e.g. IPM)
- Diverse construction-public health facilities schools, storage building, tree nurseries,
- facilities for ecotourism and field research in protected areas, enclosed latrines, small enterprise, logging mills, manufacturing furniture carpentry shop, access road, well digging, camps, dams, reservoirs
- River basin development and watershed management projects
- Food aid, humanitarian relief

23) Trade: Importation and Exportation of the following

- Hazardous chemicals/waste
- Plastics
- Petroleum products

- Vehicles
- Used materials
- Wildlife and wildlife products
- Food
- Beverages

24) Urban and Rural Development including

- designation of new urban areas;
- establishment of industrial estates;
- establishment or expansion of recreational areas;
- establishment or expansion of recreational areas in mountain areas, national parks and game reserves;
- rezoning;
- shopping centers and complexes;
- hotels and other tourist facilities;
- buildings with a total floor space of 500m or more;
- declaration of development areas; and
- other infrastructure (both urban and rural).

25) Policies and Programmes

- Decisions of policies and programmes and legislative acts on environment and development;
- Decisions to change designated status;
- Family planning;
- Technical assistance
- Urban assistance;
- Urban and rural land use development plans (e.g. master plans, etc.)

26) General

- any activity out of character with its surroundings;
- any structure of a scale not in keeping with its surroundings;
- major changes in land use