

POLICY BRIEF //
**IMPLEMENTING NATURE BASED
SOLUTIONS TO ACHIEVE GLOBAL
BIODIVERSITY TARGETS AND
SUSTAINABLE DEVELOPMENT IN
LIBERIA**

July 2023

01/ KEY MESSAGES

- 1 In December 2022, 196 countries adopted a new global framework with the objective of halting and reversing biodiversity loss by 2030 at the 15th Conference of the Parties (COP15) to the Convention on Biological Diversity (CBD) in Montreal last December.
- 2 The Kunming-Montreal Global Biodiversity Framework (GBF) will be implemented over the next decade, starting with countries updating their National Biodiversity Strategies and Action Plans (NBSAPs) to align with the new global goals. These updated NBSAPs will be submitted for consideration at COP16, scheduled for the second half of 2024 in Türkiye.
- 3 As countries undergo their national updates to the NBSAPs and set new national targets aligned with the GBF, there are many opportunities to implement and scale up nature-based solutions (NBS) that contribute to the achievement of the GBF, as well as to other international commitments such as those made under the United Nations Framework Convention on Climate Change (UNFCCC).
- 4 The NBS and other actions that support nature's role in combatting biodiversity loss and climate change can be used to help Liberia achieve many GBF targets, including 7, 8, 10 and 11.

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02/ BACKGROUND

2.1 CONVENTION ON BIOLOGICAL BIODIVERSITY

The Convention on Biological Diversity (CBD) is an international legally binding agreement with three main goals: (1) the conservation of biological diversity; (2) the sustainable use of its components; and (3) the fair and equitable sharing of the benefits arising from the utilization of genetic resources. It was established in 1992 and including Liberia it has 196 countries as signatories. The CBD encompasses all aspects of biodiversity, including ecosystems, species genetic resources, and biotechnology, as well as its

role in development, including science, politics, education, agriculture, business, culture, and more. The primary focus of the CBD is to preserve biodiversity and ensure its sustainable use. To achieve this, it addresses threats to biodiversity such as habitat loss and climate change. The CBD also works to maintain the goods and services that biodiversity provides to support human well-being. In addition, it aims to protect traditional knowledge, innovations, and practices, and ensures fair and equitable sharing of benefits arising from the use of genetic resources. The CBD endeavours to guarantee that adequate resources are provided for the implementation of its goals.

2.1.1 GLOBAL BIODIVERSITY FRAMEWORK / The Kunming-Montreal Global Biodiversity Framework (GBF) was developed by the CBD to guide global efforts to protect and conserve biodiversity to put biodiversity on a path to recovery by 2030 for the benefit of the planet and all people. Replacing and updating the previous global strategic plan for biodiversity created in 2010 (the Aichi Biodiversity Targets), the GBF is the Paris Agreement for biodiversity, setting the direction and ambition for global biodiversity action and funding to ensure that biodiversity loss is halted and reversed by 2030. It sets four goals and 23 targets for conserving and sustainably using biodiversity and ensures that biodiversity benefits are shared equitably among all people. As party to the CBD, Liberia supports its three objectives and their operationalisation by the GBF.

2.2 LIBERIA'S DIVERSE LANDSCAPES AND ECOLOGICALLY SIGNIFICANT WETLANDS AND MANGROVES

2.2.1 AN OVERVIEW / Liberia ranges from flat coastal lowlands with mangroves and swamps to rolling hills and plateaus further inland, and low mountains in the northeast. The Nimba Mountain range, partially protected as a nature reserve, stretches along the Guinea border. The Coastal Plains are covered by a mosaic of savannahs, degraded coastal forests. In contrast, the hills of the Montane Forest Zone and Tropical Forest eco-regions are mostly covered by dense rainforests. In the Montane Forest Zone, Mount Wuteve reaches a maximum of 1,380m, the nation's highest point. This mountain range is surrounded by the less densely forested Wooded Plateaus, where woodlands and degraded forests dominate. The Bong Interior Plateau encompasses most of Liberia's arable land.

Lake Piso is an open coastal lagoon, fed by various creeks and rivers that drain into a series of swamps below the lagoon, the lower ones of which are tidal and support mangroves. The site is an important nursery and spawning ground for fish, sea turtles and a feeding and roosting place for shore and sea birds.

Marshall Wetlands comprises of three small rivers, sandy and rocky shores, and further inland a population of secondary forests and savannah woodland. The wetland is composed mainly of mangroves trees with mature trees reaching up to 30 meters.

Mesurado Wetlands in Monrovia and Montserrado County, is an important mangrove site. Three mangrove species (true mangrove (*Rhizophora harrisonii*), Red mangrove (*Rhizophora mangle*), White mangrove (*Avicennia Africana*)) are dominant and are threatened by intensive charcoal burning and fuel wood collection. Mesurado Wetlands provides a favourable habitat and feeding ground for several bird species and crocodiles and plays an important role in shoreline stabilisation and sediment trapping.

2.2.2 LIBERIA'S BIODIVERSITY IS IMPORTANT / Liberia's biodiversity faces severe threats, with rapid loss and destruction of species and habitats endangering the country's future development. The loss of biodiversity is a cause of alarm for the region. Liberia is home to the last two remaining (intact) blocks of the Upper Guinea Forest Ecosystem of West Africa. The forest is a biodiversity hotspot in this region. Thus, any further significant loss of biodiversity in Liberia would have severe ramifications for biodiversity conservation in West Africa.

Liberia developed a national Biodiversity Goal and Objectives to use biodiversity sustainably over the long-term, to meet the needs of current generations without compromising the ability of future generations to meet their own needs. The long-term vision is to develop education and information programs to raise awareness about the importance of biodiversity and place values on ecosystem goods and services, as well as to develop a framework for mainstreaming biodiversity into national accounting systems, development policies, plans and programs.

Specific goals include:

- 1** Taking appropriate measures to protect critical ecosystems against harmful effects or destructive practices for the conservation of biodiversity.
- 2** By 2023, at least **20-25%** of living marine and aquatic resources are managed sustainably and guided by the ecosystem approach.
- 3** Creating biodiversity awareness among sectors of society and promoting international cooperation.
- 4** Committing the people to the sound and sustainable use of biodiversity to for socio-economic development.

- 5 Promoting rational utilisation and conservation of biodiversity.
- 6 Promoting access to genetic resources and the fair and equitable sharing of benefits arising from their utilisation.

- 7 Fulfilling the Sustainable Development Goals, seek to end poverty and hunger, realise the human rights of all, achieve gender equality and the empowerment of all women and girls, and ensure the lasting protection of the planet and its natural resources by 2030.

03/ THE REGIONAL CHALLENGE

Achieving Liberia's national Biodiversity Goal and Objectives requires balancing long-term biodiversity conservation with sustainable utilisation to meet the needs of current and future generations. The issue is how to sustainably utilise biodiversity and harness ecological services without compromising its ecological integrity and ability to support dependent communities/populations now and in future. Specific challenges are described below.

OVERFISHING AND USE OF DESTRUCTIVE FISHING GEAR / There is increasing fishing pressure from artisanal fishers who are using destructive and illegal gear, Illegal Unregulated Unreported continues to be a challenge in Liberian waters with distant fishing water nations vessels causing havoc in terms of lost revenue, overfishing and driving biodiversity loss.

PLASTIC POLLUTION / We currently dump 11 million metric tons of plastic into the ocean each year and this figure is projected to double by 2030 and nearly triple by 2040. Soon we shall have more plastics than fish in our oceans if the trend continues. In 2018, impacts on tourism, fisheries, and aquaculture together with other costs such as those of clean-ups, were estimated to be at least US\$6-19 billion globally. Plastic waste management is a big challenge in Liberia. It is mainly generated from water sachets and bottles and beverages packaging. There is limited awareness and inadequate waste management regulations, leading to increased plastics in the marine ecosystem.

UNABATED LOSS OF MANGROVES COVER (THE LUNGS OF THE SEA) / Mangrove loss and degradation continues to be a challenge. Liberia has lost 26% of mangrove cover in the last 20 years. It is challenging to stop or reverse this decline with an increasing population,

competing land use including urban sprawl, increased mangrove use and climate change.

COMMUNITIES AND LIVELIHOODS - THE TWIN CHALLENGE / Communities and populations are encroaching into biodiversity rich areas such as wetlands and forests accelerating biodiversity and species loss resulting in loss of key ecosystem services that this habitat provide. The result being extinction of species, habitat degradation creating a negative feedback loop that is exacerbated by climate perturbations/weather variation.

Communities that live close to biodiversity rich geographies bear the burden of conservation and the brunt of lost or diminished livelihoods due to the need to protect key species or declining ecosystem services. They are often asked to make a binary choice to survive or perish - conserve or protect nature or starve or reduced livelihood returns - this should not be the case if they can eke a sustainable livelihood whilst conserving or protecting nature.

INADEQUATELY INTEGRATED LIVELIHOOD OPTIONS - AN AFTERTHOUGHT / The development of alternative livelihoods and income generating activities are critical interventions to ensure long-term conservation and sustaining natural resource dependent livelihoods. Access to micro credit, financial literacy skills, enterprise and value addition infrastructure are critical in anchoring long-term sustainability and appreciation of nature. The blending of nature conservation, livelihoods, and socioeconomic considerations for communities is lacking or inadequate in most models deployed in biodiversity management and conservation. Inclusion and ownership by communities is the weakest link in conservation.

04/ RECOMMENDATIONS FOR ACTION

ADDRESSING CHALLENGES WITH NATURE BASED SOLUTIONS IN LIBERIA'S NBSAP

The GBF's goals and targets cover a large variety of topics related to balancing conservation and sustainable use of biodiversity. This document will cover a selection of targets that most relate to ensuring nature's contributions to people through conservation, restoration, and sustainable use/management, as identified by Liberia as key priorities. The section below aims to provide examples of how Liberia can integrate nature-based solutions (NBS) to support variety of targets as they undergo their national updates to the NBSAPs and set new national targets aligned with the GBF. In particular, this section aims to connect existing work being done in Liberia to how it contributes to the achievement of several GBF targets.



4.1. TARGET 7 – POLLUTION

GBF TARGET 7 – POLLUTION / Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: (a) by reducing excess nutrients lost to the environment by at least half, including through more efficient nutrient cycling and use; (b) by reducing the overall risk from pesticides and highly hazardous chemicals by at least half, including through integrated pest management, based on science, taking into account food security and livelihoods; and (c) by preventing, reducing, and working towards eliminating plastic pollution.

- Developing contextually relevant solutions along the plastics value and supply chain that integrate community livelihoods and enterprises is one way to reduce marine plastics pollution.
- Protecting and restoring mangroves can also contribute to mitigating plastic pollution in coastal ecosystems. Mangroves serve as important habitats and buffer zones that can trap and filter pollutants, including plastics, preventing them from entering marine environments.
- CI is working with and supporting community-based enterprises (CBEs) to implement solutions to reduce, recycle and reuse plastics with an entrepreneurial focus to improve livelihoods whilst creating a cleaner environment by reducing the marine plastics footprint. The aim of this project is to demonstrate practical solutions across plastic value and supply chain and dependent livelihoods (Trash to Cash).
- In the quest to ban single use plastics in Liberia, CI has initiated a national conversation on developing a national policy of single-use plastics (SUPs) that will be owned and assigned compliance monitoring by multi stakeholders.

4.2. TARGET 8 – CLIMATE CHANGE

GBF TARGET 8 – CLIMATE CHANGE /

Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimising negative and fostering positive impacts of climate action on biodiversity.

- Mangrove conservation is a key nature-based solution that can support mitigation, adaptation and minimise the impact of climate change on biodiversity.
- Liberia lost **26%** of its mangroves in the last 20 years, and aims to protect **35%** of mangroves (38,585ha) by improving protected area management and operationalising proposed and new marine protected areas.
- Through the REDD+ framework and carbon credits, Liberia can explore and incentivise blue carbon as a short to intermediate strategy for the protection and management of mangrove wetlands and marshes.
- CI is supporting Liberia's efforts to protect and conserve mangroves and its biodiversity by preventing degradation, clear cutting, supporting restoration and protecting mangrove forests. CI is supporting the protection of wetlands through legal instruments (Marshals gazettement), the management of Lake Piso multiple use reserve, and supporting a policy review to include marine protected areas in national resource management policy frameworks.
- Restoration can contribute to achieving target 8. CI is working to mitigate the impact of mangrove degradation by restoring mangroves and wetlands where applicable.
- CI is leading the development of a national mangrove inventory for Liberia, to provide a baseline for mangroves and develop a national mangrove management plan.
- Liberia's updated NDC and Implementation Plan focuses on reducing national emissions and adapting to climate change, which directly contributes to achieving target 8.

4.3. TARGET 10 – PRODUCTIVE SYSTEMS

GBF TARGET 10 – PRODUCTIVE SYSTEMS /

Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches contributing to the resilience and long-term efficiency and productivity of these production systems and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.

- Liberia has approximately **37,000** active fishers and processors. The estimated maximum sustainable yield of the continental shelf area was 180,000 metric tons per year (pre-war estimates - fish stock assessment is pending). A total of **219** fish species are harvested. The fisheries sector makes a large contribution to GDP, going up to **10%** in some years, alongside its contribution to food and nutritional security and livelihoods of hundreds of thousands of people living on the coast and further inland.
- This vibrant economy is held together by women. Approximately **90%** of fish vendors in Liberia are women. In simple terms, if there are no women then there is no fish and fishing in Liberia.
- Increasing the engagement of women, improving access to affordable credit, unlocking and improving fish markets supply and value chain to increase income, and creating youth employment can also contribute to fisheries and natural resource management in support of this target.
- CI is educating fisherfolk on the impact of dynamite fishing, cutting down mangroves, sand mining, using firewood to process fish, and polluting waterways. CI is also providing the requisite infrastructure and utilities to aid fisherfolk where possible in the transition to renewable energy options such as the use of solar dryers and use of less demanding options such as eco stoves and kilns for example the [FAO-Thiaroye Processing Technique](#).

4.4. TARGET 11 – NATURE'S CONTRIBUTIONS TO PEOPLE (ECOSYSTEM SERVICES)

GBF TARGET 11 – NATURE'S CONTRIBUTIONS TO PEOPLE (ECOSYSTEM SERVICES)

Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as regulation of air, water, and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.

- Scientific discourse, research, peer review of opinions is critical in developing policies that are implementable, relevant and fact based. To effectively report on its commitments, track progress, seek compensation (such as payment for loss and damages)

Liberia needs a system of accounting that tracks the value of natural resources and their changes over time through Natural Capital Accounts.

- Spatial planning is important for protecting biodiversity by balancing competing uses for space (such as conservation and resource extraction) while also integrating livelihood options for communities in projects and policies that biodiversity conservation and management.
- Women are often at the fringe of enterprise development mainly due to limited access to capital and skills to effectively engage in enterprises. CI has provided women with the skillset to engage in enterprises and access to micro-credit through CI supported fisher cooperatives to support nature-based enterprises (fisheries). This is creating a better appreciation for sustainable resource management (nature), employment, enhancing inclusion and gender parity in natural resource management.

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