



# Assessment of the Legal, Scientific, and Institutional Frameworks for Biodiversity Protection in the Republic of Liberia



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# Introduction

Liberia has been lauded for its extensive and unique biodiversity, including the largest remaining tract of Upper Guinean Forest in West Africa and a stunningly diverse range of wildlife and plant species. In 1999, the West African Conservation Priority-Setting Exercise for the Upper Guinean Ecosystem identified Liberia as the top priority country for conservation efforts in humid West Africa.<sup>1</sup> However, the nation's biodiversity faces serious threats from a wide range of activities, including logging, fuelwood and charcoal production, subsistence agriculture, hunting, mining, and rubber plantations.<sup>2</sup> These threats are compounded by the subsistence struggles of a population that ranks as one of the most impoverished in the world, in part resulting from more than a decade of civil conflict. In short, Liberia poses unique challenges for the conservation of biodiversity.

This Assessment examines the current legal, scientific, and institutional frameworks for protecting biodiversity in Liberia. It focuses on the laws and regulations that directly address biodiversity,<sup>3</sup> and is meant to assist Liberia in identifying opportunities for steps to further conserve and sustainably manage its biological resources. The assessment has been conducted against the backdrop of a broad legal reform effort now taking place in Liberia by the Liberia Forest Initiative ("LFI"), a partnership of government, international, and non-government organizations working to rehabilitate and reform Liberia's forestry sector and build capacity for the promotion of sustainable forest management.<sup>4</sup> LFI was the driving force behind a new forestry law enacted in 2006, and is continuing to work on drafting the implementing forestry regulations, model contracts, codes, and manuals. This assessment discusses issues of overlapping concern with the LFI, such as protected areas, species protection, and trade in species.

The Environmental Law Institute ("ELI") produced this Assessment in partnership with the University of Oxford, Department of Plant Sciences, and the Sustainable Development Institute in Liberia. ELI first developed a list of biodiversity-related issues for further examination, including eight substantive and four cross-cutting issues, described below. Next,

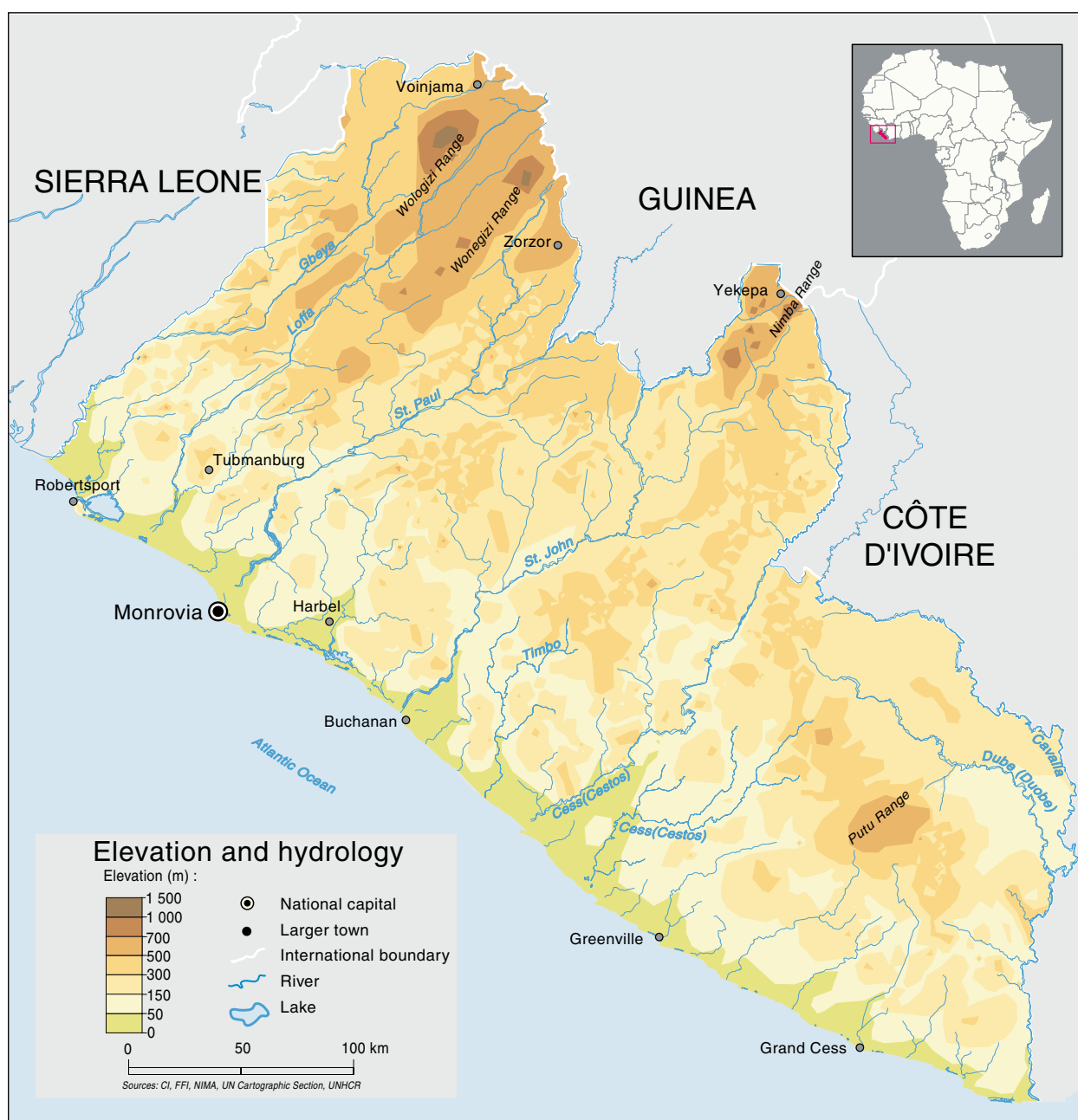
ELI worked with Paul Jarvan, a Liberian lawyer and ELI Visiting Scholar, to identify the relevant Liberian laws and regulations for analysis. In conducting its research, ELI began with a number of primary reports on Liberia, including the following:

- U.S. Forest Service, "USDA Forest Service Support to Wildlife Conservation in Liberia: Development of a Wildlife Management and Enforcement Strategy" (2005)
- Consultant's Report on the Review of Existing Environmental Legislation and Institutional Arrangements for the Management of the Environment and Natural Resources in Liberia (prepared for the National Environmental Commission of Liberia, with funding from the UN Environment Programme)
- Roland F. Dahn, "Report on Legislations and Institutions" (December 24, 2002)
- Anyaa Vohiri, "A Study to Clarify the Protected Forest Types Officially/Legally Recognized in Liberia," Report prepared for the Liberia Forest Reassessment Project (November 2002)
- S.S. Ajayi, Food and Agriculture Organization, Wildlife Conservation Issue Paper (February 2002)

ELI synthesized and added to this prior work with original research on Liberia's biodiversity laws, regulations, and institutions; an analysis of environmental information to support biodiversity conservation and management in Liberia by Dr. Nick Brown of Oxford; and interviews with seven Liberian government officials from four key Ministries conducted by Mr. Jarvan.

The Assessment comprises two parts. Part I examines the legal and scientific frameworks for protecting biodiversity in Liberia, viewed through eight substantive issues (protected areas, species protection, trade in species, invasive species, community-based natural resource management, inland and coastal water resources, biotechnology and biosafety, and access to genetic resources) and four cross-cutting institutional topics (environmental impact assessment, information and research, planning, and public participation). Several of the substantive issues are supplemented by an analysis of environmental information to support biodiversity conservation and management in

# Elevation and Hydrology of Liberia



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Liberia, conducted by Oxford's Department of Plant Sciences. Part II of the Assessment considers the capacity of key government and non-government institutions to advance biodiversity protection in Liberia.<sup>5</sup> The capacity analysis includes a snapshot of the primary institutions and organizations working

on biodiversity in Liberia, an examination of issues confronting Liberia's government institutions, and detailed profiles of four key government agencies. The Assessment concludes with five key recommendations for strengthening the protection of biodiversity in Liberia.

# I. Analysis of Legal Framework

## Introduction

Historically, most of Liberia's biodiversity-related laws were contained in a patchwork of national forestry legislation, consisting of a series of successive laws and regulations that repeal earlier ones wholly or in part. This temporal and substantive piecemeal approach generated significant confusion regarding the current state of the law. The agency responsible for implementing the forestry laws and regulations is the Forestry Development Authority ("FDA"). In 2003, Liberia also established the Environmental Protection Agency ("EPA"), which is charged with implementing a framework environmental law through the development of sector-specific laws, though this has not yet occurred. In addition, certain sectoral laws also address biodiversity conservation.<sup>6</sup>

This assessment focuses on the four main laws that currently address biodiversity issues:

- the 1976 FDA Act, as amended<sup>7</sup>
- the 2006 Forestry Law<sup>8</sup>
- the 2003 EPA Act<sup>9</sup>
- the 2003 Environment Protection and Management Law<sup>10</sup>

The first two of these laws are implemented by the FDA; the latter two by the EPA.

The 2006 Forestry Law, based on expert drafting guidance received from the LFI as part of a package of recommended reforms for Liberia's forest sector, is the latest in a series of laws addressing forestry and biodiversity issues in Liberia. The 2006 Law follows the 2000 Forestry Law, as amended,<sup>11</sup> and the 1988 Wildlife and National Parks Law.<sup>12</sup> Although the 2006 Law replaced the 2000 Law in its entirety, it left the earlier law's biodiversity-related portions substantially unchanged. As a result, much of the underlying analysis in this Assessment is directed more at the 2000 Law, the contents of which the 2006 Law largely preserved.

Between 1978 and 2001, long before the LFI instituted the present forest sector reforms, the FDA promulgated several regulations addressing biodiversity issues. The most substantial of these is Regulation No. 25, Revised Administrative Fees on Wildlife Conservation (June 9, 2000). Other regulations include No. 27, Reduction of Reforestation, Conservation, and Forest Research Fees Amending Regulation 23 (March 2001); No. 19, Sustainability of the Resource Base for Fuelwood and Charcoal Production (March 26, 1990); No. 18, Banning Export of Selected Species of Logs (March 20, 1990), and No. 17, Restricting the Export Size of Niangon Logs (Oct. 1, 1989).<sup>13</sup>

All of these regulations were enacted prior to the 2006 Forestry Law. A new draft set of ten core regulations under the 2006 Law, four of which are relevant to biodiversity generally, have undergone formal public review and comment and are expected to issue imminently. As many of these new proposed regulations contain sections recommending repeal of earlier regulations, in whole or in part, it is unclear how much one can rely on the substantive provisions of the earlier regulations while the forestry sector continues to undergo legal and regulatory reforms.

Together, the laws and regulations listed above provide for important elements of biodiversity conservation, including the creation of a network of protected forest areas; protection of wildlife, including regulation of the bushmeat trade; prevention of the introduction of invasive species; environmental impact assessment for a wide range of activities that may threaten biodiversity; environmental planning; and scientific research. However, significant gaps remain. Although the 2003 Environment Protection and Management Law sets forth broad criteria for the protection and sustainable use of biodiversity, directed at all agencies with sectoral environmental responsibilities, the lack of implementing regulations leaves this law largely inoperative. The laws also do not clarify the division of responsibility for biodiversity conservation among the various sectors. Weak on-the-ground enforcement and a lack of adequate scientific data about at-risk species and ecosystems further undermine the effectiveness of the existing laws and regulations.

# Biodiversity Framework

## (1) Protected Areas

*Introduction.* The World Conservation Union (IUCN) defines protected areas as “areas of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.”<sup>15</sup> A comprehensive, well-managed system of protected areas can play a key role in the conservation and sustainable management of a country’s biological diversity.<sup>16</sup> Protected areas may be divided into a number of different zones corresponding to various levels of use and protection, including a core area with extensive restrictions to protect critical habitat and species, and a buffer zone, surrounding the core zone, to allow for a broader range of uses while protecting the core zone from degradation. Protected areas can also be linked together via wildlife migration corridors that facilitate the safe movement of animals from one area to the next. Although Liberia’s laws provide for a protected forest areas network, stronger legal provisions and on-the-ground implementation are needed to bring it more fully into existence.

*International Law.*<sup>17</sup> Liberia is party to several international environmental agreements that contain provisions on protected areas. Most prominently, Article 8 of the Convention on Biological Diversity<sup>18</sup> (“Convention or CBD”) directs parties to establish a system of protected areas to conserve biodiversity; to develop guidelines for their selection, establishment, and management; and to promote the protection of ecosystems, habitats, and species. The Convention on Wetlands of International Importance<sup>19</sup> (“Ramsar Convention”) requires signing parties to designate at least one national wetland for inclusion in a list of internationally important wetlands and to establish and manage nature reserves to promote the conservation of wetlands. The African Convention on the Conservation of Nature and Natural Resources<sup>20</sup> (“African Convention”) directs parties to maintain and extend existing conservation areas, and to assess the necessity of establishing additional conservation areas in order to protect representative ecosystems.

Finally, Article 4 of the United Nations Framework Convention on Climate Change<sup>21</sup> (“UN Convention on Climate Change”) obligates parties to promote sustainable management of sinks and reservoirs for all greenhouse gases, including biomass, forests, and oceans as well as other terrestrial, coastal, and marine ecosystems. Protected forest areas can help provide such sinks and reservoirs.

### Summary of Liberian Law

*2006 Forestry Law.* The primary legal authority for the establishment and management of protected areas in Liberia is Chapter 9 of the 2006 Forestry Law, which directs the FDA to establish a “Protected Forest Areas Network” encompassing at least 30% of Liberia’s existing forest area (Sec. 9.1(a)). This Network is composed of two categories of protected areas.<sup>22</sup> Category I areas, which consist of National Forests, National Parks, Nature Reserves, and Strict Nature Reserves, must be established through legislation, following a proposal submitted by FDA to the President and forwarded by her to the Legislature (Sec. 9.2-9.5 & App. I). Category II areas, which are to serve as Conservation Corridors, consist of Game Reserves, Controlled Hunting Areas, Communal Forests, Buffer Zones, and other areas, and may be established through FDA regulation (Sec. 9.9).

As set forth in Section 1.3 (Definitions), the categories of protected areas are defined as follows:

#### Category I

*National Forest.* An area, set aside pursuant to Chapter 9 of this Law, for sustainable regulated commercial Forest Product extraction, Hunting, and the preservation of essential environmental functions performed by the forest.

*National Park.* An area of sufficient size to form a complete ecological unit, set aside pursuant to Chapter 9 of this Law, for the preservation and enjoyment of features that have outstanding natural beauty, or cultural or biological significance.

*Nature Reserve.* An area that does not represent a complete ecological unit, set aside pursuant to Chapter 9 of this Law, for the preservation and enjoyment of features that have outstanding natural beauty, or cultural or biological significance, and which may require some management intervention.



*Strict Nature Reserve.* An area possessing outstanding or representative features, ecosystems, or species, set aside pursuant to Chapter 9 of this Law, primarily for scientific research or environmental monitoring, and requiring strict protection and minimum intervention.

## Category II

*Buffer Zone.* A transitional zone (such as a Communal Forest, Game Reserve, or Multiple Sustainable Use Reserve) surrounding a more strictly protected zone, intended for low-impact sustained human use to reduce the impact of outside human disturbance, to protect the boundaries from encroachment, and to preserve the natural state of the more strictly protected zone it surrounds.

*Communal Forest.* An area set aside by statute or regulation for the sustainable use of Forest Products by local communities or tribes on a non-commercial basis.<sup>23</sup>

*Game Reserve.* An area, set aside pursuant to Chapter 9 of this Law, to protect an important feature for Wildlife or to allow the recovery or growth of Indigenous Species.

*Multiple Sustainable Use Reserve.* An area, set aside pursuant to Chapter 9 of this Law, to allow sustainable uses of Forest Resources, including subsistence uses.

## Other

*Cultural Site.* An area, set aside pursuant to Chapter 9 of this Law, for the preservation and enjoyment of features with a local or national cultural significance.

must be reviewed and republished every five years. While information about protected areas in Liberia is conflicting,<sup>24</sup> the Protected Forest Areas Network currently appears to consist of one national park (Sapo National Park),<sup>25</sup> one nature reserve (East Nimba Nature Reserve),<sup>26</sup> and fifteen national forests (Belle, East Nimba, Gibi, Gio, Gola, Grebo, Kpelle, Krahn Bassa, Lorma, National Forest Unknown No. 1 & 2, North Gio, North Lorma, West Nimba, and Yomo).<sup>27</sup> Liberia also contains between one and four "Nature Conservation Units,"<sup>28</sup> although it is unclear if this designation corresponds to any of the categories listed in the 2006 Forestry Law. In addition to the existing protected areas, a number of other areas have been proposed. These include Cestos-GBI, Cestos-Senkwen, Wologisi (or Wologezi), Wanegisi (or Wenegizi), Grebo, Nimba, and Cavalla.<sup>29</sup>

*2003 Environment Protection and Management Law.* Although the 2006 Forestry Law serves as the main authority on protected areas, the 2003 Environment Protection and Management Law also contains some relevant provisions. Section 75 of that law gives the Environmental Protection Agency ("EPA") authority to declare rivers, lakes, or wetlands<sup>30</sup> as protected areas based on specified criteria. Section 79 gives EPA authority to declare any area of land, river, lake, wetland, or coastal zone as a "protected natural environment." Section 80 provides for the declaration, upon completion of an Environmental Impact Study by EPA, of "wildlife protected areas" (consisting of national parks, wildlife reserves, nature reserves, or any other areas) and "wildlife management areas" (consisting of wildlife sanctuaries, community wildlife areas, or any other areas),<sup>31</sup> and charges EPA with prescribing measures necessary for wildlife management in these areas. Section 77 directs

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