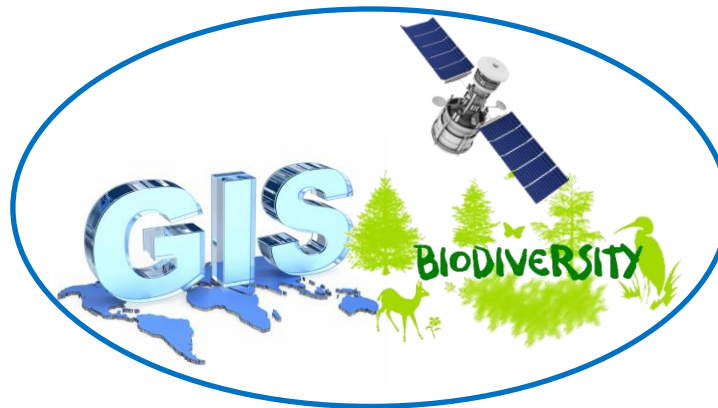




Republic of **LIBERIA**



OVERVIEW OF SPATIAL DATASET FOR LIBERIA'S GNR



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NATIONAL FOCAL POINT - United Nations Convention on Biological Diversity

REPUBLIC OF LIBERIA



Outline:

- Spatial Data and Biodiversity
- Mode of Liberia's data collection
- Data Source
- Maps and Analysis

Spatial Data and Biodiversity:

Recently, there has been a revolution in the availability of information and in the development and application of tools for managing information. Information needs for biodiversity are many and varied. Any database that deals with biodiversity information has to be geographically based, and able to predict where new populations of endangered species with a limited known range might be expected, indicating potential hot spots.

An important tool for monitoring biodiversity is a geographic information system (GIS), which accommodates large varieties of spatial and aspatial (attribute) data. The information embedded in a GIS is used to target surveys and monitoring schemes.

Spatial Data and Biodiversity Cont.:

Data on species and habitat distribution from different dates allow monitoring of the location and the extent of change.



Mode of Liberia's Data Collection:

Spatial data collected for Liberia's 6th National Report are in both vector and raster formats. Most of the data being collected for Liberia's reporting process are National datasets; with higher integrity, accuracy, and reflects near-current activities within the Liberian landscape.



Data Source:

The UN Biodiversity lab presents a wealth of spatial datasets to help countries in the 6 NR process. However, some of the data presented on the website are out of date, as compared to near-current datasets collected nationally. In regards to the aforementioned, most of the spatial dataset used in the 6 NR are gathered from National repository of ministries and agencies within Liberia.



Data Source:

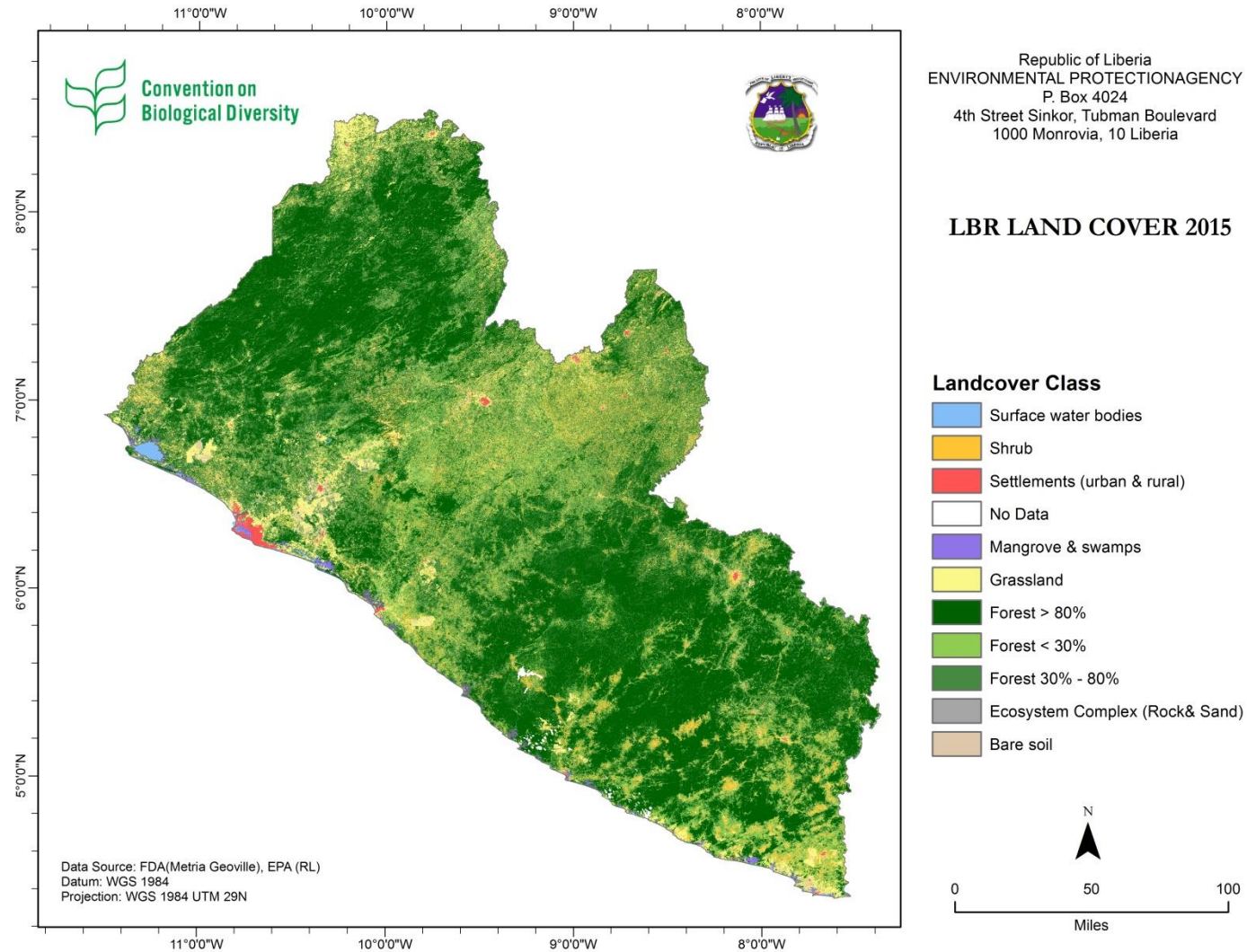
- Land cover – Forestry Development Authority
- Socioeconomic – Liberia Institute of Statistics and Geo-information Services
- Protected Area Data – Forestry Development Authority
- Biodiversity – Forestry Development Authority, Flora & Fauna International, Conservation International – Liberia, Society for the Conservation of Nature of Liberia, IUCN, GBIF



Data Source:

- Climate Change Vulnerability – Conservation International – Liberia
- Land Degradation – European Space Agency Land cover data
- Fire occurrence Data – UN Bio-lab
- Food insecurity – Liberia Institute of Statistics and Geo-information Services

LAND COVER:

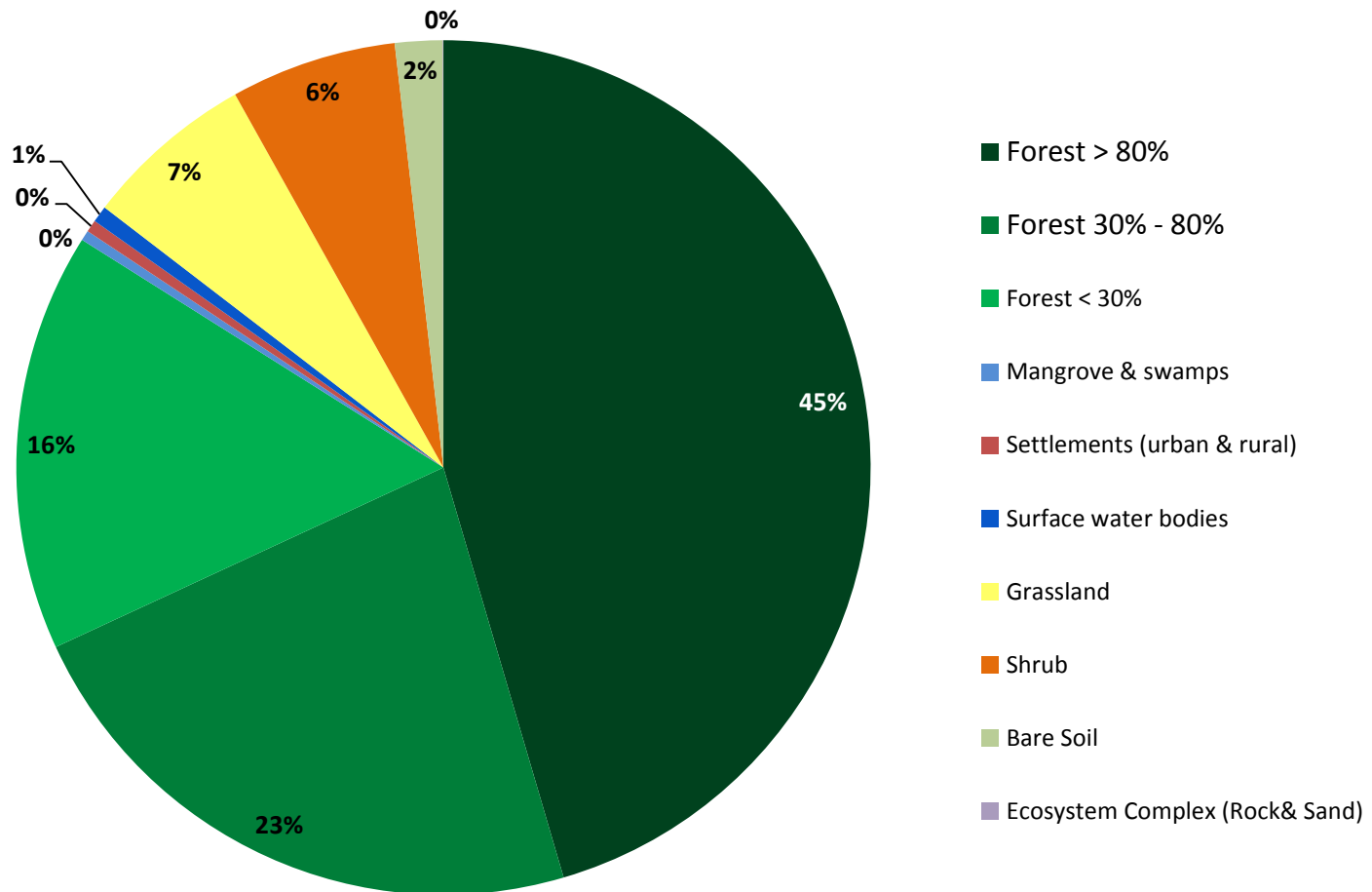


LAND COVER:

Land cover Type	Hectares	Square Kilometer
Forest > 80%	8778539.66	87785.40
Forest 30% - 80%	4372989.88	43729.90
Forest < 30%	3059898.74	30598.99
Total Forest	16211428.28	162114.29
Mangrove & swamps	74316.88	743.17
Settlements (urban & rural)	89189.42	891.89
Surface water bodies	120747.08	1207.47
Grassland	1250664.32	12506.64
Shrub	1213855	12138.55
Bare Soil	347380.4	3473.80
Ecosystem Complex (Rock& Sand)	4542.58	45.43



Area in Hectares

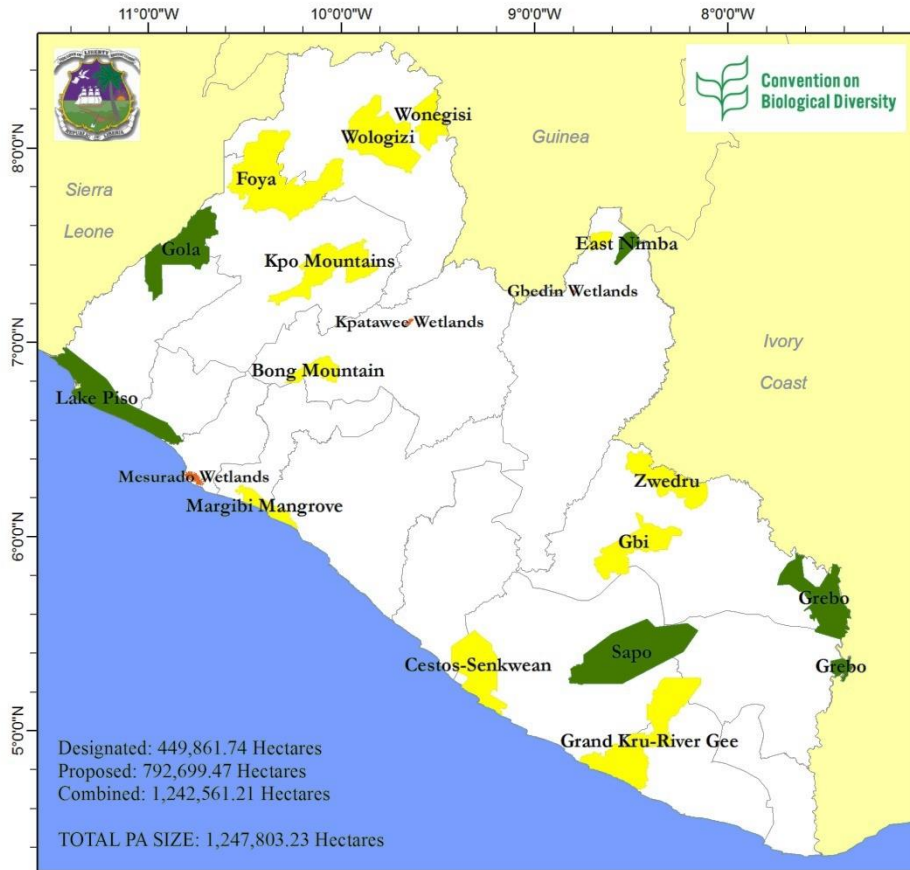




Land Cover Analysis:

- The dataset presented here was produced by Metria Geoville for the Forestry Development authority of Liberia. The land cover has been disaggregated into the following classes: Grass land, Shrub land, mangrove, water body, settlements, bare soil, ecosystem complex(rock & sand), Forest(> 80%, < 30%, 30% - 80%)
- The data shows that the landscape is covered with 45% primary forest, 23% secondary forest and 16% tertiary forest. Grassland accounts for 7%, shrub land 6%, bare soil 2%, and surface water 1%. Mangrove, ecosystem complex and settlements or built-up areas account for lower percentages of less than 1%.

Protected Area Network:



LIBERIA PROTECTED AREA NETWORK

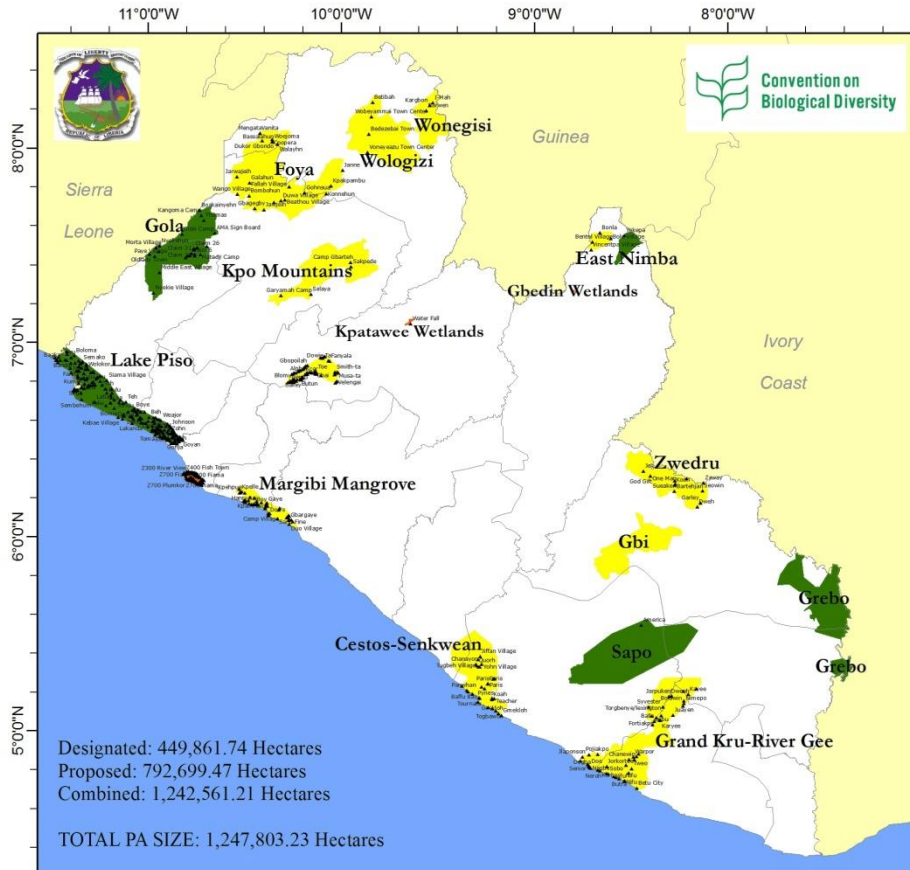
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 P. O. Box 4024
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 1000 Monrovia, 10 Liberia

Liberia Protected Areas

- Designated
- Proposed
- Ramsar Sites


Data Source: FDA (RL)
 Datum: WGS 1984
 Projection: WGS 1984 UTM 29N

Protected Area Network:




Designated: 449,861.74 Hectares
 Proposed: 792,699.47 Hectares
 Combined: 1,242,561.21 Hectares
TOTAL PA SIZE: 1,247,803.23 Hectares

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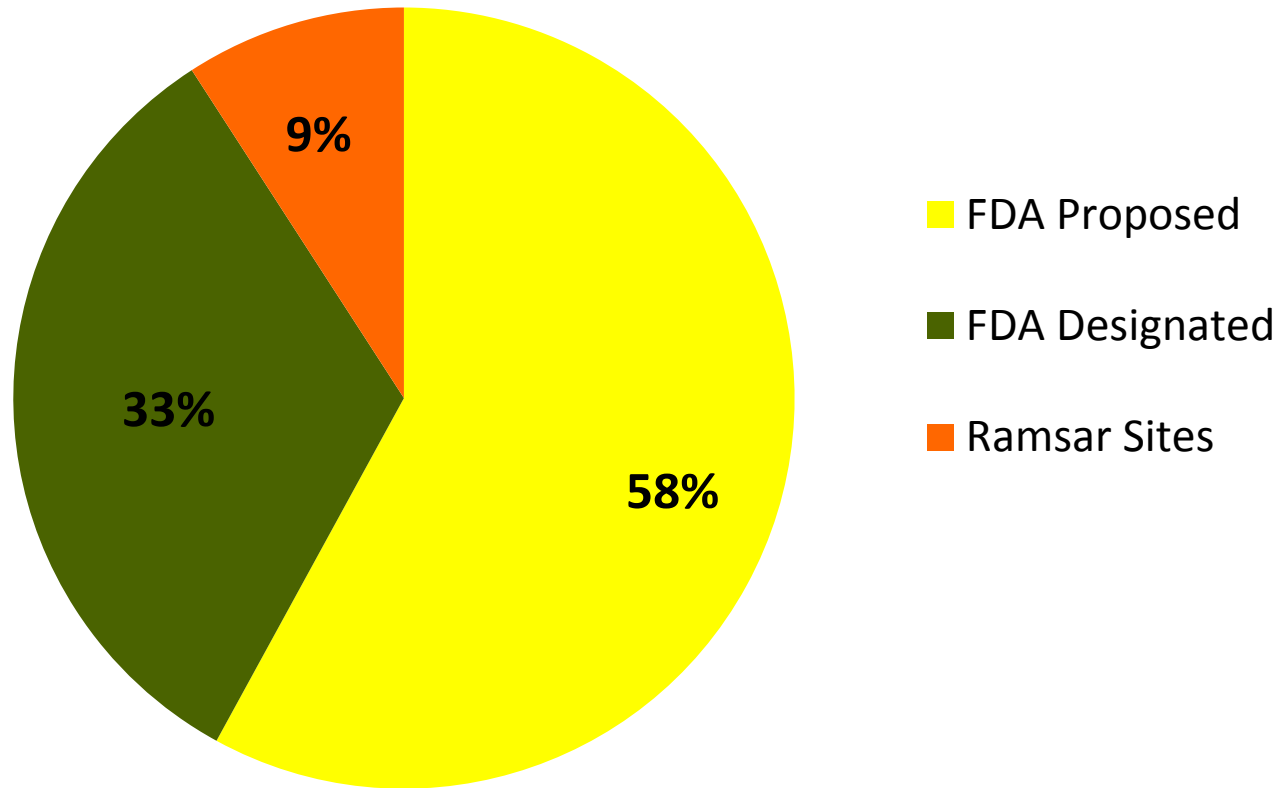
Liberia Protected Areas

- Designated
- Proposed
- Settlements
- Ramsar Sites

Data Source: FDA (RL)
 Datum: WGS 1984
 Projection: WGS 1984 UTM 29N

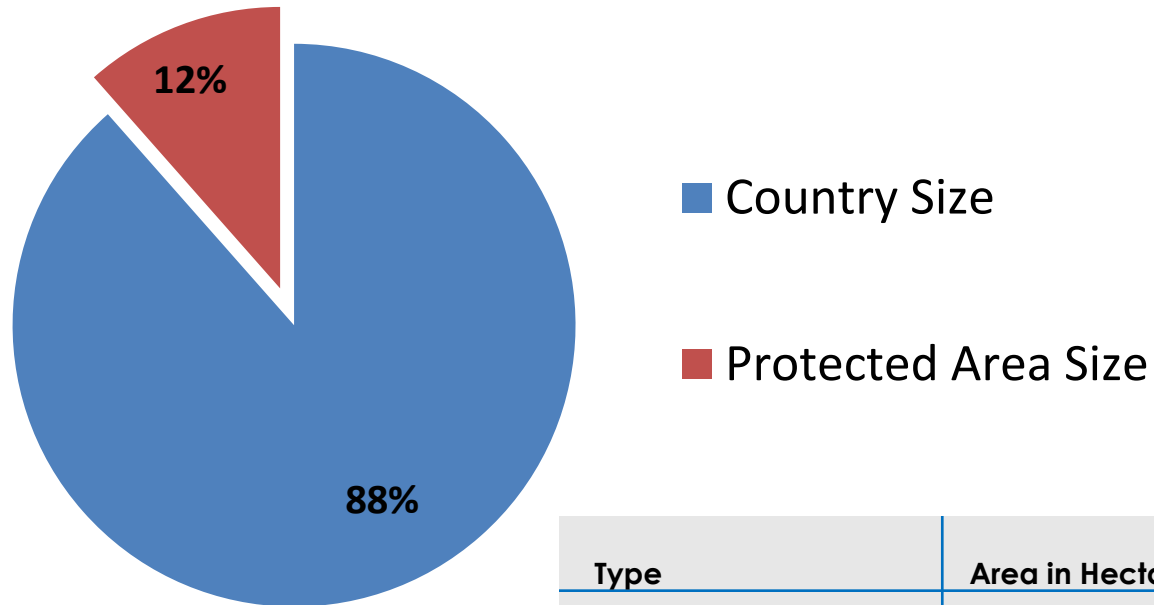


Area in Hectares





Area in Hectares



Type	Area in Hectares
Country Size	9,597,344.34
Protected Area Size	1,247,803.23



Protected Area Network Analysis:

- Liberia has five (5) designated protected areas and ten (10) proposed protected areas. Liberia also has five Ramsar sites.
- The FDA Designated Protected areas cover an area of 449,861.74 hectares of land, and FDA Proposed Protected 792,699.47 hectares. Total amount of area covered by the combined FDA Protected areas is **1,242,561.21 hectares** of land.
- Ramsar sites of Liberia cover a total area of 124,970.47 hectares. Two of the Ramsar sites (Lake Piso & Marshall Mangrove) are also covered under FDA Protected Area Network.
- The Ramsar sites are yet to be gazetted.
- There are 680 settlements located within the boundaries of protected areas, with a population of 158,029 people (2008 Census).