

# National Forest Management Strategy



## Forestry Development Authority

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## Table of Contents

<b><u>OBJECTIVE</u></b> .....	<b>3</b>
<b><u>CONTEXT</u></b> .....	<b>3</b>
POLICY .....	4
<i>Objectives</i> .....	4
LEGAL OBJECTIVES OF FOREST MANAGEMENT .....	5
STATE OF THE FOREST .....	7
FORESTRY SECTOR CONTRIBUTION TO THE NATIONAL ECONOMY.....	9
<b><u>FOREST MANAGEMENT SUITABILITY STUDY</u></b> .....	<b>11</b>
OBJECTIVE .....	11
RESULTS.....	11
THE TOTAL AREA UNDER THESE LAND SUITABILITY CATEGORIES IS A TOTAL LAND MASS LARGER THEN THE FOREST ENDOWMENT OF LIBERIA BECAUSE A SMALL PORTION JUST OVER 100,000 HA OF THE CONSERVATION AREA ARE WETLANDS AND NON-FOREST ECOSYSTEMS. ....	12
<b><u>NATIONAL FOREST MANAGEMENT STRATEGY</u></b> .....	<b>13</b>
OBJECTIVE .....	13
END STATES .....	13
COMMERCIAL DEPARTMENT .....	20
<i>Objective</i> .....	20
<i>Rationale</i> .....	20
<i>Goals</i> .....	20
<i>Responsibilities</i> .....	21
COMMUNITY DEPARTMENT.....	22
<i>Objective</i> .....	22
<i>Rationale</i> .....	22
<i>Goals</i> .....	22
<i>Responsibilities</i> .....	23
CONSERVATION DEPARTMENT .....	23
<i>Objective</i> .....	23
<i>Rationale</i> .....	23
<i>Goals</i> .....	24
<i>Responsibilities</i> .....	24
RESEARCH AND DEVELOPMENT DEPARTMENT.....	25
<i>Objective</i> .....	25
<i>Rationale</i> .....	25
<i>Goals</i> .....	25
<i>Responsibilities</i> .....	26
POVERTY ALLEVIATION .....	26
ADDITIONAL ISSUES .....	26
<i>Decision Making Process</i> .....	26
<i>Peace Building and Conflict Resolution</i> .....	27
<i>Mitigating Expectations</i> .....	27
<i>Ongoing Activities</i> .....	27
<b>ANNEX A: FOREST COVER AND USAGE SUMMARY CHART</b> .....	<b>29</b>
<b>ANNEX B: COMMERCIAL SUITABILITY MAP</b> .....	<b>30</b>
<b>ANNEX C: COMMUNITY SUITABILITY MAP</b> .....	<b>31</b>
<b>ANNEX D: CONSERVATION SUITABILITY MAP</b> .....	<b>32</b>
<b>ANNEX E: DECISION MAKING FLOW CHART</b> .....	<b>33</b>

## **Objective**

The National Forest Management Strategy summarizes the FDA philosophy for managing the national forest endowment. The strategy outlines the FDA approach to forest management, its long-term end-states, or goals, and the Authority's major forest management objectives for the following two years. The specific management actions outlined in the strategy are based on the current best available information and will require continued revision through public scrutiny and field evaluation.

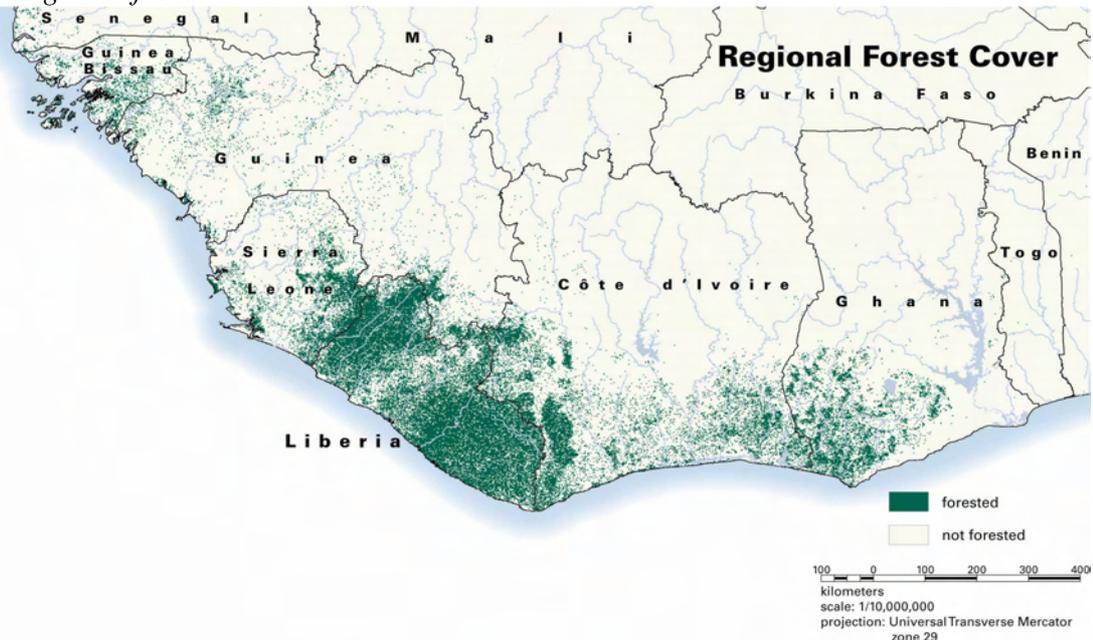
The structure of the document lays out the general policy and legal foundation for the National Forest Management Strategy. The second section explains the results of the National Forest Management Suitability Study that provides the analytical, scientific and participatory process that is the basis for the strategy.

The National Forest Management Strategy is a standing document to be updated by FDA management periodically. However, the strategy does identify specific, measurable goals for the next two years.

## **Context**

Liberia is situated within the Upper Guinea Forest, a tropical rainforest belt stretching from Cameroon to Guinea. The total Liberian land area is 9.59 million hectares, of which forests cover about 5.7 million hectares, equivalent to 45 percent of the land area<sup>1</sup>. Liberia's evergreen forests are in the more humid south, ranging from the Cestos to Cavally Rivers. The deciduous and mountain forests are located in the hills of Northwest Liberia and Mount Nimba.

*Map 1: Regional forest cover*



<sup>1</sup> This area includes forest classes 2.3 Mixed Agriculture and forest area, 3.1 Forest with small agriculture presence, 3.2 Open dense forest, and 3.3 Closed dense forest.

Liberia's forests provide a wide range of benefits to the Liberian people and the international community. Forest areas provide habitat for globally important biodiversity<sup>2</sup> and maintain ecological services (such as oxygen production and soil stabilization), enable harvesting of non-timber forest products that many local people depend upon for daily subsistence, and provide a significant input to the national budget through commercial forestry development, both industrial and community-based forestry.

The Forestry Development Authority (FDA) is the sole government agency responsible for managing forest resources in Liberia. The FDA uses a "3 C's -- Commercial, Community, Conservation" philosophy to focus on management of Liberia's forests in order to achieve the agency's overall goal of developing and sustaining the benefits of Liberia's forest resources.

Forest resources were mis-managed and revenue generated from the sector were mis-appropriated during Liberia's period of civil conflict. As a result, the United Nations Security Council imposed sanctions on Liberia's timber exports in 2003. Liberia then instituted sweeping reforms of the sector during the National Transitional Government of Liberia and the current administration of President Ellen Johnson-Sirleaf. The current government consolidated these reforms by adopting a new National Forest Policy and passing the National Forest Reform Law in 2006. These reform efforts eventually led to the lifting of sanctions in 2006 and created the enabling conditions for the FDA to improve forest management. In addition to the new law and corresponding regulations, the Government of Liberia, in conjunction with the Liberia Forest Initiative (LFI; a consortium of donors, local and international non-governmental organizations (NGOs)) reviewed the operations of all loggers involved with the sector between 1970 to present. There was substantial legal uncertainty in the sector, in part because 2.5 times the area of forest was claimed by concessionaire, mainly due to overlapping concessions. The formal, company-by-company review found that not one company was in full compliance with the law.

Thus, in this post-conflict, reform-oriented context, this National Forest Management Strategy serves as a guide for the FDA to implement the National Forest Policy, uphold the National Forestry Reform Law, and put into practice the FDA's 3-C policy to achieve its forest management objectives.

## **Policy**

The aim of the National Forest Policy of Liberia is:

*To conserve and sustainably manage all forest areas so that they will continue to produce a complete range of goods and services for the benefit of all Liberians and contribute to poverty alleviation in the nation.*

## **Objectives**

In order to achieve this aim, the following specific objectives will be pursued:

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<sup>2</sup> Liberia contains almost half of the remaining forest in the Upper Guinean Forest Hotspot; one of 34 hotspots worldwide that represent areas with 75% of the planet's most threatened mammals, birds, and amphibians, while covering just 2.3% of the Earth's surface.

1. To ensure that commercial forestry, community forestry and forest conservation activities are integrated and balanced to optimize the economic, social and environmental benefits from the forest resource.
2. To conserve a representative sample of forest ecosystems so that important environmental functions are maintained.
3. To contribute to the national development goals of poverty alleviation and increased food security by increasing the opportunities for forest-based income generating activities, especially for forest-dependent communities.
4. To grant more equitable access to forest resources so that the potential for future conflict is reduced and the benefits from forestry development are shared throughout Liberian society.
5. To ensure tenure security for rural communities' forestland holdings and safeguard their rights to conserve and use forests on their communal lands for their individual and collective well-being.
6. To institutionalize the principles of good governance, including ensuring that all stakeholders participate in the formulation of forestry policies and in the conservation and management of the forest resource.
7. To maximize the contribution of the sector to income, employment and trade through the development of appropriate processing activities.
8. To ensure that forestry development contributes to national development goals and international commitments (including regional cooperation and trans-boundary issues) and is coordinated with other relevant branches of government.
9. To ensure that activities in the forestry sector (including forest management, plantation development, harvesting, conservation and industrial development) are based on sound scientific and technical principles that minimize waste and associated environmental and community health problems.
10. To ensure that the working conditions of those within the forest sector are in accordance with internationally regarded best practice.

### **Legal objectives of forest management**

The Authority shall exercise its powers under the Forestry Reform Law of 2006 to ensure:

- Sustainable management of the Republic's Forest Land,
- Conservation of the Republic's Forest Resources,
- Protection of the Republic's Environment,
- Sustainable development of the Republic's economy, with the participation of and for the benefit of all Liberians, and to
- Contribute to poverty alleviation in the Nation.

To protect the environment, the Authority shall take a precautionary approach to the exercise of its powers under the Forestry Reform Law of 2006. The Authority shall not rely on a lack of full scientific certainty as a reason for postponing cost-effective measures to prevent environmental degradation where there are threats of serious or irreversible damage to the environment.

### **Legal status of the forest**

Currently the Republic of Liberia as a whole is working its way out of years of civil conflict, changing legal structures and systems and inequitable distribution of authority between rural and urban communities. The legal status of the forest and rights to land tenure are currently being debated with discussion with a general conclusions that both customary and statutory land tenure rights should be recognized.

Recently the FDA had requested all parties (communities and individuals) holding forest land deeds, claims, or other statutory tenure over forest resources to submit their documentation to the FDA for legal consideration. Nearly 8.5 million acres of forest land claims arrived at the hollows of the FDA, some overlapping others covering up to 800,000 acres of land for a community. This situation far outreaches the FDA mandate to manage tenure issues in these forest areas and the issue was forwarded to the Governance Reform Committee, where the national issue of land tenure and access rights is being addressed.

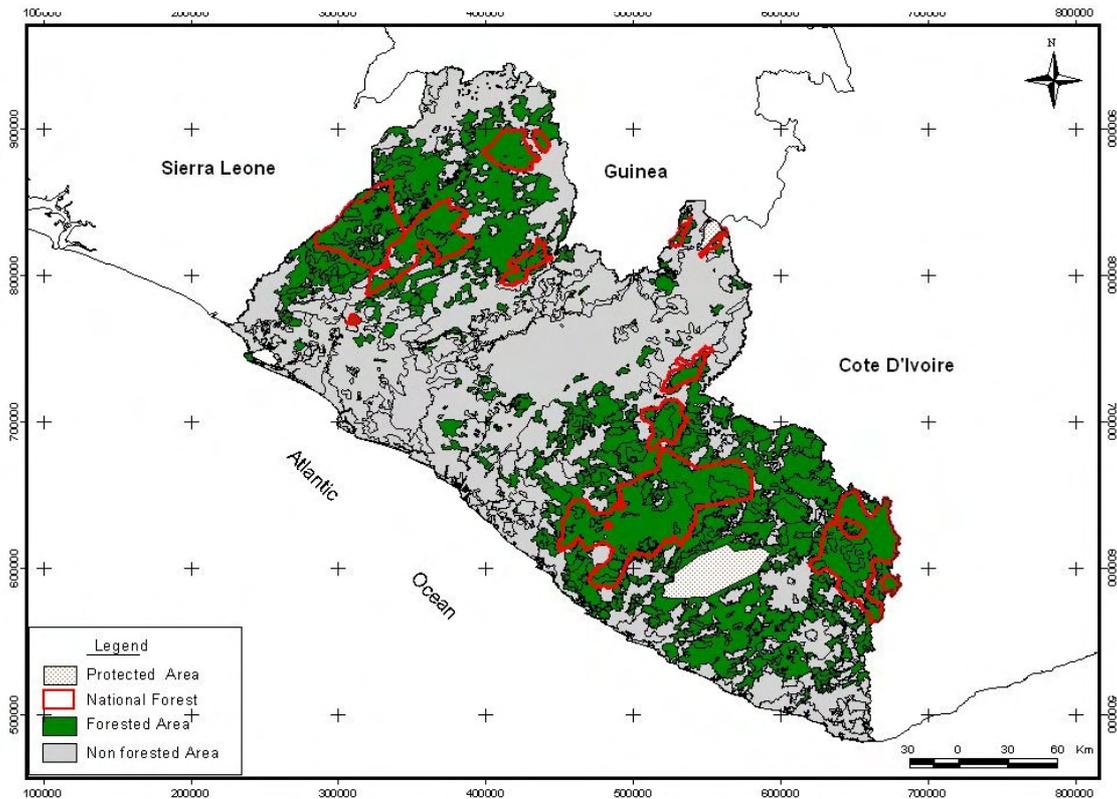
Currently the legal status of the forest is recognized as the government holding in trust the forest resources for the republic for the greater good of the population. There are 11 National Forests, one national Park, and one Strict Nature reserve.

The FDA has taken a strict policy to not issue land use activities (neither commercial, community nor conservation) without first establishing that there are no prior land tenure claims in the area, or that the local population does not agree with the land use activity. To these ends the FDA has a substantial field vetting process defined in the forestry law and regulations. This process is described in the section on Additional Issues in the subsection called Decision Making Process.

However, the issue of customary and statutory ownership remains unclear. The FDA will work with communities, civil society organizations and within the government to clarify the issue of customary tenure and access rights over the coming 6 months and propose a law to the legislature for the establishment and management of these rights.

Map 2 depicts the location of the current legally gazetted National Forests and Protected Areas.

Map 2: Legal gazetted natural forest areas

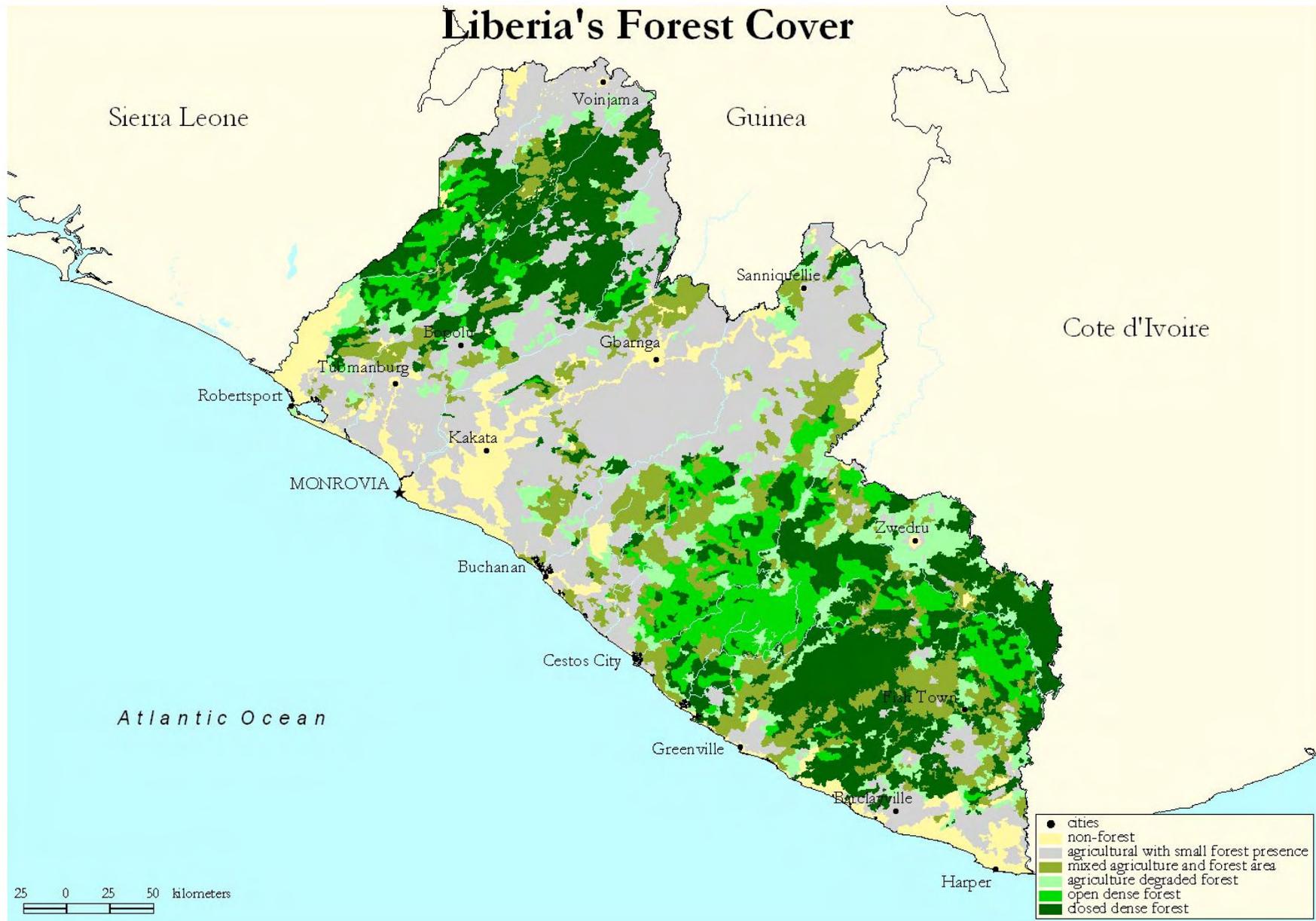


It is recommended that as Liberia develops greater consensus on the land tenure issues that these national forests be re-evaluated for their relevance to the new geopolitical climate and designed to bring the greatest increased benefit to local populations.

### State of the forest

As of 2004, the most recent study available GIS and Satellite image analysis, Liberia contains 4.39 million hectares of forest. This forest area is classified as 2.42 million closed dense forest, 1.02 million open dense forest, and .95 million agriculture degraded forest. An additional 1.28 million hectares of forest is classified as mixed agriculture and forest area and therefore, though not included in the forest cover total, offers potential areas for forest management activities. Map 3 depicts the forest cover and classification based on the satellite imaging.

Map 3: Forest cover classification



Forest area has decreased in recent years due to uncontrolled logging and an expansion of land used for agriculture. The annual rate of deforestation is currently estimated to be approximately 12,000 hectares (0.3 percent), while the recorded planting of new forests since 1971 to date has amounted to only approximately 11,000 hectares in total. Viability of commercial forestry has been reduced by the last decade's illegal over-harvesting.

At present, commercial activity is minimal throughout the country. Pit sawing activities began immediately after the end of civil conflict in 2003 in a largely un-regulated environment and has grown to a market size of greater than 120,000 m<sup>3</sup> of cut wood, thus it is likely that at least double this amount of round logs was cut in the forest. Primarily, rural communities are engaged in providing access to forest resources adjacent to their communities for pit-sawing and other forest resource extraction activities such as non-timber forest products and bushmeat. At present the FDA does not have the capacity to regulate wildlife consumption throughout the country.

Despite Liberia's small size, it has a significant amount of biodiversity including: over 2,900 different vascular plants (including 225 tree species), 600 bird species, 150 mammal species, and 75 reptile species. In addition, Liberia accounts for the largest remnant (42 percent) of the Upper Guinea forest of West Africa. Sapo National Park and the East Nimba Strict Nature Reserve are the only exclusive conservation areas in Liberia. Together, these areas total 193,500 hectares, or approximately 4% of Liberia's total forest area and 2% of landmass. Gold mining activities within Sapo National Park continue to threaten the integrity of the area though the FDA has made significant progress over the last several years to improve management of the park. The FDA has identified other forest areas for protected area status, but has not officially proposed the areas to the government nor consulted with local communities.

### **Forestry sector contribution to the national economy**

Historically, the forestry sector has been a strong contributor to Liberia's economy in the form of industrial output, national income, employment and export earnings. For example, the production of forest products accounted for around five percent of Gross Domestic Product (GDP) in the 1980s, rising to 20 percent in the late 1990s as much of the rest of the Liberian economy collapsed. Forest products also accounted for 5-10 percent of export earnings in the 1980s, rising to over 50 percent in 2000. Forest product trade and production statistics from recent years are somewhat uncertain. However, it is generally accepted that thirty-six forest companies were operating in Liberia in 2002 producing timber exports valued at over USD 100 million (or 60 percent of Liberia's total export earnings) and employing up to 8,000 people<sup>3</sup>.

Informal activities, in addition to the contribution of the formal forestry sector to the national economy, also play a vital role in the well being of many Liberian citizens. Fuelwood and charcoal production employ numerous people and remain, by far, the most important energy sources in the country. Similarly, harvesting and sale of bushmeat and Non-Timber Forest Products (NTFPs) make a significant contribution to local income and employment while providing a major share of protein in the average diet.

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<sup>3</sup> Paragraph 9, UNSC report S/2003/779

Rapid expansion of log production and export from 2000 to 2003 has not, however, been without problems. Over-harvesting and selective harvesting have caused forest degradation. Similarly, widespread wildlife poaching has degraded biodiversity. Government supervision and implementation of policy, regulations and the forestry law has been weak, inadequate, or in collusion with illegal operators, leading to many violations, financial misappropriation, and non-payment of the majority of forest fees.

As Liberia emerges from fourteen years of civil conflict there is an urgent need to improve the livelihood of all Liberians. This urgency has increased the demands placed on the sector at the same time that existing forestry institutions and infrastructure are least capable of responding. The National Forest Management Strategy, therefore, establishes a strategy that meets the need for immediate forest sector rehabilitation and medium term forest management while establishing a long-term vision for Liberia's forest endowment. The strategy reflects the current situation in the sector and the prospects for improving capacity and resources over the next decade. This strategy provides the best path forward to revitalization of Liberia's forestry sector while conserving and sustainably managing all forest areas so that they will continue to produce a complete range of goods and services for the benefit of all Liberians.

## **Forest Management Suitability Study**

### **Objective**

The Forestry Reform Law of 2006 requires a National Forest Management Strategy as a pre-requisite to proposing and implementing forest-land uses in Liberia. In order to develop this strategy, the FDA conducted a National Forest Management Suitability Study that evaluates all forest areas for their relative suitability among various land uses. Principally, the FDA focuses on identifying the most suitable areas for the 3 C categories of Commercial, Conservation and Community. Thus, the objective of the suitability study is to identify forest areas most suitable for commercial, conservation, and community management. It should be stressed that commercial forestry includes both industrial logging and logging by communities. Community management remains broadly defined as the management of forests and the resources contained by communities, which could include maintenance of ecosystem services, logging, harvesting of wildlife and other non-timber forest products, and conservation.

### **Results**

The FDA, institutional partners and forest sector stakeholders conducted the National Forest Management Suitability Study<sup>4</sup> in 2006. The methodology used to complete the study employs scientific data on forest resources, a statistical regression analysis to understand forest-resource relationships, and input from diverse stakeholders to focus understanding of the demand and expectations on Liberia's forests. The methodology is robust, using a variety of data while testing the sensitivity to various data inputs, and at the same time practical and repeatable.

The suitability study categorized forest areas into either a) multiple sustainable use where both community and industrial management may be practiced, or b) conservation. The multiple sustainable use area was further classified into i) long-term management, ii) short-term management, and iii) exclusive community forestry sites. The suitability composition of these areas is described below.

#### ***Multiple Sustainable Use***

The study identified 2.49 million hectares for multiple sustainable use management. The study also identified an additional .91 million hectares of degraded forest that could potentially be managed as timber sales contracts. Due to the nascent development of community forestry, the study also identified 52,000 hectares for community forestry areas where test pilot projects could be developed. Fully 98.7 % of this 52,000 hectare area is suitable for community management while only 18.75% and 38.5% is suitable for commercial and conservation management respectively. (The difference in suitability between community and commercial use is mainly due to the fact that commercial use was restricted in areas close to communities.)

The study identified 2.49 million hectares for long-term management in the form of forest management contracts or community forestry. An additional .91 million hectares was

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<sup>4</sup> The National Forest Management Suitability Study may be obtained at the FDA or online at the Liberia Forest Initiative website: <http://www.fao.org/forestry/site/lfi/en/>

identified for short-term management in the form of timber sales contracts or community forestry. Thus, a total of 3.41 million hectares was identified for multiple sustainable use management. 80.6 % of this area is suitable for commercial forestry practices while 85.7% and 32.2% is suitable for conservation and community management respectively. It is worth noting that this 32.2% of the multiple sustainable use area identified as suitable for community management represents ideal opportunities for community forestry in addition to the 52,000 hectares already identified.

**Conservation**

Liberia is a signatory to the United Nations Convention on Biological Diversity treaty (ratified November 8, 2000), in which it pledged to “set aside at least 10% of the land area for Strict Protection and 30% of the land area for protection and multiple-use for partial protection”. Thus, since Liberia’s total land area is approximately 9.59 million hectares, the study used an area of 950,000 hectare (or 10%) as the minimum size for the protected area network.

The study identified a total protected area network of 1.14 million hectares including 193,500 hectares of existing protected areas. 93.6% of this area is suitable conservation management while 65.4% and 17.6% of this area is suitable for commercial and community management respectively. The form of management of these conservation areas has not been established; it could take the form of traditional state-run park’s management in combination with community-led conservation initiatives or controlled commercial activities.

The following table summarizes these results of the National Forest Management Suitability Study.

<b>Suitability Results</b>			
<b><i>Multiple Sustainable Use (3.41 million hectares)</i></b>			
	Commercial	Community	Conservation
Suitability %	80.6%	32.2%	85.7%
<b><i>Example Community Forestry Use (52,000 hectares)</i></b>			
	Community	Commercial	Conservation
Suitability %	98.7%	18.75%	38.5%
<b><i>Conservation (1.14 million hectares)</i></b>			
	Conservation	Commercial	Community
Suitability %	93.6%	65.4%	17.6%

The total area under these land suitability categories is a total land mass larger than the forest endowment of Liberia because a small portion just over 100,000 ha of the conservation area are wetlands and non-forest ecosystems.

# **National Forest Management Strategy**

## **Objective**

To allocate and manage Liberia’s remaining 4.39 million hectares of forest as either forest management contract areas, and timber sales contract areas, community management areas, or protected areas to capture, develop and preserve the wide range of forest resource benefits.

## **End States**

The FDA has established a vision for the ideal status of Liberia’s forests in twenty-five years. The following end states provide an outline for measuring progress toward achieving this vision:

- Integrity of 4.39 million hectares of close-dense and open-dense forest is maintained as best as possible;
- Commercial forestry activities ensure a sustainable production of forest products, provide long term employment, facilitate value-added inputs and industries, and contribute revenue through fees to the central government;
- Community forest management provides equitable access and benefits to local people that includes the production of timber and non-timber forest products, plus the use of forests for other purposes such as: cultural rituals; future farmland and settlement areas; and the protection of sacred sites;
- Conservation management preserves biodiversity and maintains ecological services allowing the natural evolution and function of ecological processes;
- The FDA effectively and efficiently manages forest resources in accordance with the legal framework, guided by science, and with continued democratization of forest resources.

The FDA has first classified all forest land into either permanent or non-permanent future forest cover. Permanent forest areas are those areas in Liberia that will always remain covered with forest. Non-permanent forest areas are those areas that may be converted into other land uses such as agriculture. Thus, Map 4 depicts the end states by showing the areas that have been designated as either permanent or non-permanent.

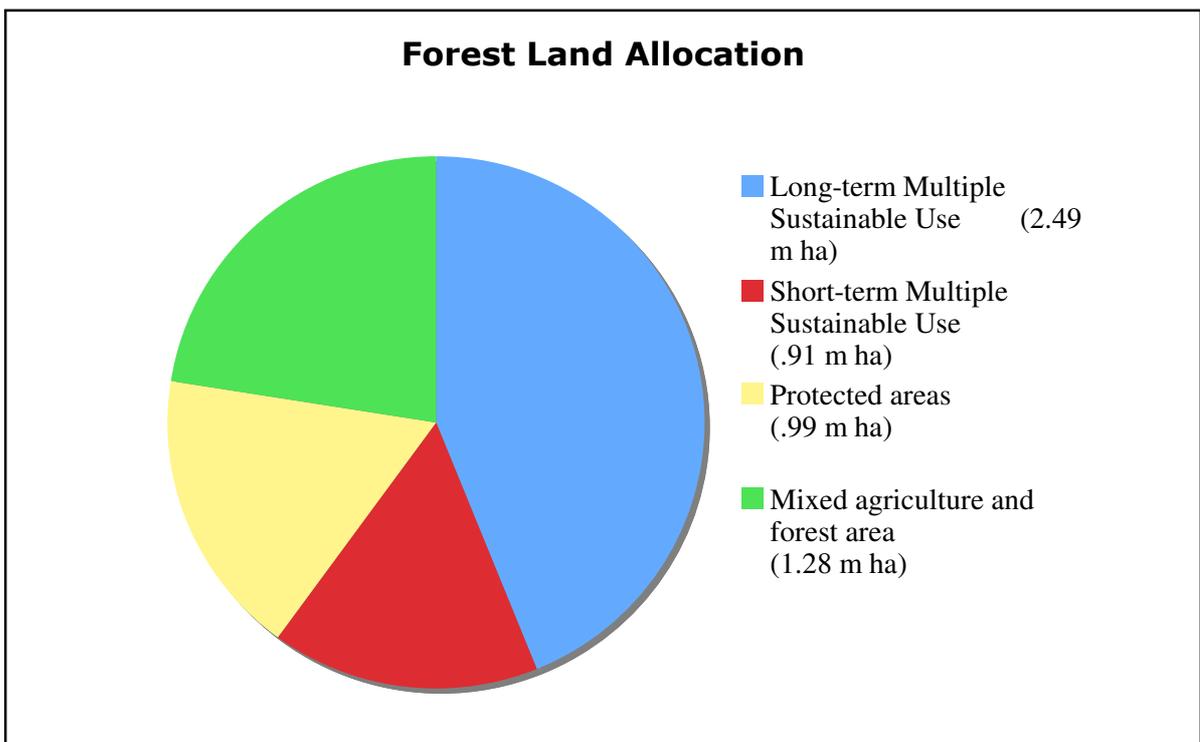
Permanent vs. Non-Permanent Forest: Permanent Lands are areas that will remain covered with forest despite any extractive activities and therefore will remain as part of the national forest endowment Non-permanent forest areas may be harvested for timber resources and then converted into other land-use such as agriculture.
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The permanent forest area is then divided into the protected area network and a multiple sustainable use zone to be managed either as community forest areas, timber sales contracts, or forest management contracts. Map 5 depicts the national forest management strategy. The strategy contains areas for multiple sustainable usage (which can either be community managed or industry managed) and proposed conservation areas for natural services and biodiversity management.

The multiple sustainable use zone consists of all forest areas outside of the protected area network. Communities and/or private logging companies will manage these areas as communal forests, timber sales contracts, or forest management contracts. Community managed forest areas may be established anywhere within the multiple sustainable use zone. Map 6 depicts areas where either community managed forest or commercial Forest Management Contracts could be established. While map 7 depicts areas for Timber Sale Contracts or community managed forest areas.

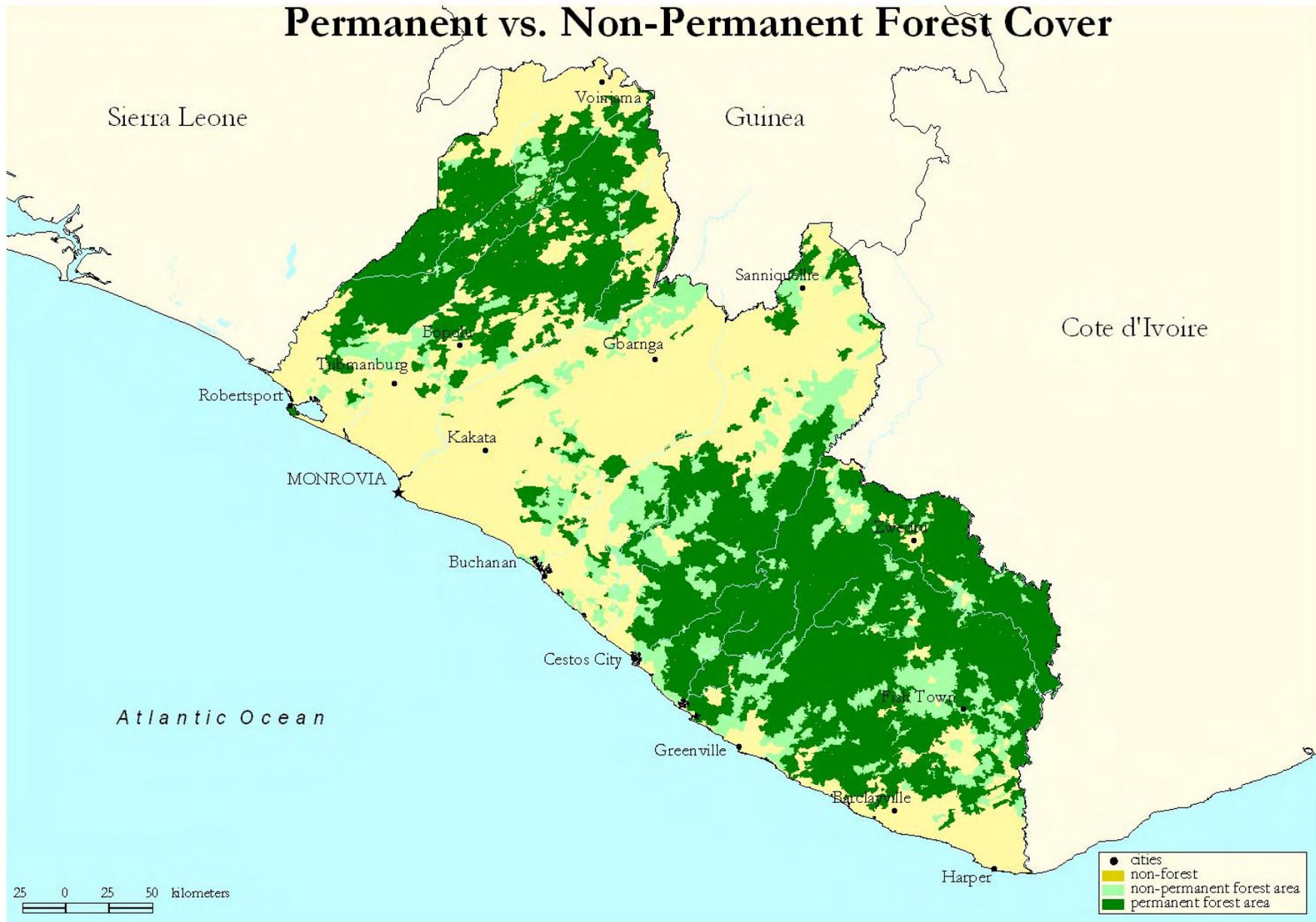
High priority conservation areas will be managed through some type of protected area in accordance with Chapter 9 of the National Forestry Reform Law and IUCN guidelines. Map 8 shows the total protected area network including the existing two protected areas of Sapo National Park and the East Nimba Strict Nature Reserve (together totaling 193,500 hectares) and an additional 13 protected areas for a total are of 1,141,813 hectares.

The following diagrams show the allocation of land according to this strategy:



The FDA will implement the National Forest Management Strategy through its four technical departments: Commercial, Community, Conservation, and Research & Development. The FDA has established an Objective Statement and set of goals for each department that will govern its activities for the duration of implementation of this National Forest Management Strategy.

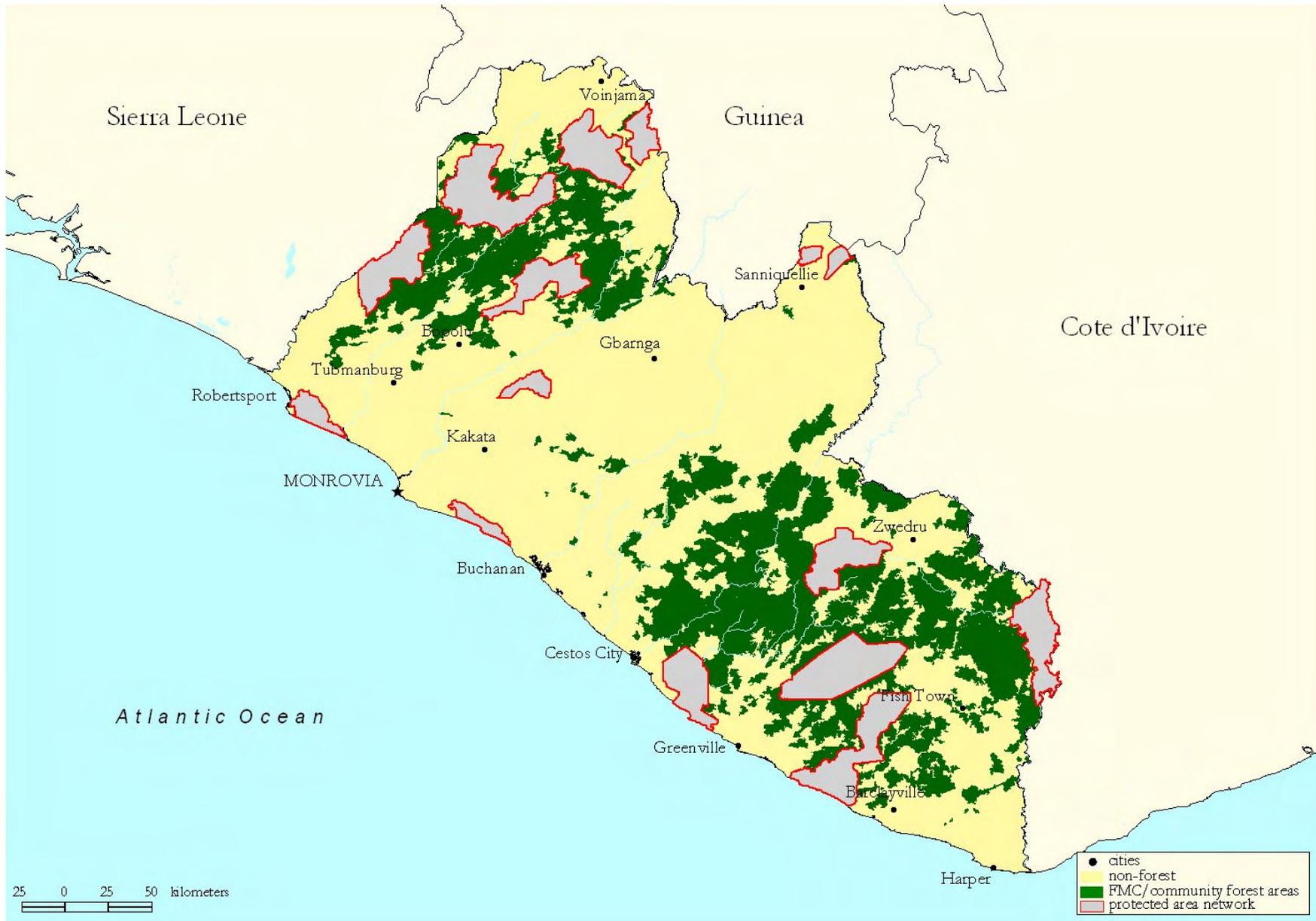
Map 4: General forest end states



Map 5: National Forest Management Strategy



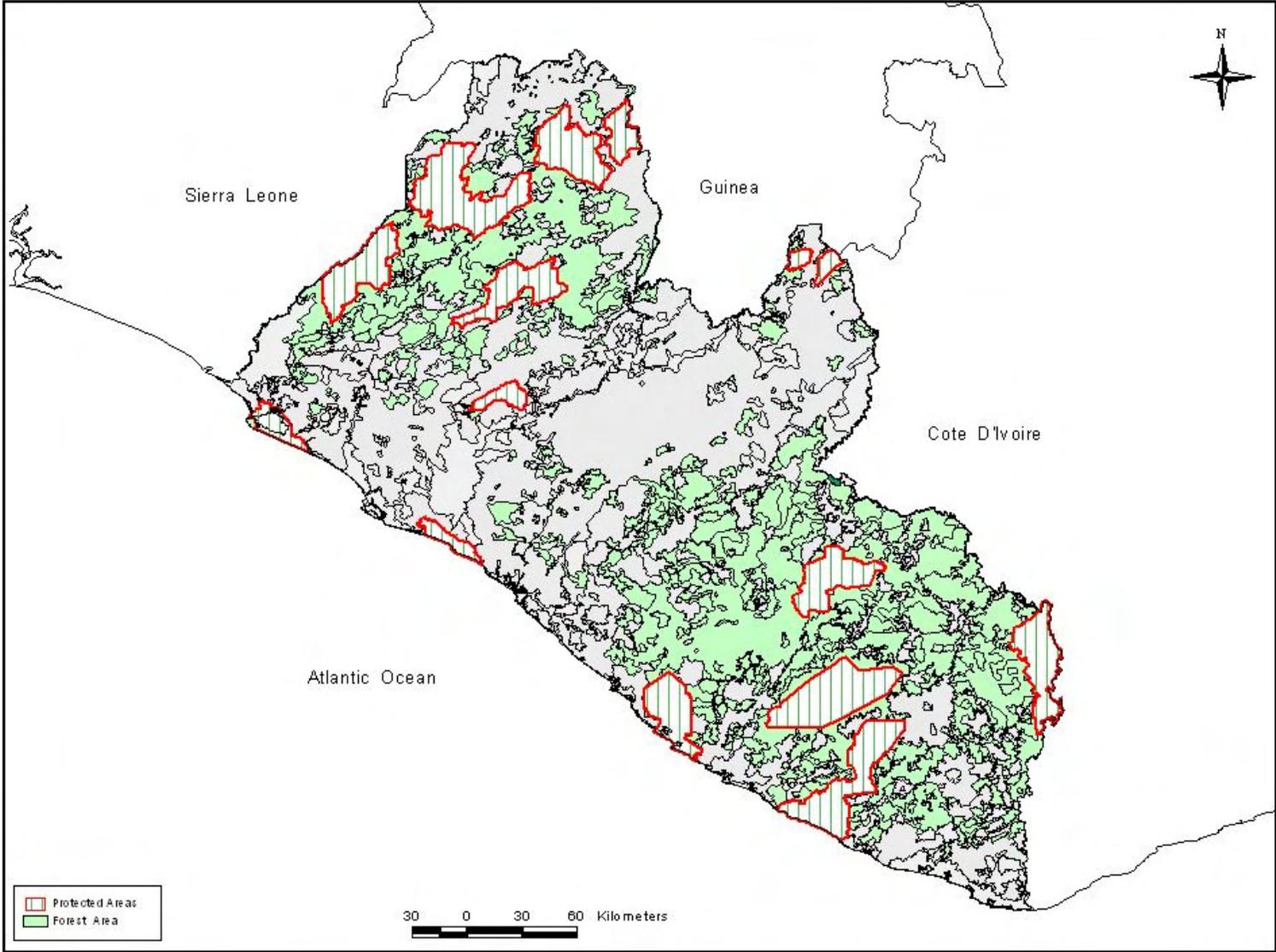
Map 6: Area available for Forest Management Contracts or Community Management



Map 7: Area suitable for Timber Sale Contract or Community Management



Map 8: Proposed national protected area network



## **Commercial Department**

### **Objective**

To re-start and regulate commercial forestry activity in accordance with Liberia's laws and the FDA's regulations and according to the sustainability objectives of the National Forest Policy.

### **Rationale**

Commercial development of Liberia's forest has the potential to provide significant social and economic benefits for the country.

The FDA has developed the National Forest Policy, National Forestry Reform Law of 2006 and accompanying regulations and guide manuals that will serve as the regulatory process for achieving this objective. Only areas that fall within the Multiple Sustainable Use Management areas will be subject to evaluation for commercial activities. All areas will be field vetted and justification of actions will be completed through the writing of justification documents that will be evaluated by the FDA staff, Forest Management Advisory Committee as established in Chapter 4 of the new Forestry Reform Law of 2006, and reconciled with communities in the proposed commercial areas. All justification documents will be available to the public.

Value added priorities: The wood processing industry can be a source of investment and employment in the Liberian economy and should contribute to value added in the sector. However, historic log production has been export-orientated and focused upon a few very high-valued species. This dependence on a limited range of species (and, in recent years, harvesting above the sustainable yield) has affected the sustainability of species-specific forest management.

Few large-scale processing plants existed even in the period prior to the recent civil conflict and a minority of forest concessionaires installed sawmills. Sawmills produced lumber primarily for export with residual production for domestic markets. Only three plywood/veneer plants were constructed but were destroyed or looted along with much of the rest of the installed wood processing plants.

The wood industry will need to rebuild if the industry is to again provide a significant contribution to the national economy and create employment as designated by national policy recommendations. It is anticipated that the majority of new investment will be as a result of the allocation of forest contracts. The FDA will promote value added production in the wood industry, increasing the utilization of lesser-used and lesser-known timber species, and ensuring improvements in efficiency in the industry.

### **Goals**

The following goals will help the Commercial Department achieve its objective of re-starting the commercial forest industry based on sustainable forest land use management practices and the rule of law, increasing over the next five years the level of value added exports and local consumption, and increasing labor opportunities for Liberians:

1. Educate relevant government and non-governmental partners and the general public on the new National Forest Reform Law and new FDA reforms.
2. Work to allocate up to approximately 2.0 million hectares of forest into Timber Sales Contracts, Forest Management Contracts, and Private Use Contracts.
3. Recognize the uncertainties in the legal status of much of Liberia's forests and ensure that any Contracts are allocated in areas where legal status is not contested, locals are consulted and their agreement has been obtained.
4. Grant and administer Chain of Custody contract and establish a collaborative and participatory relationship with the contractor, government agencies, and affected communities.
5. Work with relevant government Ministries (Ministry of Finance, Ministry of Planning and Economic Affairs, Ministry of Internal Affairs) to develop and implement a mechanism to share the benefits from forest contract activities between the government, private sector and forest communities.
6. Examine alternatives to commercial logging such as ecosystem services including carbon trade from "Reduced Emissions and Avoided Deforestation and Degradation" programs.
7. Implement and enforce a set of rules and procedures for forest management in signed contracts.
8. Develop and implement, through policies and regulations, incentives to modernize the wood-processing industry including facilitating market access through research and training programs.

## **Responsibilities**

The FDA will be responsible for guiding the nation and industry to achieve most of the above goals. However, the FDA will also collaborate with the Ministry of Finance, Ministry of Internal Affairs, private sector and local communities to provide this guidance. The FDA role is to facilitate the developments described above and monitor and control (enforce) the established rules and procedures. In addition, to strengthen the monitoring of operations, forest certification will be encouraged.

Additionally, the following institutions will assist the FDA in achieving these strategic objectives

The NGO community will play a lead role in assisting the FDA to monitor and oversee the commercial industry. However, NGOs can only perform this role if appropriately empowered to collaborate with the FDA and granted access to oversight activities vis-a-vis the industry and the chain of custody management system. The FDA will establish a memorandum of understanding with civil society that frames oversight and monitoring opportunities. The FDA also strongly recommends that civil society organize itself to institute a Forest Management Governance Program that would serve as the focal point for the MOU.

The FDA will work with the Ministry of Internal Affairs on all forest management activities in rural areas before they take place and work with the MIA to provide notification to rural authorities of proposed field actions to be taken by the FDA.

The FDA will work with the Ministry of Finance to establish Chain of Custody rules, fees schedules, and ensure that all fees are collected before export permits are made available to industry. The Ministry of Finance must play a key role in the enforcement and information sharing for these processes to be effective.

## **Community Department**

### **Objective**

To assist communities in realizing the benefits of forest resources and managing forest resources in a sustainable manner.

### **Rationale**

Community forestry is a developing field in Liberia and is identified as an integral part of the sustainable management of Liberian forests. The FDA will develop a Community Rights and Access Law to forward to the national legislature on the timeframe identified in the New Forestry Reform Law of 2006.

For the large number of people who live in rural areas, forests and trees have always been an integral part of their livelihoods. With appropriate management, forests can be used both as a sustainable source of forest products and as areas that are protected for important social and cultural uses.

### **Goals**

The following goals will encourage local communities to sustainably manage their forests by creating rights, transferring control, and building capacity for forest management within local communities:

1. Develop local understanding and definitions of community forestry.
2. Develop and implement standards on community tenure rights and access.
3. Develop and test models for community empowerment and forest management.
4. Develop, update and implement policies and regulations on bushmeat, wood energy and other non-wood forest products.
5. Empower local communities to establish the rights and responsibilities (with respect to forests) and a framework for community forest management that allows communities to maximize their benefits from all potential uses.
6. Provide extension and technical assistance in community forest management.

7. Work with stakeholders to develop the Community Forestry law that will codify the above rights and responsibilities.

## **Responsibilities**

Local communities will be responsible for community forest management. The role of government will be to create an enabling environment for community forest management and to co-ordinate activities. The government will also facilitate community forest management in collaboration with non-governmental and community-based organizations by providing technical advice and extension services and, in collaboration with other government agencies, enforcing the agreed rights and responsibilities of local communities.

## **Conservation Department**

### **Objective**

To conserve Liberia's forest biodiversity and ecological services through the regulation of wildlife consumption and the creation and management of Liberia's National Protected Areas Network.

### **Rationale**

Liberia contains two of West Africa's three largest remaining rainforest blocks. These blocks contain many plants and animal species that are endemic and whose survival is severely threatened. These forest areas have also been internationally recognized as a "biodiversity hot spot" and, therefore, a priority for global conservation efforts.

Despite its exceptional importance for biodiversity conservation, only 2% of Liberia's landmass and 4% of its forests are contained in two protected areas: Sapo National Park (180,000 ha) and the Nimba Nature Reserve (13,500 ha). Additionally, Liberia is a signatory to the Convention on Biological Diversity, in which it pledged to "set aside at least 10% of the land area for Strict Protection and 30% of the land area for protection and multiple-use for partial protection". Therefore, there is an urgent need to increase protection to international standards sufficient for conserving biodiversity.

Local people rely upon forest resources, such as non-timber forest products and bushmeat, for the daily subsistence. Thus, the conservation strategy must achieve a dual objective of preserving species biodiversity and regulating extractive activities in a manner that fosters sustainable extraction of forest resources. This objective will require a robust and well-managed protected area network, effective enforcement of appropriate hunting and other regulatory measures, and assistance to local communities to improve extractive activities or develop alternative income generating activities. In this vein the FDA should also seek to promote tourism where feasible.

Additionally, given that many of the proposed protected areas are located along Liberia's borders, conservation provides an opportunity to build partnerships with neighboring countries. As a result, the conservation strategy incorporates creation of transboundary "peace parks" that would achieve conservation goals, improve monitoring along borders

through FDA deployment to forest areas, and help foster peaceful relations within the sub-region.

## **Goals**

The following goals will help the Conservation Department achieve its conservation objective of conserving Liberia's biodiversity and maintaining resource benefits for local people:

1. Manage existing protected areas (Nimba Nature Reserve and Sapo National Park) totaling 193,500 hectares in accordance with the National Forest Reform Law and FDA regulations.
2. Work to conduct social and biological surveys of proposed protected areas and allocate up to 950,000 hectares to the National Protected Area Network with at least 100,000 allocated per year as consistent with the suitability study.
3. Develop and implement programs, such as the Civil Conservation Corps currently being implemented at Sapo NP, to support income generating activities in rural communities around protected areas.
4. Develop new Wildlife Management Law and raise awareness throughout Liberia on hunting issues including the impact of the law while enforcing the ban on hunting of all protected wildlife species and the use of chemicals in water to kill fish and other marine life.
5. Ensure conservation at the landscape scale to preserve integrity of biodiversity and maintain ecological services as consistent with the 3 C philosophy.
6. Develop collaborative agreements with neighboring countries to establish trans-boundary conservation areas.
7. Identify and establish hunting zones to avoid encroachment on protected areas by hunters.

## **Responsibilities**

The FDA and non-governmental organizations will be responsible for supporting and implementing the scientific and technical aspects of wildlife and protected area management. Along with community-based organizations, they will support and facilitate community participation in wildlife management and raised public awareness. It is anticipated that the international community will continue to provide financial and technical assistance through projects and trust fund investments.

## **Research and Development Department**

### **Objective**

To develop and provide the FDA and partner organizations with relevant, accurate and un-biased information to assist in forest management decision-making.

### **Rationale**

Accurate information is a critical element of effective decision-making. The FDA depends upon a wide range of information to achieve its forest management objectives. The FDA has adopted a decision making process aimed at maximizing the utility of forest management and contribution to social and economic development in the forested regions. Pre-2005 commercial contracts and protected areas were designed and implemented. However, the government was not required by law to complete full analysis of the opportunity costs of any given land decision. Furthermore, more advanced policies in forest management point to greater efficiency and benefits to the population by managing forests as an overall landscape and increasing democratic opportunities for decision-making.

As a result of the New Forestry Reform Law of 2006, the FDA must initiate forest land use and suitability analysis before any commercial, community or conservation forest land use activities are proposed. FDA staff will, based on the initial suitability analysis, complete field verification analyses and report the findings of the field inspections in a justification document. All field analysis must include comprehensive social and economic studies, and physical forestry and biodiversity inventories. The FDA must also regularly update the National Forest Suitability Study and other data pertaining to forest management.

### **Goals**

The following goals will help the Research & Development Department achieve its objective of providing accurate, relevant, and un-biased information to the FDA:

1. Develop and maintain an up-to-date and accurate spatial database of forest information and provide timely and accurate information, whether through maps or databases, to FDA's Commercial, Community and Conservation Departments.
2. Develop a coordinated forest science research program with international and domestic universities, companies and other institutions.
3. Redesign the national forest boundaries to more accurately encompass current standing forest areas and settlements.
4. Partner with relevant government agencies, especially the Liberia Institute for Statistics and Geographic Information Systems (LISGIS) to acquire new data on Liberia's geography.
5. Develop research program on non-timber-forest-products, ecosystem services, and wood-energy issues and other alternatives to commercial logging.

6. Develop, within two years, a national reforestation policy and afforestation strategy as consistent with the National Forestry Reform Law.

### **Responsibilities**

The FDA will work with non-governmental organizations, universities, technical assistance organizations and other government agencies to conduct field research and analyze forest data. The FDA anticipates working closely with conservation organizations to update biodiversity data and refine the protected area network. Similarly, the FDA will work with non-governmental organizations and the private sector to improve information on forest utilization activities ranging from logging to non-timber forest product extraction.

### **Poverty Alleviation**

The FDA will work to develop and implement actions in rural areas that make an appropriate contribution to achieving Millennium Development Goals in terms of poverty reduction, protection of the environment and increasing food security. It is important that actions taken in rural communities protect vulnerable and marginalized groups that depend on forests for their livelihood.

To help alleviate poverty, the FDA will promote job creation through value-added production in urban and rural areas. The FDA will also work to facilitate job transition from illegal pit-sawing and unskilled labor to legally recognized private sector activity employing skilled laborers. By effectively regulating extractive activities, the FDA's conservation strategy will also help maintain the natural resource base that provides for the livelihood of many rural Liberians. The forest sector can potentially contribute to poverty alleviation by conserving the resource base, creating skilled jobs and fostering a legitimate private forestry sector that develops value-added products.

The FDA will continue to work closely with the Ministry of Planning and Economic Affairs and other relevant government agencies to implement the National Development Plan other development strategies to alleviate poverty throughout the country.

### **Additional Issues**

#### **Decision Making Process**

To complete the process, the FDA is committed (through the New Forestry Reform Law of 2006 and supporting regulations) to initiate forest land use and suitability analysis before committing to any commercial, community or conservation forest land use activities are proposed (see Annex E: Decision making flow chart). Based on the initial suitability and strategic management goals defined in this document, the FDA staff will complete field verification analysis and report the findings of the field inspections in a justification document. All field analysis must include comprehensive social and economic studies, and physical forestry inventories. If the justification document is approved, the FDA will follow the legal process for committing the forest land to the defined use. For example, commercial contract areas must be tendered through the

Public Procurement and Concessions Act process, and Protected Areas will follow requirements defined in law.

### **Peace Building and Conflict Resolution**

The FDA is dedicated to resolving current and future land use conflicts in the forest sector. There are at least three ways in which the FDA will actively contribute to peace building and conflict resolution through forest management:

1. By implementing the forest land use decision making process and consulting with all stakeholders, especially communities, at all levels of land use decision making.
2. Where conflicts exist in forest usage, the FDA should seek to mediate by serving as a third party facilitator or honest broker.
3. Armed militia were frequently used in Liberia's forest areas for military training and transit points into neighboring countries during recent civil conflict. The FDA will work with partners and neighboring governments to establish Peace Parks to prevent militant groups from using forest area as to foment conflict in the sub-region.

### **Mitigating Expectations**

There are a variety of expectations on the future of the forest sector resulting from the reform process in Liberia, the eager anticipation of the start up of the commercial logging activities, and the desire for devolution of forest management to local government and communities and increased democracy in forest resources management. The FDA will be responsible for providing clear information to the public and, in particular, for educating affected rural communities on policies, law, regulations and the strategies being implemented in the forest sector. Information was often absent or poorly defined and explained to the public due to the lack of transparency and formal communications channels in the past. The lack of public understanding of the rule of law facilitated conflict in regard to natural resources and the centralization of resource decision-making. However, at present the reform process has not yet been sufficiently taught to the public and expectations of natural resources management and their contribution to localized and national economies are potentially misunderstood.

Thus, the FDA will seek to manage expectation in order to avoid a situation of un-clear expectations in the future. The FDA will strive to implement a thorough and rigorous outreach and communications plan and ensure that clear policy statements are available during all field missions.

### **Ongoing Activities**

Currently, the FDA has dedicated itself to positive management of forests based on appropriate tenure rights, legal security for investments, and access and ownership rights. However, the country is currently working to revise policies and laws on tenure and community rights. There is a need to continue collecting additional data that will allow for greater accuracy in decision-making. Therefore, not all policies can be fully addressed in this document. The FDA will continue working toward several subtasks previously defined in the National Forest Management Strategy and in collaboration with relevant government agencies and partner organizations to ensure cohesion of FDA activities and policies with other relevant policies.

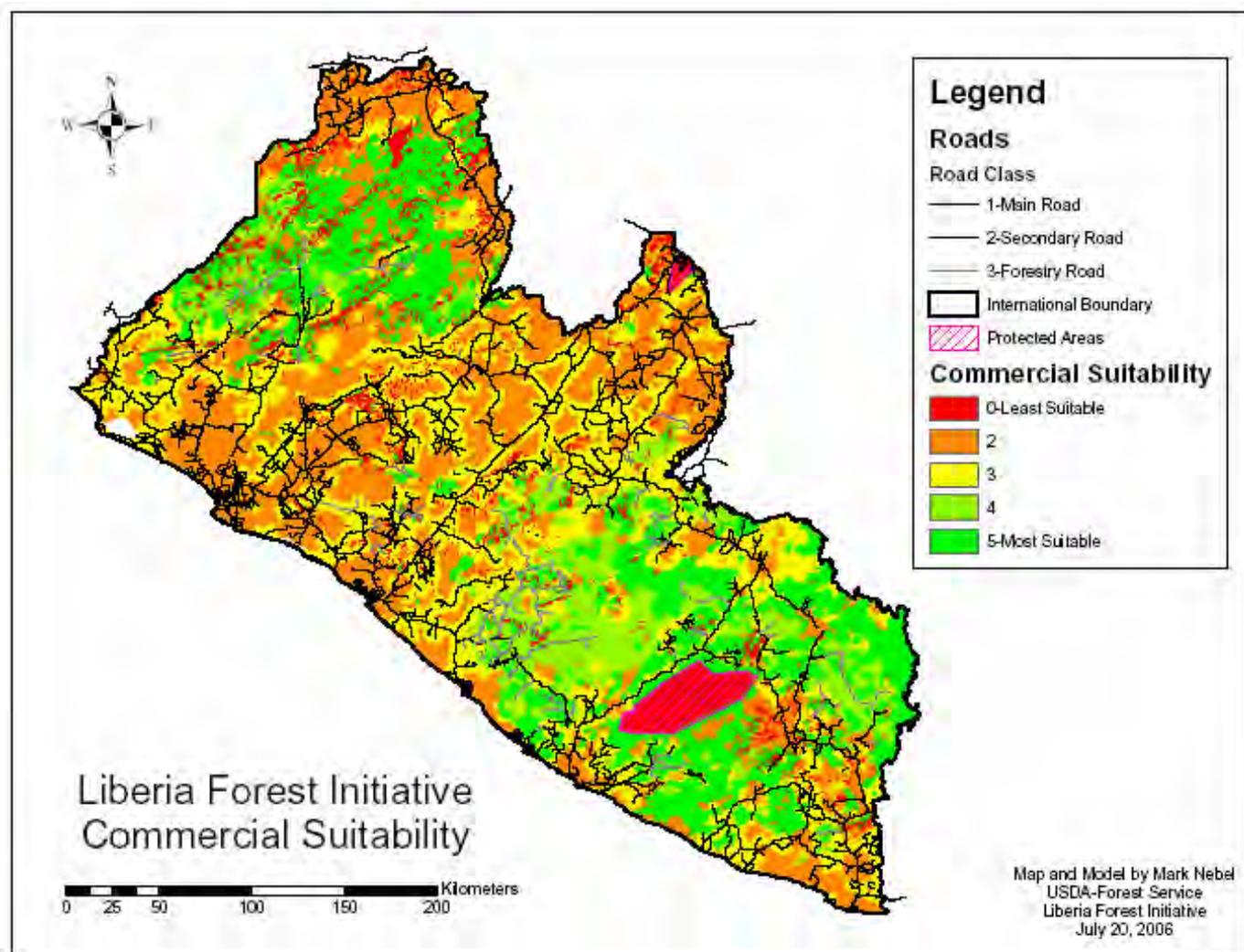
Some of the sub-tasks that must be addressed are:

- participate in and incorporate future land tenure commission policies and decisions into the National Forest Management Plan. The Governance Reform Commission (GRC) has created a Land Tenure Steering Group that will work to resolve some of the pressing and long term land tenure and land reform issues facing the nation. The FDA should work closely with the GRC to participate in the land tenure reform process.
- validate and geographically verify metes and bounds of all tribal and deeded lands
- collaborate with relevant government agencies to integrate national agricultural and mining strategies into the National Forest Management Strategy.

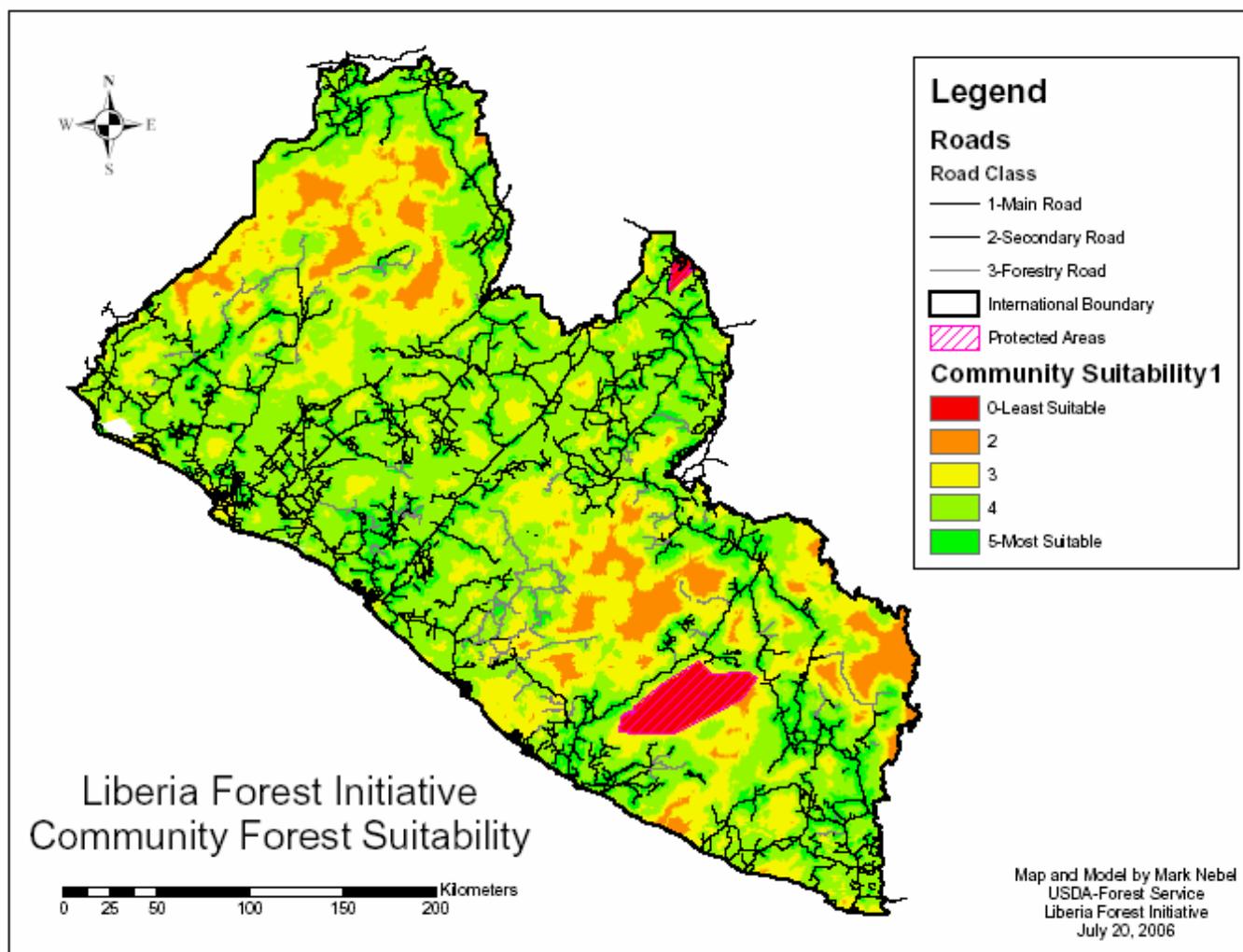
## Annex A: Forest Cover and Usage Summary Chart

<b>Forest Class or Proposed Forest Usage</b>	<b>Surface area available (hectare)</b>	<b>Percentage of total land mass</b>
Total forest land surface area	5,705,559	59%
Non-forest area	3,885,530	41%
<b>TOTAL</b>	<b>9,591,000</b>	
<b>Forest Classification</b>		
2.3 Mixed agriculture and forest area	1,317,873	14%
<b>Non-permanent forest total</b>	<b>1,317,873</b>	<b>14%</b>
<b>Forest Management Strategy</b>		
3.1 Agriculture degraded forest	949,615	10%
Closed and Open Dense forest (3.2, 3.3)	3,438,071	36%
<b>Permanent forest total</b>	<b>4,387,686</b>	<b>46%</b>
Area available for TSC or community forest area	911,575	10%
Area available for FMC or community forest area	2,498,908	26%
Proposed protected areas	948,313	10%
Current Protected area coverage	193,500	2%
<b>TOTAL</b>	<b>THIS EQUAL 4.552 m</b>	<b>Ie, more than for permanent forest above.</b>
<b>Other Classifications</b>		
Permanent proposed forest cover	3,438,071	36%
Non-permanent proposed forest cover	2,267,488	24%

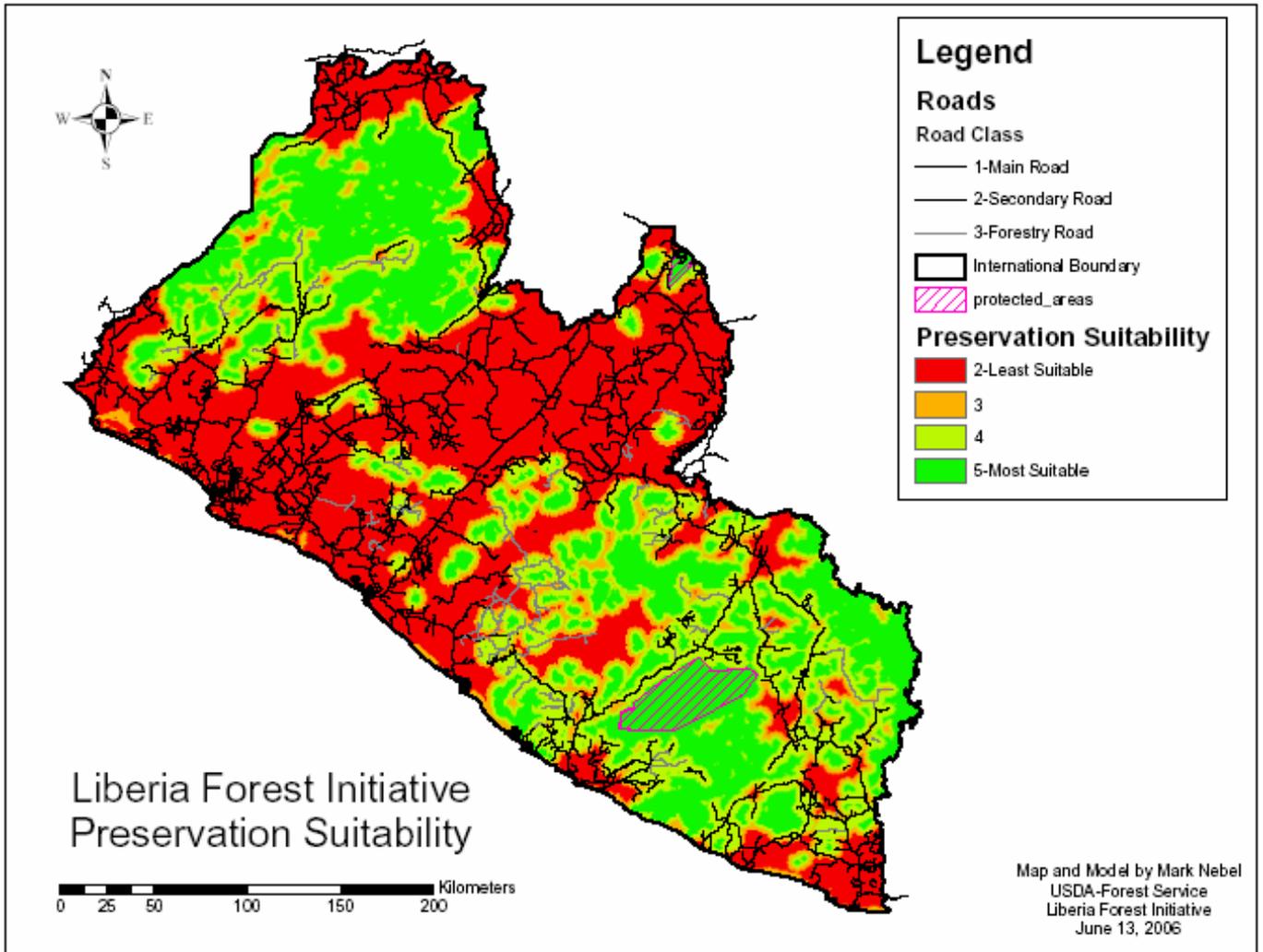
## Annex B: Commercial suitability map



## Annex C: Community suitability map



## Annex D: Conservation suitability map



## Annex E: Decision making flow chart

