

**Critical Ecosystem Partnership Fund
28th Meeting of the CEPF Donor Council
Brussels, Belgium
20 January 2016
2:00 to 5:00 pm CET**

Ecosystem profile for the Guinean Forests of West Africa Hotspot

Background

The ecosystem profile for the Guinean Forests of West Africa Hotspot was developed during FY14 and FY15 by a consortium consisting of the IUCN West and Central Africa Programme, the IUCN Global Species Programme and the United Nations Environment Programme-World Conservation Monitoring Centre.

An extended summary of the ecosystem profile for the Guinean Forests of West Africa Hotspot is presented here. The full text of the profile can be downloaded from:

<https://www.dropbox.com/sh/n45yjj651r9wgcu/AABVzgtPIn8O56nc-Ejw9h2a?dl=0>

1. INTRODUCTION

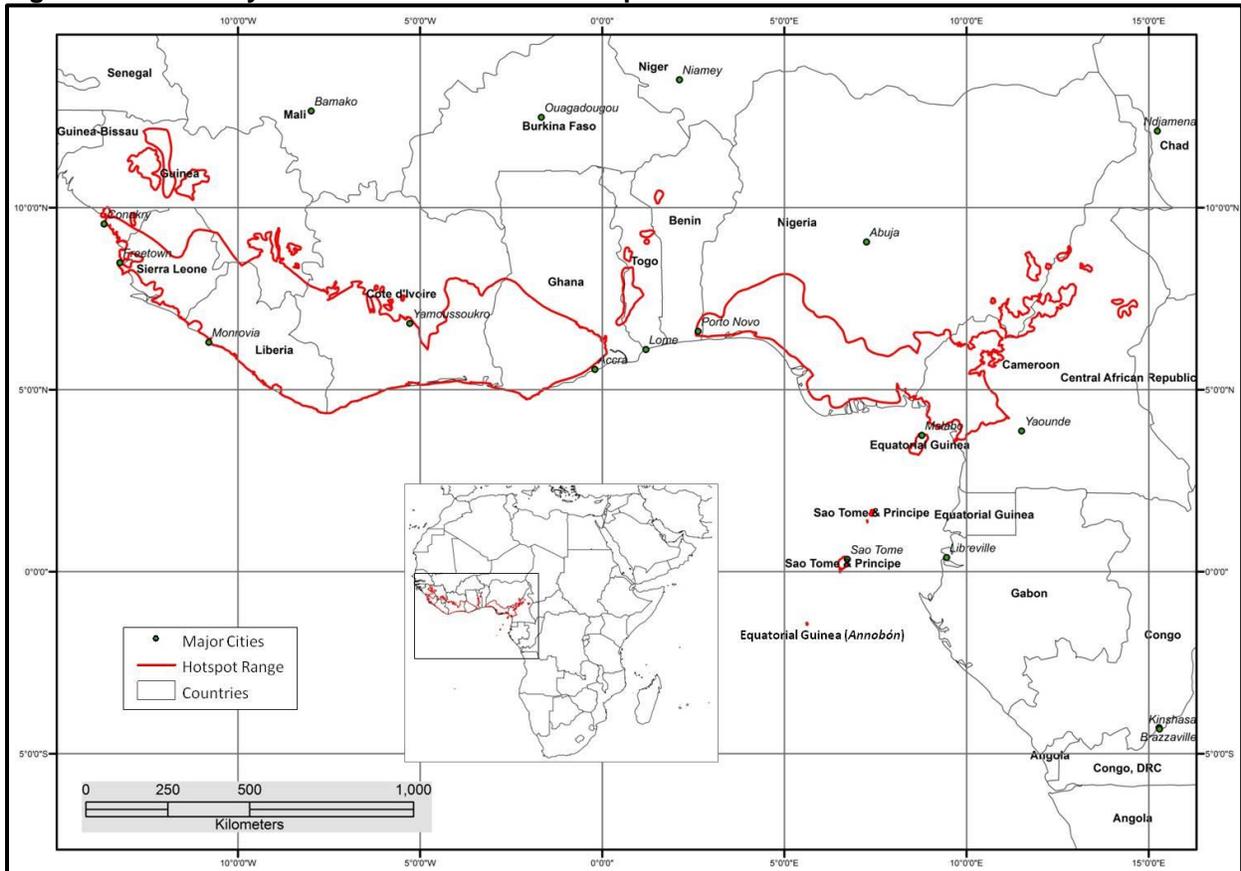
1.1 The Critical Ecosystem Partnership Fund

The Critical Ecosystem Partnership Fund (CEPF) is a collaborative funding initiative of the l'Agence Française de Développement (AFD), Conservation International (CI), the European Union (EU), the Global Environment Facility (GEF), the Government of Japan, the John D. and Catherine T. MacArthur Foundation, and the World Bank. Their shared interest and objective is the conservation of biodiversity hotspots – Earth's most biologically rich yet threatened areas.

1.2 The Guinean Forests of West Africa Biodiversity Hotspot

The Guinean Forests of West Africa Biodiversity Hotspot (hereafter, for brevity, the Guinean Forests Hotspot) extends across the southern part of West Africa and into Central Africa north of the Congo Wilderness Area (Figure 1.1).

Figure 1.1 Boundary of the Guinean Forests Hotspot



The hotspot covers 621,705 km², and can be divided into two subregions. The first subregion, referred to as the 'Upper Guinean Forests', stretches from Guinea in the west, through Sierra Leone, Liberia, Côte d'Ivoire, Ghana, Togo and, marginally, into Benin. The second subregion,

the ‘Lower Guinean Forests’, covers much of southern Nigeria, extends into southwestern Cameroon, and also includes São Tomé and Príncipe and the offshore islands of Equatorial Guinea. The Guinean Forests are one of eight biodiversity hotspots in Africa and Madagascar.

The Guinean Forests support impressive levels of biodiversity, having high levels of species richness and endemism. Approximately 9,000 species of vascular plant are believed to occur in the hotspot, including 1,800 endemic species. The hotspot also supports an exceptional diversity of other terrestrial species. There are 416 mammal (representing nearly a quarter of the mammals native to continental Africa), 917 bird, 107 reptile and 269 amphibian species within the hotspot boundary, of which 65 mammals, 48 birds, 20 reptiles and 118 amphibians are thought to be endemic to the hotspot. The hotspot is among the world’s top priorities for primate conservation, with five Critically Endangered and 21 Endangered species.

In addition to its biological richness, a number of ongoing threats to biodiversity in the hotspot have resulted in the loss of more than 85 percent of the native vegetation cover. These include agricultural expansion to provide for the needs of an expanding population in rural and urban areas, unsustainable logging and fishing, hunting and trade of bushmeat, industrial and artisanal mining, industrial development, climate change and pollution, among numerous others. Many of the threats to biodiversity occurring in the region are linked, either directly or indirectly, to a high incidence of poverty, political instability and/or civil conflict.

1.3 Previous CEPF Investment in the Hotspot

In September 2012, the CEPF Donor Council selected the Guinean Forests Hotspot for profiling and future investment. This was intended to be a full reinvestment, following an initial investment and subsequent consolidation phase between 2001 and 2011, during which CEPF provided a total of USD 8.3 million in support to conservation projects in the Upper Guinean Forests subregion. The current ecosystem profile takes account of the lessons learned from these earlier investments, which include that:

- Emerging NGOs need to start small. They require oversight and capacity building in addition to just money, and they benefit from sharing experience with others.
- Some capacity building approaches appear to work better than others. For instance, mentoring of a small organization by a larger, longer established one seems to be more effective than professional training courses. Nevertheless, retaining trained staff is a major challenge for smaller civil society organization (CSOs).
- Local groups have taken the initiative to form partnerships and networks, for example the Environmental Forum for Action in Sierra Leone. Such collaborations are integral to avoiding duplication of effort and maximizing conservation results.
- CEPF investments in environmental education and outreach have been innovative and unusual, in an effort to get beyond conventional efforts, which have not proven successful. More innovative communication strategies, featuring the use of film, drama, music and hands-on experience appear to have been more effective.
- Community participation needs to be encouraged at all stages of the design and implementation of conservation interventions, to ensure they are locally owned.

- Sustaining community motivation to support conservation goals beyond the end of projects was identified as a challenge by several grantees, especially where financial incentives are used.
- Although CEPF investments have been instrumental in generating biodiversity data, they fell short of setting up a region-wide biodiversity monitoring system, as originally planned. One lesson that can be drawn from this is the importance of setting feasible objectives well grounded in an analysis of the capacity of civil society in the region.
- Corridor creation in West Africa is complex and challenging, and requires substantial incorporation of livelihood components. Poverty is a constant obstacle to conservation success, and CEPF's projects that have included alternative income generation components have often yielded significant results.
- There is a great need for a range of grant sizes, to engage partners of differing capacities. Small grants can be particularly useful for engaging the many smaller CSOs in the hotspot that lack the capacity to handle larger amounts of funding.

Above all, the earlier investments by CEPF demonstrated that, with appropriate support and guided by a common plan of action, civil society groups are able to contribute meaningfully to conservation efforts in West Africa. Investing in small local NGOs has had results, in a significant number of cases. There is, nevertheless, a need for longer-term engagements by CEPF and other funders, because increases in capacity and on-the-ground conservation results require considerable time to be achieved and secured.

1.4 Development of the Ecosystem Profile

To guide its next phase of investment in the hotspot, CEPF commissioned the preparation of an ecosystem profile, which provides an analysis of the current situation across the hotspot, and frames a detailed strategy for CEPF investment over a five-year period, between 2016 and 2021. In addition to using existing datasets and reports, the profile is based on the information gathered through a consultation process with a range of governmental and non-governmental stakeholders in the region. The reasoning behind such a participatory approach is the desire to develop a shared strategy from the outset; one that accounts for the needs and ongoing activities of the region's stakeholders, and allows other donors and programs to complement CEPF investments.

2. BACKGROUND

The ecosystem profile was prepared by a consortium consisting of the West and Central Africa Programme of the International Union for Conservation of Nature (IUCN-PACO), the Global Species Programme of the International Union for Conservation of Nature (IUCN-GSP) and the United Nations Environment Programme-World Conservation Monitoring Centre (UNEP-WCMC), with technical contributions from BirdLife International, CI and other partners, including independent consultants with extensive expertise in the region.

The profiling process began with the organization of an advisory group meeting in Accra, Ghana (December 10-12, 2013), followed by stakeholder consultation meetings in Lomé, Togo (February 17-18, 2014) and Douala, Cameroon (February 24-25, 2014). However, the outbreak of the Ebola virus in March 2014, which affected four of the 11 countries in the hotspot (Guinea,

Liberia, Nigeria and Sierra Leone) meant that travel and meetings around the region were severely restricted, requiring the postponement of some the planned consultation activities, and replacement of others by remote consultations. Following the lifting of travel restrictions introduced during the Ebola outbreak, the stakeholder consultation process was concluded with two final stakeholder workshops, in Monrovia, Liberia (August 27-28, 2015) and Limbé, Cameroon (September 2-3, 2015), and a consultation with members of the BirdLife International Africa Partnership in Akosombo, Ghana (October 11-13, 2015).

The main activities of the profiling process were:

- i. Defining the conservation outcomes for the Guinean Forests Hotspot at species, site and corridor scales;
- ii. Analyzing the socioeconomic, policy and civil society context, and assessing the relevant pressures and threats to the biological values of the region;
- iii. Identifying current conservation investments in the hotspot by donors, NGOs and governments;
- iv. Consulting a wide range of national and international stakeholders with knowledge of the hotspot in order to gather and validate information and to assist with analysis; and
- v. Defining CEPF's niche and investment strategy for the hotspot.

3. BIOLOGICAL AND ECOLOGICAL IMPORTANCE OF THE GUINEAN FORESTS HOTSPOT

3.1 Introduction

The Guinean Forests Hotspot supports impressive levels of biodiversity, including numerous endemic species, making it a conservation priority at the global scale. The hotspot is ranked among the world's foremost regions for mammalian diversity. Notable threatened species in the Lower Guinean Forests subregion of the hotspot include western gorilla (*Gorilla gorilla*) and drill (*Mandrillus leucophaeus*), while the Upper Guinean Forest subregion supports endemics such as the pygmy hippopotamus (*Choeropsis liberiensis*) and several species of forest duikers, such as Jentink's Duiker (*Cephalophus jentinki*). The hotspot is one of the top global priorities for primate conservation due to both high levels of endemism and threat: 92 percent of the hotspot's 30 species of primate are endemic, and almost all of these are globally threatened.

The hotspot contains many other ecological features that render it globally unique. The Niger Delta swamp forests, for instance, are the second largest swamp forest on the continent, while the Central African Mangroves are the largest mangrove stands in Africa. The hotspot's offshore volcanic islands support notably high levels of endemism, particularly for their size. One of the largest rivers in West Africa, the Volta, and the delta of the longest and largest river in West Africa, the Niger, are found within the hotspot boundary. The Western Equatorial Crater Lakes ecoregion is among several that are listed as globally outstanding.

3.2 Biological History

During wetter climatic periods, such as those of the past few thousand years, the Guinean Forests Hotspot would have been covered in large part by tropical rainforest formations. However, the forest cover has been reduced to a series of fragments of high forest separated by large areas of agricultural land, and numerous villages and towns. Overall, the hotspot retains approximately 93,047 km² of natural vegetation, or roughly 15 percent of its original cover.

Studies suggest that around 80 percent of the original forest area is now an agriculture-forest mosaic. Much of the remaining forest is exploited for timber and/or is used for local purposes, such as for construction materials and fuel. A majority of the hotspot's forests show evidence of tens of thousands of years of periodic human habitation, use and re-growth, meaning that very little of the remaining forest can be regarded as pristine. Nonetheless, inhabitation of the forest does not always result in forest cover decline, as communities sometimes also plant forests, such as in the forest-savanna mosaic at the northern boundary of the hotspot.

3.3 The Importance of Ecosystem Services in the Hotspot

A variety of services are provided by the ecosystems found within the hotspot. These services include those that are important at a global scale, such as climate mitigation through carbon storage and sequestration, as well as those benefitting the local communities, such as those providing essential products to sustain livelihoods, such as food, fuel and building materials.

The hotspot's forests contain high amounts of biomass carbon, which contributes to mediating climate change processes and maintaining biodiversity at the global scale. These forests play an important role in the global climate balance, by emitting or sequestering significant amounts of carbon dioxide, depending on their condition and degree of deforestation or degradation. Undisturbed forests in the hotspot are considered as 'carbon sinks', with uptake of CO₂ exceeding emissions. Conversely, when forests are disturbed through logging, farming, or other utilization activities, they become CO₂ emitters. The hotspot currently contains a mean above-ground biomass carbon content of 160 tonnes per hectare, increasing to 300 tonnes per hectare in more intact areas.

At the national and local levels, the hotspot's forests provide a range of ecosystem services for a population of around 200 million, generally poor, people. These services include supplying timber and other building materials, fuel for cooking, food (e.g. fruit, fungi, meat, etc.) and medicine. Hunting traditions are strong in the Guinean Forest countries, and, for rural people in the hotspot, bushmeat provides a major source of protein for human consumption.

Forestry as a production sector in the hotspot can be divided into two broad categories; large scale and smaller-scale exploitation. Large scale includes commercial logging and timber extraction, and plantation forestry. Smaller scale includes local or artisanal exploitation for local use and domestic markets.

The hotspot's forests also play essential roles in providing various hydrological functions, such as driving the water cycle itself, protecting water quality, regulating water flows, controlling soil

salinity, controlling erosion and sediment deposition, and maintaining aquatic habitats, which are essential to the persistence and wellbeing of local communities.

Freshwater ecosystems make important contributions to local and national economies and underpin the livelihoods of many of the poorest people within the hotspot. Benefits include flood regulation, whereby functioning wetlands buffer the rise and fall of floodwaters, provision and purification of drinking water, and many direct benefits such as provision of building materials, nutrient rich floodplain pastures, medicines, and food such as from the inland fisheries.

From a West African perspective, the major ecosystem service values from water are realised outside the hotspot boundaries, where there is less rainfall and hence water is a more important service. Within the hotspot itself, water supply is generally not limiting and most major cities are supplied from local rivers or existing large dams. Most agriculture in the hotspot is also rain fed, including so-called 'upland rice', which is sown directly into the soil during the rainy season. The most important catchment within the region is the Fouta Djallon Massif, which serves as the water catchment area for a number of the key rivers that flow outside of the hotspot, most notably the Niger and Senegal Rivers.

Of the estimated 85 million people living in the hotspot, more than 40 percent live in coastal areas and are dependent on lagoons, estuaries, creeks and inshore waters for their sustenance and socio-economic well-being. Many people are also reliant on fish protein, which constitutes between 40 and 80 percent of total annual protein consumed per capita.

Mangrove habitats and coastal lagoons in West Africa are acknowledged as providing protection against floods, storm surges and erosion. They are also highly important for the nutrient and organic matter processing and sediment control services they provide, as well as serving as both a source and sink for nutrients and sediments for other inshore marine habitats such as seagrass beds. Mangroves sequester up to 25.5 million tons of carbon per year and provide more than 10 percent of essential organic carbon to the global oceans. Mangroves are also critical nursing and spawning grounds for many fish and shrimp species, with offshore commercial fishing in the hotspot relying on mangroves functioning as nursery grounds for many fish species.

Ecosystems in the hotspot provide ecotourism opportunities and sites for recreation activities. In 2005, West Africa had the strongest tourism performance of the five African regions in terms of international tourism receipts growth, with a 21 percent increase compared with 2004. This provided hope that the region would experience a strong growth in tourism. However, this has not happened with civil disturbance, human disease outbreaks, and persistent poor governance keeping international tourist numbers low, especially in the rainforest regions. By 2012, nine West African countries were among the least globally competitive in terms of tourism. Nevertheless, the region still attracted over 4.5 million visitors and generated USD 3.2 billion in revenue from the tourism sector that year.

Throughout the hotspot, and especially in Benin, Ghana and Togo, traditional sacred groves (sometimes called 'fetish groves') are designated as areas where resource harvest and, even, entrance by people are highly restricted. These sacred groves are found in all villages and can provide valuable, albeit small, areas of protected forest in farmed landscapes.

4. CONSERVATION OUTCOMES DEFINED FOR THE HOTSPOT

4.1 Introduction

Selection of conservation outcomes relies on the understanding that biodiversity is not measured in any single unit. Rather, it is distributed across a hierarchical continuum of ecological scales that can be categorized into three levels: i) species; ii) sites; and iii) broad landscapes (or ecosystem-level units) termed corridors. These levels interlock geographically through the occurrence of species at sites and species and sites within corridors. Given the threats to biodiversity at each of these three levels, targets for conservation can be set in terms of ‘extinctions avoided’ (species outcomes), ‘areas protected’ (site outcomes) and ‘corridors consolidated’ (corridor outcomes). Species are selected as those classified as threatened according to the IUCN Red List of Threatened Species (hereafter known as the IUCN Red List). Sites are identified as Key Biodiversity Areas or KBAs, places that “contribute significantly to the global persistence of biodiversity”, for example by supporting threatened species and species with severely restricted global distributions, and are delineated as areas of land and/or water that are actually or potentially manageable as a single unit (e.g. a protected area or other managed conservation unit). Landscape corridors are delineated to link KBAs (in particular for transfrontier areas), secure landscape connectivity such as within river catchments, and maintain ecosystem function and services for long-term species survival. Following this approach, quantifiable measures of progress in the conservation of threatened biodiversity can be tracked across the Guinean Forests Hotspot, allowing the limited resources available for conservation to be targeted more effectively.

Defining conservation outcomes is a bottom-up process that follows a standard methodology. It starts from the definition of species-level targets, from which the definition of site-level targets is then developed. The process requires detailed knowledge of the conservation status of individual species. This information has been accumulating in the IUCN Red List for more than 50 years. For the Guinean Forests Hotspot, the conservation status of species has been comprehensively assessed for many taxonomic groups but there are notable gaps in the assessments of plants and some reptiles. Identification of KBAs is also incomplete for some taxa and regions of the hotspot with the identification of terrestrial KBAs in the Lower Guinean Forests subregion, in particular, requiring additional work. Additional information on the availability of information on species and site outcomes is given in the relevant sections below.

Conservation outcomes were defined using best-available species distribution data, followed by expert review and validation procedures involving confirmation of species presence in the hotspot. KBA information collated for the hotspot comes from three main data sets: (i) data on Important Bird Areas (IBAs) compiled by BirdLife International and stored on the World Biodiversity Database (WBDB), from where it was extracted and provided to IUCN for use in the profile in November 2013; (ii) data on terrestrial KBAs in the Upper Guinean Forest subregion compiled by Conservation International between 2008-2010, as extracted from the WBDB and provided to IUCN in November 2013; and (iii) data on the freshwater KBAs identified by IUCN’s Global Species Programme on the basis of Red List assessments of freshwater taxa completed in 2009.

Stakeholder input to supplement and verify the information on conservation outcomes was provided through three workshops, responses to circulated questionnaires, and consultations with BirdLife International and its partner NGOs. The information was also cross-checked with the results of the IUCN/UNEP situation analysis on large terrestrial and freshwater fauna in west and central Africa. It must be noted, however, that the outbreak of Ebola in the region made it difficult to obtain the desired level of stakeholder input and, consequently, information on additional outcomes may be forthcoming at a later date. The number of experts previously consulted in compilation of the species Red List assessments used to determine conservation outcomes within the hotspot is estimated to exceed 150 people, including from within the region and from the wider international community of species experts, while many other experts were involved in the consultations and research undertaken by the BirdLife Partnership that led to the original identification of IBAs, which underpin much of the analysis of site outcomes.

4.2 Species Outcomes

At least 936 species found in the hotspot are globally threatened (Table 4.1). This number is likely to increase significantly as more species are assessed in the future, particularly in groups such as plants and reptiles. A significant proportion of the species that have been assessed are not well-known, with 389 species (8 percent of those assessed to date) being classified as Data Deficient, meaning that there is insufficient information available to make a reliable assessment of their current risk of extinction using the IUCN Red List criteria. The globally threatened species include 135 assessed as Critically Endangered: the highest category of threat.

Table 4.1 Globally Threatened Species in the Guinean Forests Hotspot

Taxonomic Group	Global Threat Status			Total
	CR	EN	VU	
Mammals ¹	6	29	30	65
Birds ¹	5	12	31	48
Reptiles ^{2,3,4}	2	3	6	11
Amphibians ¹	13	42	22	77
Bony fishes ¹	35	59	78	172
Sharks and rays ¹	4	8	21	33
Butterflies ^{3,4}	0	0	2	2
Odonates ¹	4	4	8	16
Freshwater crabs and shrimps ¹	2	9	5	16
Mollusks ¹	2	6	5	13
Plants ^{4,5}	62	98	323	483
Total	135	270	531	936

Source: IUCN Red List version 2013; exported in January 2014.

¹All known described species. ²Species endemic to the hotspot. ³Random representative sample. ⁴*Ad hoc* selection.

⁵Species within selected families of aquatic plant.

Plants

Around half of the 1,030 plant species in the hotspot so far assessed for the IUCN Red List are threatened. For these species, a broad spatial analysis shows a significant gap in coverage by the protected areas network in the hotspot. This gap in spatial cover of protected areas is somewhat reduced by the inclusion of forest reserves but in reality many of these reserves may provide little real conservation benefit.

Mammals

Sixty-five of the 416 mammal species occurring in the hotspot (16 percent) are threatened, including a number of iconic species, such as western gorilla, chimpanzee, lion (*Panthera leo*), pygmy hippopotamus (near endemic to the hotspot), African elephant and drill. The primates, rodents, shrews and bats are however the dominant (in terms of the number of species) and most threatened groups of mammals, impacted mainly by hunting and deforestation due to agricultural expansion and logging.

Western gorilla, found in Cameroon and Equatorial Guinea within the hotspot, is Critically Endangered due to a combination of exceptionally high levels of hunting and disease-induced mortality. Most protected areas have serious poaching problems and animals in almost half of the habitat under protected status have been hit hard by Ebola. Both commercial hunting and Ebola-induced mortality are continuing and even accelerating. Chimpanzee, which has subpopulations across much of the hotspot, is assessed as Endangered, also due to high levels of hunting, loss of habitat and Ebola.

Birds

Forty-eight of the 917 birds recorded in the hotspot (five percent) are threatened. The main threats are once again mainly agricultural expansion, hunting, and loss of habitat due to logging. Of the five Critically Endangered species, all appear to have highly restricted ranges within small remaining forest fragments. São Tomé grosbeak (*Neospiza concolor*) and São Tomé fiscal (*Lanius newtoni*) are both known from a very small area of primary forest on São Tomé, which currently remains unprotected. Dwarf olive ibis (*Bostrychia bocagei*) is also known only from São Tomé. The most recent estimate puts the total population at between 50 and 250 mature individuals. Liberian greenbul (*Phyllastrephus leucolepis*), is only known from a few forest fragments in southeastern Liberia but has not been recorded since its original discovery in 1985. The fifth Critically Endangered bird species is Príncipe thrush (*Turdus xanthorhynchus*), which is endemic to the island of Príncipe. It is found only in the remaining forests in the centre and south of the island, and has a population estimated at fewer than 250 mature individuals.

Reptiles

Information on reptiles is rather incomplete for the hotspot. Eleven of the 107 reptile species to have been assessed are threatened (10 percent). However, this is likely not representative of the state of reptiles across the hotspot, as few species east of Nigeria have been assessed. Four of the most severely threatened reptile species in the hotspot are marine turtles. Other threatened reptiles include the Critically Endangered Annobón lidless skink (*Afroablepharus annobonensis*) is, as the name suggests, endemic to Annobón Island, where it is threatened by habitat loss and, potentially, predation by introduced species.

Amphibians

Seventy-seven of the 269 amphibian species in the hotspot (29 percent) are globally threatened, mainly due to the habitat loss/degradation resulting from expanding urban and commercial developments, agricultural expansion, and logging. Of these species, the majority are concentrated in Cameroon, which supports 61. Thirteen of the hotspot's amphibians are Critically Endangered. It should, however, be noted that the level of threat may be even higher than currently recognized, as the increased intensity of harvesting in the region has not yet been

factored into many amphibian assessments. An estimated 44 percent of the amphibian species found in the hotspot are endemic to it. The Cameroon Highlands, in particular, contain many highly threatened and restricted-range endemic species and are one of the two areas of mainland Africa with the highest diversity of amphibians, underlining the exceptionally high importance of the region for the conservation of amphibian diversity.

Freshwater Fishes

A comprehensive Red List assessment of freshwater fishes has been conducted across the hotspot, covering 632 species of bony fish (class: Actinopterygii). The highest densities of freshwater fish species in the hotspot are found within the Niger Delta and the Atlantic river catchments of Sierra Leone and Liberia. The Niger Delta itself has 180 recorded freshwater fish species and an additional 19 species are thought likely to be present. More than half of the freshwater fishes present are endemic to the western Africa region, but only a few species are thought to be endemic to the hotspot itself, primarily as the hotspot boundaries are largely based upon forest habitats and not river catchments, and most river systems in the hotspot originate outside its boundaries. Many species are, however, endemic to catchments crossing the hotspot. For example, *Notoglanidium akiri* is endemic to the lower Niger Delta but not to the hotspot itself, as the hotspot boundary does not include the full extent of the delta. This species, along with many others in the delta, especially the many regionally endemic killifishes, is highly threatened by pollution and habitat loss resulting from oil exploration.

4.3 Site Outcomes

Many species are best conserved by protecting their habitats and the biological communities they are part of, through conservation actions at a network of sites. The method used by CEPF to identify these sites is that of KBAs, which are explicitly designed to conserve biodiversity at the greatest risk of extinction. The KBA methodology is data-driven, although, in data-poor regions, expert opinion also plays a critical role. All KBAs meet one or more standard criteria.

A total of 137 KBAs have been identified in the hotspot (Figure 4.1, Table 4.2). The total land area covered by these KBAs, adjusting for overlap between sites, is 109,271 km², slightly larger than Liberia and covering 18 percent of the entire hotspot (621,705 km²). The KBAs have an average size of 81,152 hectares, ranging from the 159 hectare Mont Bana (CMR7) to the 586,803 hectare Gashaka-Gumti National Park (NGA5).

Ghana has the largest number of KBAs (30 sites) but, as many of them are relatively small, the total land area (5,490 km²) is less than for Liberia which has 22 KBAs covering a total area of 38,677 km² representing one-third of the total area of KBAs in the hotspot.

It is not possible for CEPF to fund conservation actions at all of the 137 KBAs identified within the hotspot during a single investment phase. Consequently, a subset of priority sites was identified as those considered most likely to benefit from the financial resources available through CEPF investments during the next five years.

Figure 4.1 Location of All KBAs within or Bordering the Hotspot

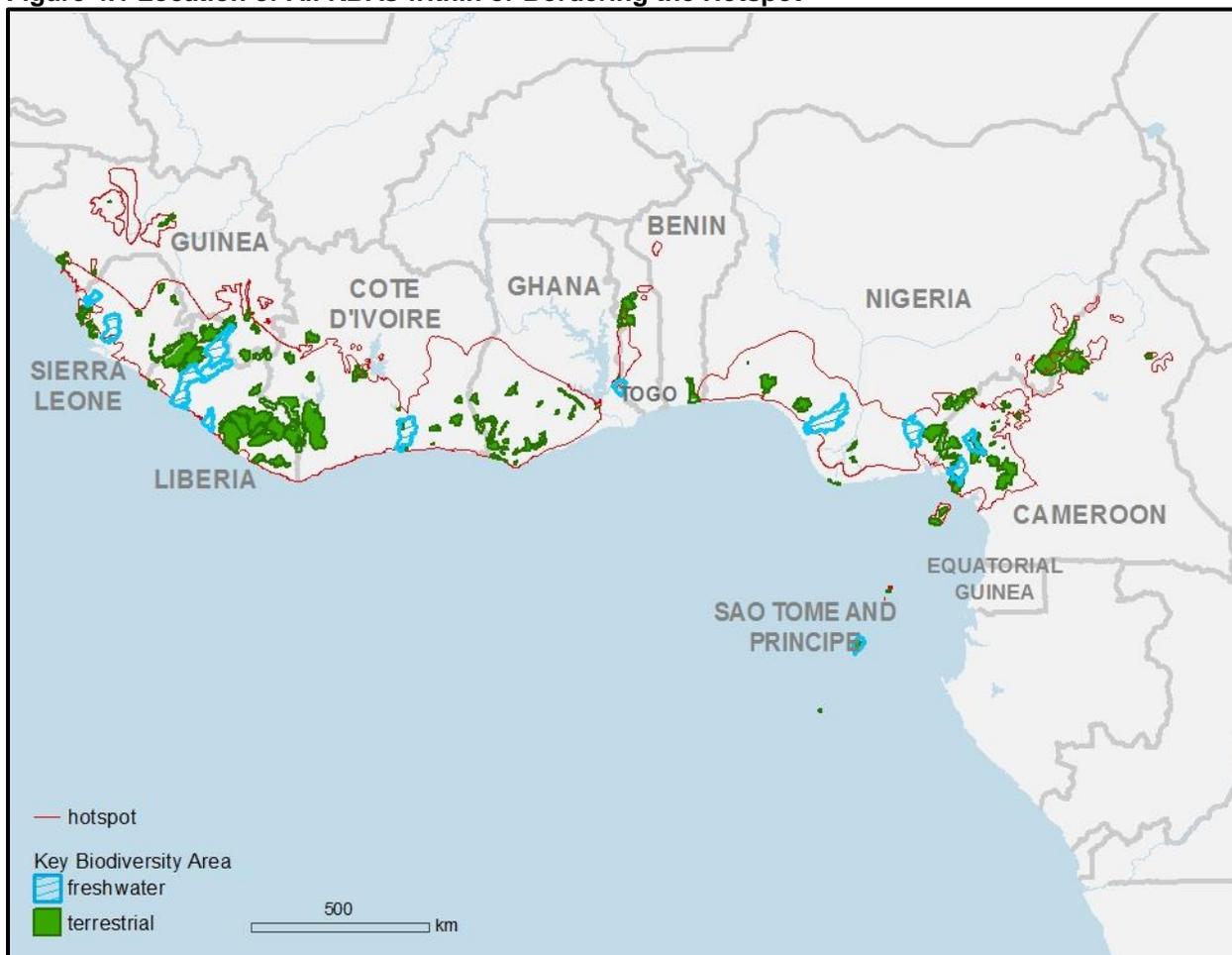


Table 4.2. Distribution of Terrestrial and Freshwater KBAs by Country

Country	KBA Area within Hotspot (sq km) ¹	Number of Terrestrial KBAs	Number of Freshwater KBAs	Total Number of KBAs
Benin	984	1	0	1
Cameroon	13,837	19	2	21
Côte d'Ivoire	14,659	15	1	16
Equatorial Guinea	862	3	0	3
Ghana	5,490	30	0	30
Guinea	3,260	11	0	11
Liberia	38,677	18	4	22
Nigeria	21,231	12	2	14
São Tomé & Príncipe	961	4	1	5
Sierra Leone	6,245	9	2	11
Togo	3,065	2	1	3
Total	109,271	124	13	137

¹ The area of overlap between terrestrial and freshwater KBAs has been accounted for in these measurements.

The first step was to prioritize among KBAs based upon their relative biological importance. It is important to stress here that this is an exercise in prioritization among sites that are all of global importance for the persistence of biodiversity, and that the priority scores thereby assigned are relative. Each terrestrial KBA was assigned a total score for relative biological importance, based upon criteria of irreplaceability and vulnerability. Then, a priority score was assigned to each species-site combination based upon a combination of all three criteria, and each KBA site was assigned to the highest priority ranking it triggered.

For the purposes of this profile, only a small number of the highest priority freshwater sites were identified as KBAs through stakeholder feedback. Further work is needed to identify the full suite of freshwater KBAs in the Guinean Forests Hotspot. The results of the biological prioritization of terrestrial and freshwater KBAs in each hotspot country are given in Table 4.3.

Table 4.3 Terrestrial and Freshwater KBAs by Priority Score and Country

Priority Score	Benin	Cameroon	Côte d'Ivoire	Equatorial Guinea	Ghana	Guinea	Liberia	Nigeria	São Tomé & Príncipe	Sierra Leone	Togo	Total Number of KBAs
Terrestrial KBAs												
1	0	12	0	2	0	1	1	0	3	2	0	21
2	0	4	6	0	12	2	7	6	1	4	1	43
3	1	1	2	1	5	6	4	3	0	1	0	24
4	0	2	7	0	7	2	6	2	0	2	1	29
5	0	0	0	0	6	0	0	1	0	0	0	7
Total	1	19	15	3	30	11	18	12	4	9	2	124
Freshwater KBAs												
1	0	2	0	0	0	0	2	0	1	1	0	6
2	0	0	1	0	0	0	2	2	0	1	1	7
Total	0	2	1	0	0	0	4	2	1	2	1	13

Note: Some KBAs are transboundary and are counted for each of the countries into which they extend.

4.4 Corridor Outcomes

There exist multiple different definitions of a “conservation corridor” and thinking on corridors has somewhat shifted away from simply assessing priorities and applying a relatively rigid definition of a corridor as merely a mechanism to ensure connectivity for species. A more fluid and flexible approach is developing, as the corridor concept matures. There is a greater recognition of the potential to manage landscapes proactively for maintenance of ecological functions, adaptation to global change, and towards sustainable economies.

For the purposes of the ecosystem profile, the following set of selection criteria was employed: hydrological units; existing corridors; clusters of connected KBAs; and clusters of spatially proximate KBAs. Following these criteria, and in consultation with stakeholders through the consultation workshops, nine corridors, covering a total area of 413,183 km² (part of which includes the marine environment) were identified (Table 4.4; Figure 4.2). Four of these corridors are restricted to single countries, three are bi-national and two are tri-national. One hundred and five of the 137 KBAs in the hotspot are included within these corridors. All of them contain at least one Priority 1 or 2 KBA, with one corridor (Korupmba-Obachap) containing 22.

Figure 4.2 Conservation Corridors in the Guinean Forests Hotspot

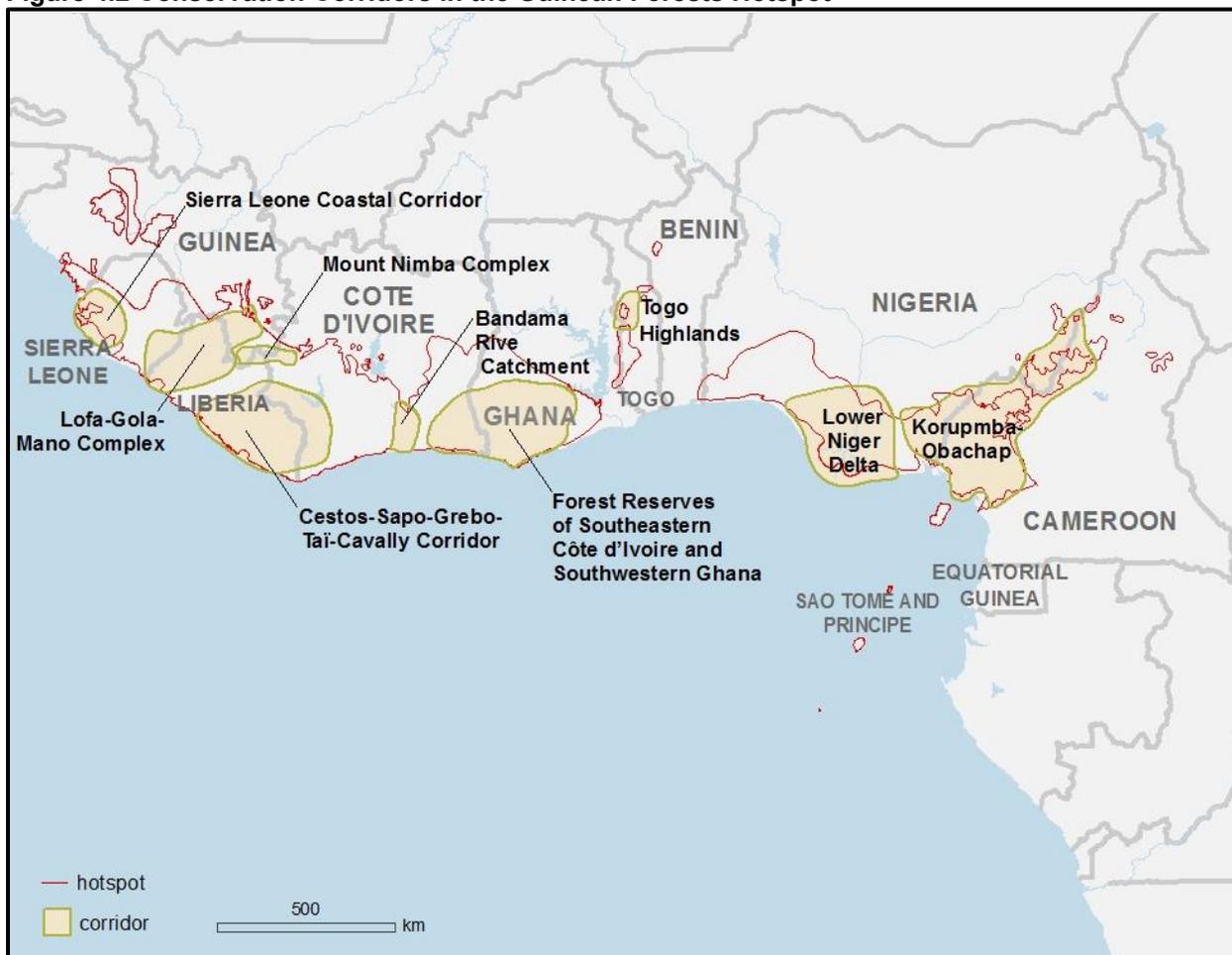


Table 4.4 Corridors Delineated within the Hotspot and Selection Criteria Met

No.	Corridor Name	Area (km ²)	Countries	Selection criteria met
1	Sierra Leone Coastal Corridor	17,096	Sierra Leone	4
2	Lofa-Gola-Mano Complex	47,545	Sierra Leone, Liberia, Guinea	1, 2, 3, 4
3	Mount Nimba Complex	6,829	Guinea, Côte d'Ivoire, Liberia	2,4
4	Cestos-Sapo-Grebo-Taï-Cavally Corridor	70,278	Liberia, Côte d'Ivoire	2,3,4
5	Bandama River Catchment	8,389	Côte d'Ivoire	1,3
6	Forest Reserves of Southeastern Côte d'Ivoire and Southwestern Ghana	72,579	Côte d'Ivoire, Ghana	4
7	Togo Highlands	6,049	Togo	4
8	Lower Niger Delta	65,743	Nigeria	3,4
9	Korupmba-Obachap	118,675	Cameroon, Nigeria	1,3,4
	Total	413,183		

5. SOCIOECONOMIC CONTEXT OF THE HOTSPOT

5.1 Introduction

The 11 countries of the Guinean Forests Hotspot are highly complex from both social and economic standpoints. The complex mix of cultures and indigenous groups found across the region has been further complicated by historic and ongoing migrations of people, including into, from and within the hotspot and its countries. Historical and contemporary periods of civil unrest and disease outbreaks have contributed to the remaining high levels of poverty in the region and acted as obstacles to development. Amidst all this, many of the region's industries, such as agriculture, mineral and oil extraction and forestry, among others, have continued to shape the landscapes. All of these factors have implications for biodiversity conservation, and can significantly influence the success of conservation efforts in the region.

5.2 Demographic and Social Trends

The hotspot countries have a combined population of 282.4 million. Because it is bounded by biogeographic and not political boundaries, demographic data specific to the hotspot are not available, although the total population was estimated at 84.7 million in 2004, indicating an average population density of 136 people per km². However, centers of population are distributed patchily across the hotspot. While many areas of the hotspot have between 10 and 100 people per km², population densities can reach much higher numbers in major cities.

In line with much of Africa, the hotspot countries showed some of the highest rates of population growth in the world in the early part of the 21st century. Twenty of the highest annual growth rates were in Africa and Liberia had the highest growth rate in the world in 2007 (4.8 percent). However, population growth in most hotspot countries appears to have slowed in recent years, and, although current census data are not available, most are now estimated to have rates of only a little above 2 percent per year. Exceptions to this are Benin, Equatorial Guinea and Liberia, which all have been estimated to have current growth rates of more than 2.5 percent. Nigeria is the most populous country in Africa (and the 7th most populous in the world in 2013) and is predicted to have a population exceeding 250 million by 2030. Nigeria also has one of the highest population densities in the hotspot (180 people per km²), exceeded only by São Tomé and Príncipe (191 people per km²), which has a population of only around 200,000 but a very small land area. The capital district of São Tomé and Príncipe has a population density exceeding 4,200 people per km², and this is growing fast, making it among the highest densities recorded in the whole hotspot.

5.3 Economic Trends

For Sub-Saharan Africa as a whole, economic growth was strong in 2013, with real Gross Domestic Product (GDP) growth of 4.7 percent; the second fastest growing region world-wide in 2013. It should be noted, however, that there is a large range of growth patterns in the hotspot countries, with some countries (e.g. Equatorial Guinea) showing very erratic patterns in GDP growth. This is largely due to fluctuations in key export prices (e.g. oil); the Ebola crisis has also

had an impact on economic growth in the region. There has been much foreign investment in oil, gas and mining exploration and development but service sectors, such as telecommunications, finance, retail and transport, are also expanding rapidly in many countries, as consumer incomes rise and domestic demand increases.

Large flows of Foreign Direct Investment (FDI) are making very substantial contributions to growth in hotspot countries (e.g. an estimated 0.9 percent of total growth in Nigeria between 2003 and 2009). Increasing amounts of this FDI comes from state-owned and private in China, which also provides preferential loans, training and joint business support to sectors including garments and textiles, telecommunications, pharmaceuticals, electronics and construction. Using agreements such as ‘infrastructure for oil’, China has become a major funding source for infrastructure developments in Africa. Such investments can be seen in throughout the hotspot, such as the construction of a new USD 200 million international airport in Sierra Leone by the China Railway International Company (to be constructed near Freetown, inside the hotspot) and the contracts won by Huawei to provide mobile phone service in Nigeria. There is no discernible information on which KBAs are impacted. It should be noted that between 2007 and 2013 only 4.2 percent of FDI in Africa originated from China, with the majority coming from the US, UK and UAE. India is also growing in its importance in terms of FDI in Africa as a whole.

Foreign investment in Sub-Saharan Africa also includes the acquisition of very large land areas, particularly for the development of agro-industries such as biofuel production. This is a concern where environmental and social standards and governance are weak, and the ecosystem benefits of existing intact and low intensity managed landscapes are not valued. Rural communities often have the most to lose and have little ability to be heard in negotiations or in the awarding of leases at national level. For example, British companies had acquired more than 3.2 million hectares of land for biofuels in Africa by 2011, including concessions in Ghana, Guinea and Liberia. Such developments can be seen as welcome investment in the agriculture sector or as a major threat, which may go against the interests of the local communities. In São Tomé and Príncipe, there have been two major recent concessions granted: 5,000 hectares to the French-Belgian company Socfinco (locally registered as Agripalma) to grow oil palm and 2,500 hectares to the French-Swiss company SATOCAO to produce cacao. Although seemingly small, these areas represent nearly 10 percent of the island of São Tomé, which is already crowded and heavily dependent on imported food.

6. POLICY CONTEXT OF THE HOTSPOT

6.1 Governance

The popular perception is that many West African countries suffer from high rates of corruption and poor governance. The 2014 Corruption Perception Index assigns all hotspot countries a scores between 48 (61st rank) and 25 (145th rank), with the maximum score of 100 indicating good governance. These results suggest that, in all hotspot countries with the possible exception of Ghana, corruption is a factor in citizen’s daily lives, and hence impacts all work across the region.

West Africa has experienced considerable political instability, authoritarian regimes, civil unrest and armed conflicts in the past 20 years. Security and economic conditions have improved in the past five years but the root causes that led to these conflicts persist today in some countries, due to high levels of unemployment, inequality and poverty, ethnic or sectarian tensions, and power struggles over land and the extraction of natural resources.

In some countries, the aftermath of war has reduced the ability of the state to enforce the rule of law and to place the environmental agenda alongside other immediate development concerns. In the case of Sierra Leone, the devastating civil war (1991–2002), which began as an overspill from an earlier war in Liberia, led to a series of direct and indirect impacts on conservation efforts in the country. For instance, rebel groups destroyed or damaged park facilities as well as urban, water and agricultural infrastructure in rural areas and towns in the east of the country. Cross-border poaching increased between Sierra Leone, Liberia and Guinea, and there was a mass movement of refugees to Guinea, causing significant deforestation. Destruction of public records led to land grabbing and lack of clarity regarding property rights. Institutions in charge of environmental management collapsed, and low levels of transparency and accountability led to illegal logging concessions inside protected areas. Although there has been a marked progress in security conditions, environmental and natural resource governance remained at a critical stage for a number of years, although improving in recent years.

6.2 National Legislation

Across the hotspot, the legislation in place to support conservation activities is variable. Most countries have laws in place around protected areas, forestry, environmental impact assessments, and poverty reduction. Some countries also have laws and regulations governing land-use planning and community conservation, transboundary conservation, sustainable financing species conservation, and decentralization of decision-making. Targeted CSO advocacy programs might be used to help countries develop relevant laws and regulations, where these are not already in place.

Protected areas constitute an essential tool, not only to protect biodiversity, but also the ecosystem services they provide to the communities. However, biodiversity conservation through protected areas in West Africa presents a particularly challenging task, given the high levels of poverty and often low institutional capacity of the countries. West Africa includes some of the least developed and most populated countries in the world. Protected area management institutions face limitations in capacity and motivation, often severe. Moreover, three quarter of the poorest people in the region are found in rural areas, where they depend on agriculture and related activities for their livelihoods.

The constitutions of all hotspot countries provide legislation relevant to the creation and management of a framework of protected areas, and all hotspot countries have made significant progress towards creating a national PA network. About 108,104 km², or 17.4 percent, of the remaining closed forest in the hotspot is within protected areas of various types (including national parks, wildlife sanctuaries and a few private and community-managed reserves). However, when the area under more strict levels of protection for biodiversity conservation purposes (IUCN protected area Categories I to IV) is calculated, the protected area coverage falls

to 18,800 km² (three percent of the forest area). Much of the remainder of the protected area network in the hotspot is made up of a network of forest reserves, some of which are also managed for timber production.

Challenges remain within the hotspot to develop a comprehensive protected area network, and include the prevailing customary land ownership, resource tenure, limited capacity and conflicts over alternative land uses, such as logging and mining. These mean that the creation of any new protected area is a long, complicated and costly process, especially if people are living in the area.

7. CIVIL SOCIETY CONTEXT IN THE GUINEAN FORESTS HOTSPOT

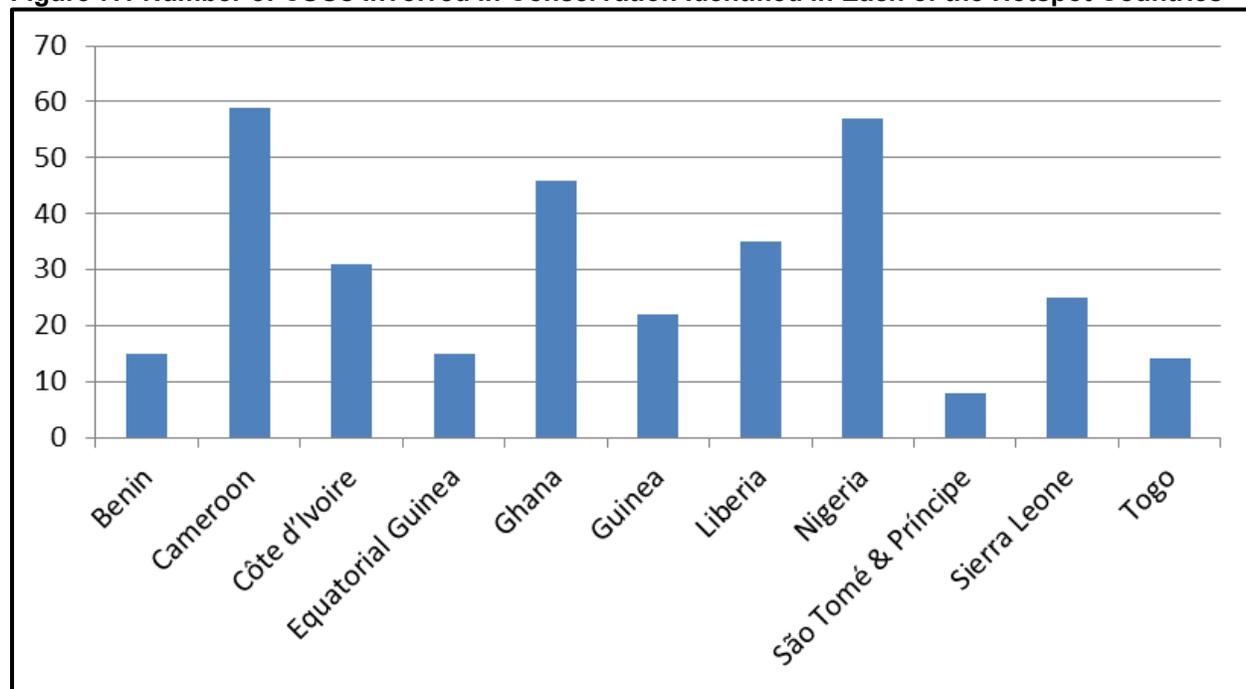
7.1 General Overview

As is the case in almost all parts of Africa, CSOs in the Guinean Forests Hotspot are broadly those institutions and organizations operating at the interface between the government and private sector, and those who tackle issues at the level of families and individuals (e.g. land ownership matters). These include NGOs, private voluntary organizations, community based organizations (CBOs), trade unions, gender groups, cultural and religious groups, private companies, and research institutions. Civil society groups display differences in their relative degrees of formality, autonomy and power relationship with other stakeholder groups. A breakdown of the different categories of civil society groups is provided in Section 7.2.

Although the organizations consulted during this profiling process varied in terms of their composition, vision and core values, most shared an ideology of promoting the conservation and sustainable management of West Africa's biodiversity. During the consultation process, key CSOs were identified in each of the hotspot countries. A number of the CSOs consulted showed significant potential for the implementation of conservation strategies in the hotspot. Figure 7.1 shows the number of CSOs involved in the conservation or sustainable management of biodiversity within the hotspot, including national and international NGOs; community-based organizations; universities and research centers. Cameroon has the largest number with 59, followed closely by Nigeria with 57 and Ghana with 46. The country with the fewest CSOs involved in conservation or sustainable management of biodiversity is São Tomé and Príncipe, with eight.

Among the CSOs identified, the majority are registered in one of the hotspot countries, with a local board or other governance structure, and activities at the grassroots, subnational and/or national levels. Such CSOs are considered to be local organizations. A number of these groups have relevant experience working in other countries or in partnership with international organizations, although very few local CSOs with an explicit regional focus were identified during the stakeholder consultation process. A number of international CSOs are also active in the conservation or sustainable management of biodiversity in the hotspot. Their involvement is often through partnerships with local CSOs (e.g. BirdLife International and its partners), while some international CSOs have established country programs or representative offices in hotspot countries.

Figure 7.1 Number of CSOs Involved in Conservation Identified in Each of the Hotspot Countries



Source: Consultation workshops and remote consultations between December 2013 and September 2015.

The role played by civil society in the protection and sustainable management of natural resources in the hotspot countries is generally still limited, although they have significant impacts in some cases. The hotspot countries typically face many political and socioeconomic problems which have ramifications for the conservation and management of natural resources. Examples include the recent wars in Côte d'Ivoire, Liberia and Sierra Leone, and the recent outbreak of the Ebola virus in Guinea, Liberia, Nigeria and Sierra Leone. CSOs working on public policy, advocacy or projects in controversial areas face particular challenges. Notwithstanding this sometimes complex working environment, CSOs continue to play a key role in supporting and complementing government policies and programs, especially at the local and regional levels where decentralization has expanded government mandates but has often not increased capacities.

7.2 Capacity Needs

Representatives from the 11 countries that were consulted at the final consultation workshops in Monrovia and Limbé were asked to identify major barriers to effective civil society performance and to suggest how they could be best supported to overcome them (Table 7.1).

Major barriers for CSOs in eight countries are lack of adequate technical and institutional capacity, as well as the difficulty in accessing fundings, including from their respective government. More specifically, when looking at their capacities, CSOs identified gaps at two levels: individual skills (such as leadership and financial management); and institutional skills (such as strategic planning, proposal development and reporting). The lack of funding options for CSOs (see Section 7.5) goes hand in hand with constraining timeframes. To obtain results in terms of sensitization, community ownership or development of alternative livelihoods often

takes longer than the typical project cycles of international donors. This, in turn, creates fatigue and disenchantment among communities that are left on their own between projects. Limited and unstable funding was also perceived as a contributing factor to higher staff turnover. Trained staff members with the capacities to raise and manage funds too often leave their institutions for more stable employment and higher salaries within bigger institutions, the private sector and/or the government, thereby creating a vicious circle.

Table 7.1 Barriers to Effective Civil Society Performance in the Hotspot Countries and Priorities for Support

		Benin	Cameroon	Côte d'Ivoire	Equatorial Guinea	Ghana	Guinea	Liberia	Nigeria	São Tomé & Príncipe	Sierra Leone	Togo	Total
Barriers to performance due to inadequate:	CSOs technical and institutional capacities	x	x	x	x	x				x	x	x	8
	Access to public and other long term funding	x	x	x	x		x	x		x	x		8
	Project timeframe and design to obtain community ownership	x						x		x	x		4
	Process for establishing / recognition CSOs		x		x				x				3
	Communication / partnerships between CSOs			x			x			x			3
	Participation in policy formulation and implementation		x										1
Support needed with:	Building CSOs' technical and institutional capacities	x	x	x	x	x	x		x			x	8
	Building partnerships among CSOs	x	x	x		x		x		x	x		7
	Establishing transparent performance monitoring systems by CSOs		x	x		x	x	x		x			6
	Simplifying establishment/ recognition processes for CSOs		x		x				x	x		x	5
	Creating sustainable funding mechanisms		x	x			x	x			x		5
	Demonstrating CSOs contributions to Governments		x		x					x	x		4

Source: Final consultation workshops, August and September 2015.

Fostering partnerships among CSOs, encouraging South-South exchanges between them, and promoting mentorship by international NGOs are all perceived as positive pathways for civil society development along with recurrent training based on standardized modules. Simplification of the public funding process would enhance CSOs access to government funding, should CSOs better align their funding needs and strategies with priorities of government as well as bilateral and multilateral donors. CSOs feel the need to put in place rigorous and more transparent performance monitoring systems including regular audits. This is another theme for which CSOs consulted requested dedicated training and support. Along with a dire need for the creation of sustainable funding mechanisms, such as Conservation Trust Funds, CSO representatives

highlighted the necessity of engaging in policy formulation and implementation processes, to demonstrate to government the important contribution that CSOs can make with their unique perspectives. This will require greater alignment of CSOs' agendas with government priorities and improved dissemination of information produced by CSOs via local-language media.

7.3 Funding Context

Funding for CSOs has long been problematic in the hotspot, not least because there is often little or no internally generated funding from the countries themselves. Most of the hotspot's CSOs rely solely on funds from developed countries for the implementation of their activities. Even then, few have been successful in supporting programs with funds from international donors over a sustained period of time, due in part to a typically low capacity for fundraising. A number have, however, developed partnerships with international NGOs, from whom they gain technical and fundraising support, and who can help them to access such funding sources that may be available locally (e.g. discretionary embassy funds and some private companies).

7.4 Conclusion

Civil society serves as a uniting force within the hotspot and should work towards making positive, long-term impacts on the region's development. Civil society can be the voice of the marginalized population as a whole, and serves as a critical link between society and the state. Civil society also plays an educating and supervisory role and facilitates community outreach and capacity-building measures.

Civil society has struggled to define its relationship with the state in many hotspot countries, with some governments fearing that civil society will usurp state responsibilities. Consequently, governments have sought to maintain control over the activities of CSOs, to a greater or lesser extent. Stakeholders consulted for this profile expressed frustration that governments often exclude civil society from policy-making processes. Civil society representatives believe they can play a role that complements state efforts to rebuild society and enhance sustainable development, working in remote locations and using innovative methods that bring together actors from different sectors.

There are significant variations among the national CSOs in the hotspot, both in terms of their technical competence and their levels of financial resources available for their conservation activities. The international CSOs involved in the hotspot are typically better equipped both technically and financially, and they often perform better by working with national CSOs. Financial sustainability (or a lack thereof) was a recurring theme throughout the consultation process.

The existence of regional and national partnerships and networks in the hotspot countries was viewed as positive, as it represents a key strategy to overcome the technical and financial constraints facing CSOs. Maintaining partnerships and networks, and thus facilitating experience-sharing, will help contribute towards building the capacity of organizations to influence national policies and regulatory frameworks. There is a need to promote greater cooperation and coordination between international CSOs, national CSOs, donors, and the

governments of the hotspot countries. This will lead to the development of additional networks, and can facilitate the long term sustainability of CSOs in the hotspot.

Strengthening the capacity of the hotspot's CSOs will be an important step towards increasing their overall conservation impact. Some CSOs are unable to influence public policies due to the lack of enabling regulatory frameworks. CSOs need to have the capacity to hold government and the private sector accountable, and to ensure that local communities in their respective countries are aware of their rights and responsibilities. Many CSOs have close links to local communities and are well placed to contribute to the strengthening of community capacities, and to enable the people to carry out collective actions for the betterment of the environment.

CSOs within the hotspot face several structural, logistical and political obstacles. Structurally, civil society continues to lack unity and clarification of purpose. Many disparate CSOs represent small groups focused on specific issues, rather than on the interests of society in general.

CSOs in the hotspot need to improve on their approaches and means of communication and information sharing. They also need to improve levels of cooperation between each other, and to establish mechanisms that will allow for self-monitoring and regulation. The capacities of CSOs in the hotspot countries (and especially in Benin, Côte d'Ivoire, Cameroon, Equatorial Guinea, Guinea, and São Tomé and Príncipe) will need to be improved so as to effectively take up a watchdog role. They will also need to build their social capital and increase the trust of the local communities in their respective countries.

Finally, a gap in the understanding of how CSOs can effectively engage with the private sector is apparent, and it will be important to support the CSOs in the hotspot with a view to increasing their capacities in terms of interest-based negotiation skills, which will ultimately enable them to engage positively with both governments and the private sector.

8. THREATS TO BIODIVERSITY IN THE HOTSPOT

West African rainforests have been greatly modified by people: a conservative estimate is that around 10 million hectares of forest were lost in the 20th century. Agricultural expansion has been the most significant cause of deforestation and 80 percent of original Guinean Forests can now be considered as an agriculture-forest mosaic. Today, forests have been, and continue to be, cleared or degraded to allow for expanding areas of agriculture, including for commercial crops, as well as urban expansion and industry, roads and infrastructure. A number of these threats emerged as priorities through the analysis, and are examined in greater detail below.

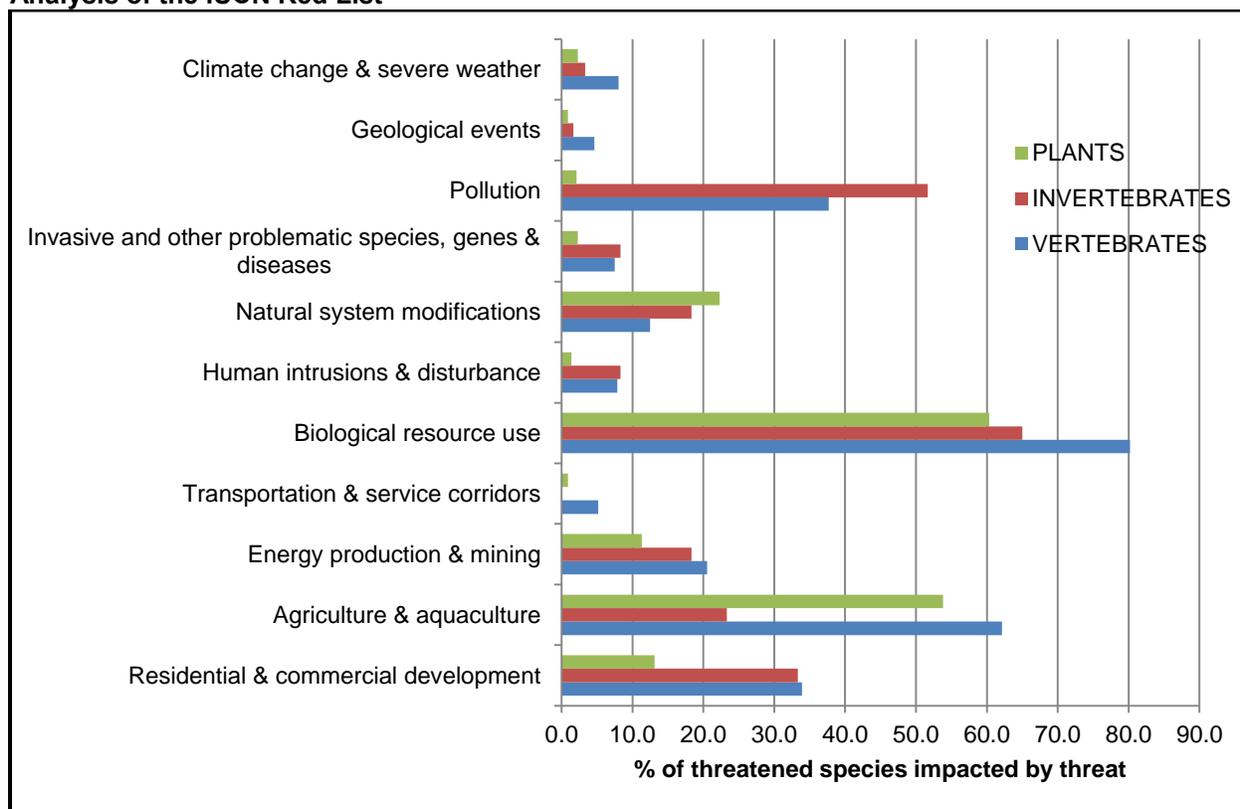
In terms of a forest cover baseline, recent work on understanding tree cover loss and gain for 2000-2012, reveals both the status and trends for the hotspot. Table 8.1 shows tree cover loss and gain in the hotspot and surrounding areas over 2000-2012. Tree cover loss is evident throughout most parts of the hotspot (with the exception of São Tomé and Príncipe) but is especially prevalent in southern Côte d'Ivoire and Ghana, as well as several parts of Sierra Leone, Nigeria and Cameroon. The lack of tree cover loss in São Tomé and Príncipe is most likely due to the small size of the country relative the scale of the analysis, as significant losses of forest cover and increases in forest degradation have been reported.

Table 8.1 Loss, Gain and Net Loss of Tree Cover between 2000 and 2012 in the Hotspot Countries

Country	Rank (out of 180 Countries)	Total Loss (km ²)	Total Gain (km ²)	Net Loss (km ²)
Benin	60	3,307	69	3,238
Cameroon	48	4,816	651	4,165
Côte d'Ivoire	22	14,889	2,298	12,591
Equatorial Guinea	107	439	56	383
Ghana	43	5,406	1,345	4,061
Guinea	55	3,933	296	3,637
Liberia	54	3,955	1,084	2,871
Nigeria	31	10,239	603	9,636
São Tomé and Príncipe	Unknown	Unknown	Unknown	Unknown
Sierra Leone	72	1,967	451	1,516
Togo	95	768	24	744

The classification of threats in this study follows the IUCN standardized threat categories, which are used for the Red List to maintain consistency among countries and to allow regional analysis. Threats to species, sites and corridors in the hotspot have then been ranked in two ways. Figure 8.1 shows the ranking according to threats to Red Listed species (marine, freshwater and terrestrial) in the hotspot, based on the IUCN threat classification.

Figure 8.1 Major Threats to Species Thought to be Present in the Hotspot, According to an Analysis of the IUCN Red List



Source: IUCN Red List version 2013.

Note: The chart is based on an analysis of 4,666 assessed species in all categories (i.e., Extinct to Data Deficient), in the terrestrial, marine and freshwater realms.

An alternative ranking, based on expert opinion, was conducted through the stakeholder consultations, again using the IUCN threat categories (Table 8.2). In both approaches, biological resource use, agriculture and aquaculture, and pollution emerge as key threats. Workshop participants also considered energy production and mining, transportation and service corridors, human intrusions and disturbance, climate change and severe weather, and residential and commercial development to be among the main threats to biodiversity in the hotspot. Recognising that the IUCN threat classification provides a global framework for analyzing threats under Red List criteria, rather than a locally specific threat framework, participants were also asked to list any additional threats affecting their part of the hotspot.

Table 8.2 Prioritized Threats in the Guinean Forests Hotspot

IUCN Threat Category	Threat Ranking by Workshop Participants from Country											Rank Totals	Hotspot Ranking
	Benin	Cameroon	Equatorial Guinea	Guinea	Ghana	Côte d'Ivoire	Liberia	Nigeria	São Tomé & Príncipe	Sierra Leone	Togo		
Biological resource use	1	1	1	1	1	1	2	1	1	-	1	11	1
Agriculture and aquaculture	2	1	2	1	1	1	1	1	1	-	1	12	2
Energy production and mining	2	2	3	1	1	1	1	1	2	-	3	17	3=
Human intrusions and disturbance	1	3	3	3	1	1	1	1	2	-	1	17	3=
Climate change and severe weather	2	3	2	2	1	2	1	2	2	-	2	19	5
Pollution	1	2	3	3	1	2	2	1	3	-	2	20	6=
Natural system modifications (e.g. dams, fires)	2	3	3	1	1	2	1	3	2	-	2	20	6=
Transportation and service corridors	3	3	1	2	2	2	1	2	3	-	2	21	8
Residential and commercial development	3	3	1	2	1	3	2	1	3	-	3	22	9=
Invasive and other problematic species and genes	2	3	3	2	1	3	3	2	1	-	2	22	9=
Geological events	3	3	3	3	3	3	3	3	3	-	2	29	11
Other threats (outside of IUCN categories)													
Insecurity and conflict in the Delta								1					n/a
Enclaves								1					n/a
Livestock grazing /pastoralism								1			2		n/a
Erosion (montane and coastal)											2		n/a

Notes: This table summarizes the ranking of threats to biodiversity based on the IUCN categories during the national consultation workshops, according to the ranking: 1 = severe; 2 = moderate; 3 = minor/not relevant.

9. CLIMATE CHANGE

9.1 Projected Future Climate Change

Africa is particularly vulnerable to the impacts of climate change, due to widespread poverty, recurrent droughts, inequitable land distribution and rain-dependent agriculture. Concerns include impacts on both natural systems (e.g. biodiversity, forestry and coastal ecology) and human livelihoods (e.g. access to water and food resources, health and economies). In preparation for climate change, each hotspot country has developed national action plans, strategies and/or communications describing the climate change impacts about which they are most concerned. Agricultural and livestock impacts, particularly on farmers, were listed as a vulnerability by all countries except São Tomé and Príncipe. Impacts on mangroves and coastal zones were the next most commonly listed concern, and impacts of climate change on water resources and catchments, fisheries, and drought or soil drying listed third most often, each by six countries. Impacts on urban areas, human migration, national security and vegetation loss were listed least often, each by only a single country. These findings are valuable for understanding national governments' concerns about climate change and for identifying areas where further vulnerability assessment and information sharing might be necessary.

9.2 Projected Impacts on Biodiversity

Changes in local temperature and precipitation have the potential to directly affect Africa's rainforests and have led to large ecological shifts on millennial timescales. These changes are likely to be mediated and affected by changing fire regimes, as well as by increasing numbers of invasive species and new pathogens and diseases. To date, West Africa has been relatively poorly covered by assessments of climate change vulnerability of biodiversity, although recent initiatives such as PARCC have made sound progress towards addressing this. Since most studies focus on one or a few taxonomic groups, their results are discussed by group in the following sections. It should be noted, however, that tropical ectotherms, such as amphibians, reptiles, fishes and invertebrates, are likely to face disproportionately large impacts from even small shifts in temperature because they are currently living very close to their optimal temperature.

Despite increasing recognition that human responses to climate change will result in impacts on biodiversity additional to those occurring through more 'direct' mechanisms, most assessments, including almost all of those described above, fail to include them. Although empirical evidence remains sparse to date, perhaps the most commonly anticipated impacts in West Africa relate to climate driven changes in agricultural practices and productivity. Decreases in agricultural productivity are likely to necessitate increased dependence on wild natural resources (e.g. bushmeat, edible wild plants), which could place additional pressure on wild species and, in certain cases, lead to an increase in (often illegal) resource harvesting from protected areas.

Similarly, any reduction in precipitation, whether annual or seasonal, could necessitate increased water abstraction from new, previously unused, natural sources, thereby impacting biodiversity and freshwater species in particular. Unsustainable water abstraction has already been shown to be negatively impacting biodiversity in the region. Similarly, dams, sea walls and other human

structures designed to alter water courses, respond to climate change impacts or generate electricity can affect riverine wildlife communities as well as downstream wetlands and marine ecosystems. Other impacts to biodiversity are likely to occur as a result of climate change-driven human migration to new areas, whereupon increased human presence can exacerbate many of the threats described in Chapter 8 of this profile.

As species move in response to shifting climates, the ability of existing protected area networks to meet their objectives may change, including those objectives related to conservation of target species and areas of greatest species richness. New areas may gain importance in a landscape due to their role as corridors for species movements or for their ability to provide refuge for species through their high topographic (and hence microclimatic) heterogeneity or because they contain important microhabitats (e.g. boulders, lakes, caves, canyons, etc.). Others may cease to be important, as target species move away or go extinct, they become degraded or inundated by sea water or their use by humans changes. As a result, protected area networks need to be re-evaluated for their conservation effectiveness in light of climate change.

9.3 The Role of Civil Society

The enormous challenge presented by climate change in the immediate and longer-term is likely to leave government resources and capacity overextended. Civil society has an essential role in supporting governments' work in the hotspot, and in filling the inevitable gaps in government strategies and outreach. Given the broad scope and rapid development of emerging climate change related issues, CSOs, particularly those operating at grassroots and subnational levels, are often under-resourced and face critical capacity constraints. Their current and potential roles in capacity building, policy development and roll-out and active management are often underplayed. In particular, interorganization coordination, information exchange and capacity building are clear and important priorities for international donor support to civil society in the region.

CEPF is well placed to advance the national policy response to climate change by strengthening the capacity of CSOs to engage in formulation of public policy. In this way, CSOs can help governments develop national frameworks, policies and regulations for climate change mitigation and adaptation, such that they meet national needs for development, adaptation and environmental sustainability, as well as commitments to international agreements, and, in particular, promote positive synergies between climate change mitigation, adaptation and biodiversity conservation.

Climate change funding provides opportunities for sustaining conservation efforts for site and corridor outcomes. CEPF can support CSOs to leverage international funding for climate change mitigation and adaptation, including from the Climate Adaptation Fund, REDD+ readiness support programmes, and bilateral funding for REDD+, in support of conservation outcomes in the hotspot. This may involve working with investors from both within and outside the region, as well as forest communities and local governments, to increase private sector investment in projects through the voluntary carbon markets that seek environmental and social benefits, for instance through application of the Climate, Communities and Biodiversity (CCB) standards.

10. ASSESSMENT OF CURRENT CONSERVATION INVESTMENT

10.1 Introduction

The ecosystem profile includes an assessment of current conservation investment across the hotspot for the period 2009 to 2014. This includes funding for direct biodiversity conservation (species and ecosystem) initiatives, as well as for broader thematic investment, which, on investigation, appear to have some benefits or components relating to biodiversity conservation in the hotspot. Examples of the latter include initiatives addressing climate change, protected areas, poverty reduction/livelihoods, ecosystem services, and corridor and landscape management approaches. A total of 158 national and 24 regional (multiple country and trans-boundary) ‘projects’ (182 in total) were identified across the hotspot, representing a total conservation investment of USD 266 million over the five-year period to 2014. This total represents less than one percent of total official development assistance (ODA) to the 11 hotspot countries (of USD 28,441 million) for the five-year period up to 2013. These 182 investments were analyzed to investigate levels of funding by country and by type of donor and project partner and to look at gaps, specifically in relation to priority KBAs.

A study of the policies and programs of major bilateral and multi-lateral donors in relation to funding for forests and forest-dependent communities found that the element of ODA going from European donors to forest-related and biodiversity projects increased dramatically between 2002 and 2012 (totals for the period were USD 2.55 billion and USD 1.57 billion, respectively). Given that European donors invest heavily in African countries, it can be inferred that this trend was reflected in the hotspot countries. However, the report underlines the difficulty of separating out relevant information even for individual countries (let alone KBAs or areas within the hotspot boundary) and the significance (in terms of funding) of large thematic programs. For example, the Norwegian International Climate and Forest Initiative (NICFI), which alone accounted for USD 287 million in 2012, and made up for more than half of all donors’ disbursements. The report also underlines the need for, and cost implications of, more detailed research, if specific information is required by country, site or theme. The trends identified in the report (of relevance to the hotspot) are discussed further under Section 10.5.1.

10.2 Major Sources of Conservation Investment in the Hotspot

Sources of conservation investment were divided into the following six categories: bilateral; multilateral; national government; NGOs; foundations and trusts; and private sector. Grants from bilateral and multilateral organizations are by far the largest contributor to conservation funding in the hotspot, accounting for two-thirds of the total (Figure 10.1). The different types of donor and the contributions of individual donors to conservation in the hotspot are considered in more detail in Section 10.4.

10.3 Distribution of Conservation Investment by Country

The breakdown of conservation investment between 2009-2014 by hotspot country is shown in Figure 10.2.

Figure 10.1 Conservation Investment in the Guinean Forests between 2009 and 2014 by Source

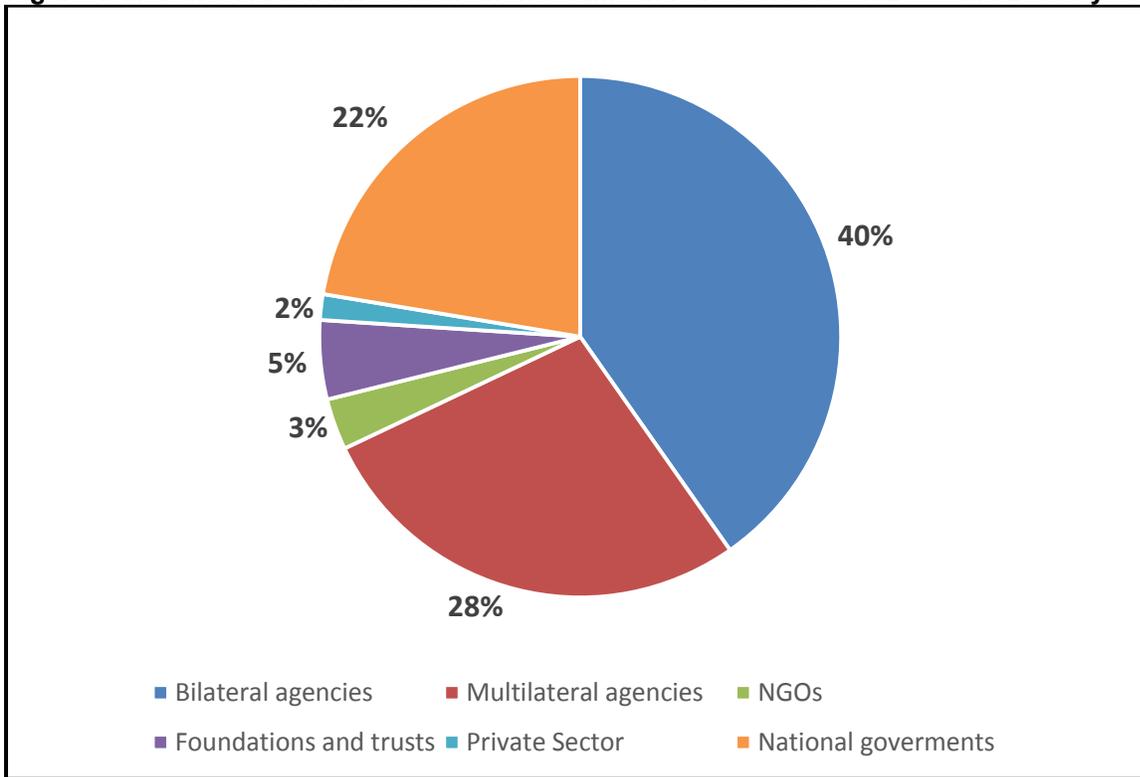
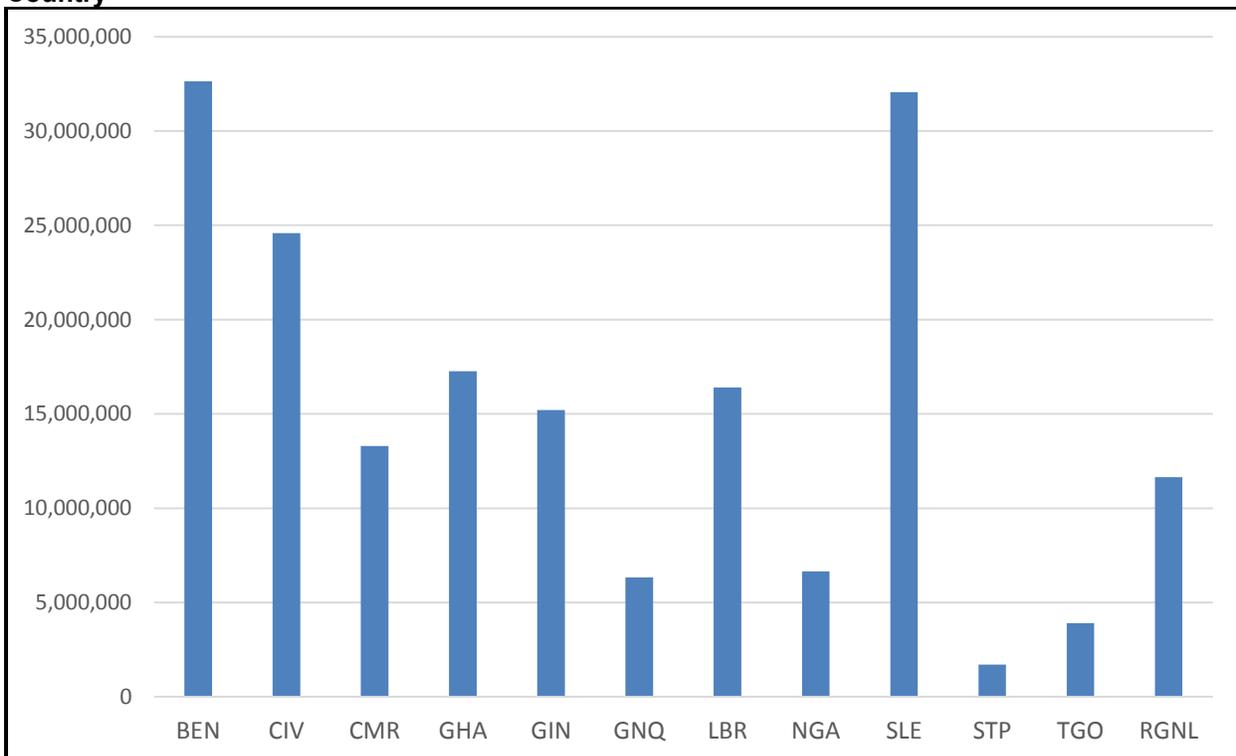


Figure 10.2 Conservation Investment (in USD) in the Guinean Forests between 2009 and 2014 by Country



Note: 'RGNL' (regional) denotes investments covering two or more countries.

The apparently high levels of funding (relative to the area of the hotspot in the country) in Benin (in particular) and also Sierra Leone are a consequence of including a few very large investments covering large areas (water basins and estuarine/coastal areas). These appeared to be of relevance to the conservation of KBAs in the hotspot and were, therefore, included. However, it was not possible to attribute the specific conservation relevance of such investments more accurately in the absence of detailed information on the locations and impacts of specific project activities. Hence, the inclusion of these projects may give a skewed impression of the relative levels of actual biodiversity conservation investment in the hotspot in these countries. Excluding these two countries, Côte d'Ivoire, Ghana and Liberia appear to receive the greatest total level of conservation investment, while Equatorial Guinea, São Tomé and Príncipe appear to receive the least.

10.4 Trends and Gaps in Investment in the Hotspot

Multilateral funding is the largest component overall and the GEF is the largest investor in conservation in the hotspot. However, there is a trend towards more complex multi-country and multi-donor programs, often with GEF, EU or FFEM funding combined with bilateral development aid funding and other co-funding, making it hard to distinguish and separate donor contributions. Although GEF agencies (for example UNDP) have policies requiring the engagement of civil society in projects this does not make the funding easily accessible, especially for smaller NGOs or CBOs with limited capacity to work in partnership with large agencies and government structures. Stakeholders reported that even the GEF Small Grants Program, which was originally intended as a civil society funding mechanism, had been captured by government in some countries (Ghana, for example) so that it is much harder, even for NGOs with strong track records in effective biodiversity conservation and work with communities, to access the funding. National and local NGOs and CBOs have a constant struggle to find funds which cover their core running costs and support their own priorities (rather than taking funds for project work that is not in their program in order to keep their finances afloat). It is particularly difficult to retain good, committed staff and build capacity in CSOs in countries in the hotspot which have expanding economies (e.g. Ghana, Nigeria) and where there is competition for good staff from the private sector (e.g. mining, energy, commercial agriculture) and also UN and other development agencies (and government), which can frequently offer far higher salaries.

Gaps in investment in conservation in the hotspot include both geographical gaps (priority KBAs with no or insufficient funding) and thematic gaps (for example lack of capacity to implement conservation effectively). An analysis of the distribution of conservation investment among KBAs (based upon data collated from donor and project websites, verified through the stakeholder consultation process) showed that four-fifths of the KBAs in the hotspot received no known external funding over the last five years. Most of the KBAs to receive external funding received between one and four grants over the period, while only three KBAs received five or more grants, comprising Parc National de Taï et Réserve de Faune du N'Zo (CIV11), Sapo National Park (LBR14) and Gola Forest Reserve (SLE1).

The main 'thematic gap' revealed through the consultation process is the lack of secure (long-term) funding and the difficulties of obtaining sufficient funding for effective conservation, especially for large and complex projects (for example in Equatorial Guinea and Bioko the

difficulty of obtaining secure, “sustainable” funding or follow-on funds for KBA initiatives at the end of the funding cycle – even for management planning for nationally protected areas). Similarly in Sierra Leone, Yawri Bay (SLE9) is another KBA listed in the consultation as newly established (or in the final stages of establishment) but with no funding to implement any conservation management.

Transboundary conservation program implementation also represents a gap in conservation investment. Trans-boundary projects require considerable investment in terms of time and money to negotiate and agree acceptable cross-border solutions and to ensure real integration across national boundaries and between different local communities. There are almost no funded initiatives in the hotspot with a sufficient long-term perspective and the funding to ensure the achievement of successful, durable trans-boundary initiatives.

11. CEPF’S NICHE FOR INVESTMENT

The countries of the Guinean Forests of West Africa Hotspot are experiencing unprecedented economic growth, based on extractive industries, agribusiness and infrastructure expansion, which brings the promise of development to millions of people, but also come with potentially large environmental and social costs. At the same time, the benefits of development are not shared equitably across the hotspot, with large sections of the rural population practicing subsistence agriculture and depending heavily on extractive uses of natural resources. Improving the conservation prospects for species and ecosystems in the hotspot will require strategies that achieve a balance between economic development and biodiversity conservation objectives, while ensuring that rural people, especially women, can benefit from sustainable and equitable development. In this context, and to meaningfully address identified gaps in current conservation investment, CEPF will promote the conservation of globally important biodiversity at species, site and corridor scales, while promoting development models that are environmentally sustainable, socially equitable, and well aligned with national conservation priorities.

To do this, the CEPF investment niche is **to provide CSOs at grassroots, national and international levels with the tools, capacity and resources to establish and sustain multi-stakeholder partnerships that demonstrate models for sustainable, pro-poor growth and achieve priority conservation outcomes in the Guinean Forests of West Africa Hotspot.** Local CSOs are very knowledgeable because they understand the local and national context of biodiversity conservation and sustainable development, as well as the needs and aspirations of local people. However, they have shown low capacity for fundraising, sustainable financing and private sector engagement. Involving international CSOs in the delivery of the program, where they demonstrate clear added value, will facilitate capacity building of local CSOs, to ensure policy reform and implementation of conservation actions on the ground. CEPF, through its grantmaking and RIT, will also catalyze and support multi-stakeholder partnerships, among governmental agencies, private sector companies, CSOs and local communities and their associations, while at the same time establishing long-term funding mechanisms for conservation, especially ones that take advantage of growing markets for biodiversity and ecosystem services.

Based upon the situational analysis presented in Chapters 3 to 10, and informed by the results of the stakeholder consultations, the CEPF investment niche was defined in three dimensions. Geographic priorities for investment at the site scale were defined as a set of ‘priority sites’, selecting from among the list of KBAs identified in the hotspot. Geographic priorities for investment at the landscape scale were defined as a set of ‘conservation corridors’, providing for conservation actions related to development and land-use planning and policy. Thematic priorities for investment were defined as a set of investment priorities grouped under broad strategic directions by identifying fields of work that: contribute to the conservation of globally important biodiversity; fill gaps in existing conservation investment; address high priority threats; focus where civil society can make the most effective contribution to conservation; and, where appropriate, deliver human well-being benefits. In order not to disperse investment too thinly, and to maximize the chances of achieving a transformational impact on particular issues, CEPF’s investments will specifically prioritize three development sectors with large biodiversity footprints, namely agriculture, forestry, and mining. The investment strategy is intended to guide investments by other funders, either through the mechanisms put in place by CEPF or in parallel. These other investments may align with those of CEPF by focusing on a different set of geographic priorities, responding to the impacts of other sectors or supporting complementary actions for the same geographic and thematic priorities.

The theory of change underlying the CEPF niche is that local CSOs have untapped potential that, if released, can contribute to reconciling biodiversity conservation with development agendas at different scales and improving natural resources governance in the Guinean Forests Hotspot. To realize the potential of civil society as a force for sustainable, pro-poor growth in the hotspot, CEPF investment will need to be delivered in a strategic manner, with grant resources linked to capacity building and partnership building across sectors, to leverage complementary capabilities, strengthen networks across borders, and facilitate transboundary conservation and exchange of information and lessons learned. At the same time, conservation efforts must be relevant to local communities and incorporate meaningful benefit sharing mechanisms that ensure the participation of vulnerable groups, especially Indigenous People and women. Without responding to the legitimate development needs and aspirations of local communities, it is unlikely that conservation initiatives will reach a level of social acceptance that ensures their long-term sustainability. As well as ensuring relevance to local communities and incorporating capacity building for civil society actors, CEPF investments must also ensure ecological connectivity at the landscape scale, in order to maintain and restore ecosystem function, maintain viable species populations, buffer sites against the effects of fragmentation and isolation, and enhance resilience to the impacts of climate change. In other words, investments in species-focused and site-based conservation should not be made in isolation but with consideration to their contributions to connectivity at the corridor-scale.

Focusing on connectivity, community and capacity will require the development and consolidation of robust partnerships, including not only civil society but also other partners like government, private sector and the donor community. There will be a need to explore opportunities to leverage additional funding and/or align with other initiatives from the very beginning of the investment phase, to complement the resources CEPF is able to marshal and ensure sustainability beyond the end of CEPF funding to the hotspot. There will also be a need to make sure that CEPF’s limited resources are made effective use of, including by monitoring the

effectiveness of different approaches, facilitating experience exchange among grantees, and promoting replication of good practice.

In these regards, the role of the Regional Implementation Team will be of critical importance, in building a portfolio of grants whose overall impact is greater than the sum of its parts, and it will need to be resourced accordingly. In addition, to maximize opportunities to engage local CSOs as grantees, and to take account of the high costs of operating at remote sites with difficult access, it is proposed that the maximum small grant size for the portfolio be set at USD 50,000 per grant (which may be one or more years in duration).

12. CEPF INVESTMENT STRATEGY

12.1 Geographic Priorities

The results and feedback from the stakeholder consultation process (including both workshops and remote consultations) and recommendations from the preceding chapters were synthesized to formulate a CEPF investment strategy for the next five years in the Guinean Forests Hotspot. The information thus analyzed reveals that, although most stakeholders are in dire need of funds to sustain their conservation efforts, there is limited funding available from donors for this purpose, and that those resources that are available tend to be difficult for local CSOs to access. Also, even where funds are available and accessible, donors sometimes find it difficult to decide where and how to invest effectively in conservation, because of a lack of adequate empirical data on the needs and priorities of target groups and the values of individual sites. This lack of information has become a barrier to cost-effective and results-oriented investments, especially for donors working under tight timeframes and other constraints. This leads to the conclusion that sound investment decisions require the type of detailed, systematic analysis of scientific data and contextual information, such as is presented in this ecosystem profile.

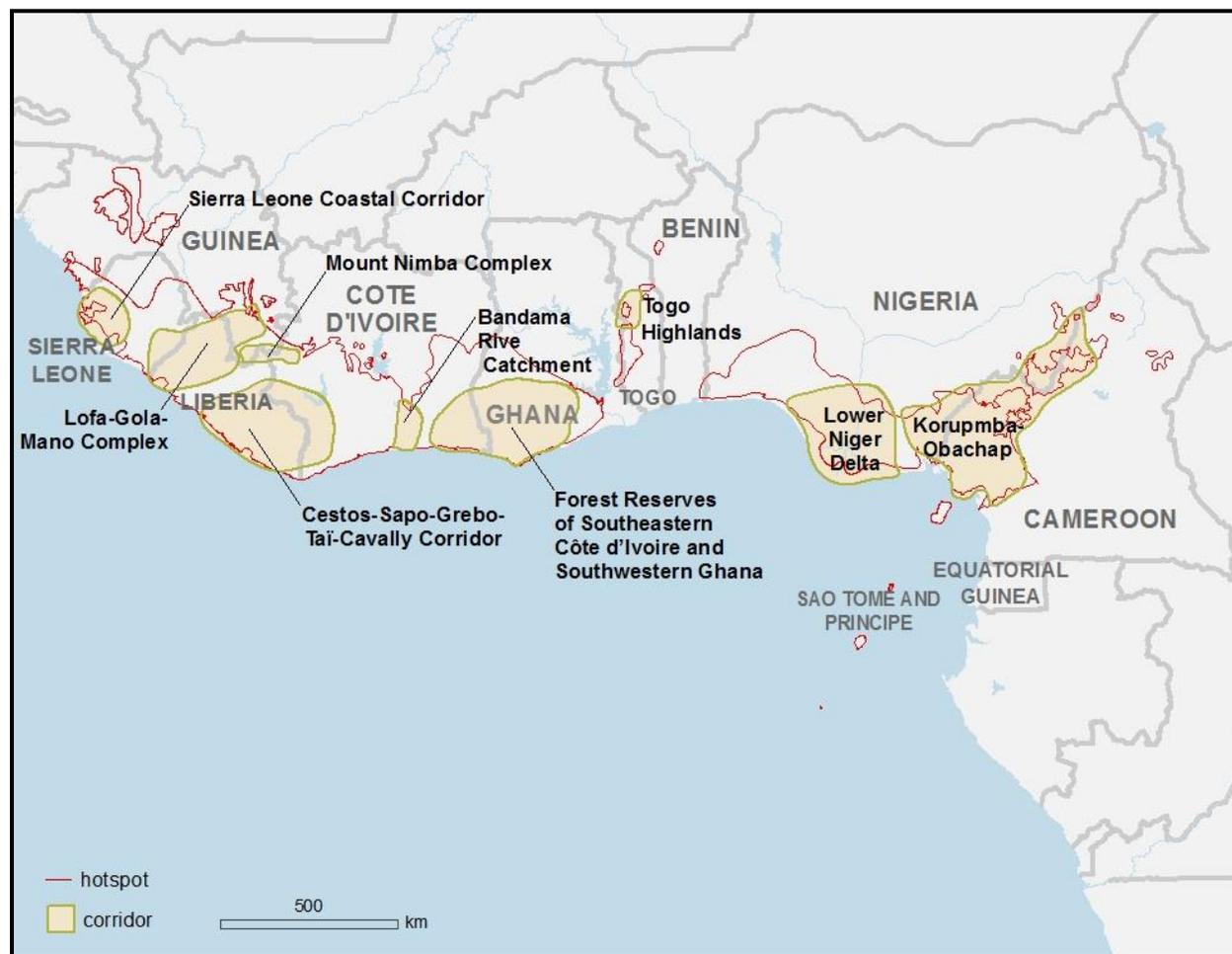
Given the fragmented nature of many of the remaining sites of global biodiversity importance within the hotspot, it is highly desirable that, wherever possible, CEPF-supported projects aim to maintain or increase the ecological connectivity of these sites, and ideally focus at the landscape scale, giving focus to the priority corridors identified in this profile.

The nine conservation corridors described in this profile are given in Table 12.1 and Figure 12.1. They cover a total area of 413,183 km², equivalent to 66 percent of the hotspot, and range in size from the Togo Highlands at 6,049 km² to the Korumpba-Obachap Corridor at 118,675 km². Although four of the corridors are restricted to single countries, five are transboundary and provide opportunities for coordinated actions across borders. Several conservation corridors also incorporate a number of entire river basins, from their headwaters to their outflow. These corridors provide opportunities for basin-wide approaches, extending from high altitude areas to coastal zones. For instance, reforestation of upland sites may provide downstream benefits to other sites in the corridor through a reduction in sediment loads.

Table 12.1 Conservation Corridors in the Guinean Forests Hotspot

No.	Corridor Name	Countries	Area (km ²)
1	Sierra Leone Coastal Corridor	Sierra Leone	17,096
2	Lofa-Gola-Mano Complex	Sierra Leone, Liberia, Guinea	47,545
3	Mount Nimba Complex	Guinea, Côte d'Ivoire, Liberia	6,829
4	Cestos-Sapo-Grebo-Tai-Cavally Corridor	Liberia, Côte d'Ivoire	70,278
5	Bandama River Catchment	Côte d'Ivoire	8,389
6	Forest Reserves of Southeastern Côte d'Ivoire and Southwestern Ghana	Côte d'Ivoire, Ghana	72,579
7	Togo Highlands	Togo	6,049
8	Lower Niger Delta	Nigeria	65,743
9	Korupmba-Obachap	Cameroon, Nigeria	118,675

Figure 12.1 Conservation Corridors in the Guinean Forests Hotspot



To promote ecological connectivity within the conservation corridors, it is important to focus on all sites of biological importance, not only KBAs designated as protected areas but also those under other designations, including within production landscapes. In this regard, it is evident that all KBAs identified within the corridors warrant attention. Nevertheless, to ensure that CEPF investments are not spread too thinly, and are thus able to deliver significant, sustained impacts, it was necessary to select, from among the full list of KBAs in the hotspot, a set of priority sites to receive targeted investment. These priorities allow investments by CEPF to focus on sites of high global biodiversity value that present good opportunities to engage civil society in conservation, without duplicating investments by national governments or international donors.

Two exercises were conducted to identify priority sites from among the full list of KBAs in the hotspot. First, an initial biological prioritization was conducted, to identify sites of the highest relative biological importance, based on the principles of irreplaceability and vulnerability. Second, during the final stakeholder consultation workshops, expert opinion was used to identify sites presenting the greatest opportunities for CEPF investment, based upon the application of a set of standard criteria. Finally, the results of the two exercises were combined, to produce a final prioritization that took into account both scientific information and expert opinion. In this way, the priority sites respond to the needs, priorities and aspirations of CSOs from across the hotspots, while ensuring that CEPF investments remain targeted towards the conservation of globally important biodiversity.

Eight standard criteria were used to guide deliberations among stakeholders regarding selection of priority sites for CEPF investment. The first criterion was biological importance. The relative biological importance of each KBA was determined by an assessment of species-based vulnerability, species-based irreplaceability and site vulnerability, following the standard methodology in the KBA guidelines. During the final consultation workshops, it was recognized that a prioritization system based upon a narrow set of global criteria does not necessarily capture the full range of values that determine the global biological importance of a site. Consequently, a number of additional factors were taken into consideration, including importance for emblematic species, and importance for delivery of realized ecosystem services.

The second criterion was degree of threat. Additional consideration was given to KBAs with site vulnerability scores that highlighted the presence of major threats, such as large infrastructure (roads, dams, railways, etc.), agriculture (including agri-business), oil exploration and exploitation, pipelines, mining, urbanization and climate change. Although there is a clear association between human population presence and level of threat faced, this factor is considered to be an underlying driver and is, therefore, considered implicitly in our assessment of other threat types.

The third criterion was need for additional funding. The level of investment by national and international donors and governments for conservation of the KBA was taken into account. This was to understand whether there was a need for CEPF to invest in a particular site, and to avoid duplicating efforts of other funders operating in the hotspot.

The fourth criterion was management need. Consideration was given to the existence of management plans, personnel, infrastructure and mechanisms for community engagement and

sustainable funding. Since management needs are key factors in sustainable management of priority sites, preference was given to KBAs where the needs are high.

The fifth criterion was capacity of civil society to engage in conservation at the KBA. This criterion was applied to data derived from the institutional capacity surveys and consultations and highlighting the capacity needs of local civil society groups, CBO, etc. These provided insight into where and how CEPF could invest most effectively to engage and strengthen the capacity of civil society, especially local organizations, to make sure that they are fully involved in the implementation of the CEPF conservation outcomes.

The sixth criterion was operational feasibility. This was one of the most important criteria because it determines whether or not civil society and other actors can effectively work in a particular site, taking into account the accessibility of particular sites, costs of implementing and monitoring conservation actions there, and the presence of some security threats, health risks and legal barriers.

The seventh criterion was opportunity for landscape-scale conservation. This criterion took into account the potential for civil society and other actors to work together to achieve conservation at a landscape-scale through linking KBAs together, including through transboundary cooperation.

The final criterion was alignment with national priorities. KBAs that were recognized as priorities in National Biodiversity Strategies and Action Plans and other national policy documents were given additional priority because they presented opportunities to support hotspot governments contribute to the Aichi Targets, Sustainable Development Goals and other international commitments, and to align CEPF support to investments in conservation from national budgets.

These criteria were applied to data collated through the remote stakeholder consultations, using a scoring system. Based upon this desktop analysis, the 56 KBAs with the highest scores were presented at the final stakeholder consultations as candidate priority sites, and the assembled stakeholders were asked to narrow down the list of priority sites for each country, taking into account the prioritization criteria. At this final stage of stakeholder review, a limited number of modifications to the KBA list were proposed, by merging or extending KBAs. This resulted in a final list of 40 priority sites for CEPF investment (Table 12.2).

The priority sites range in size from the 229 hectare Zona Ecologica dos Manguezais de Rio Malanza (STP3) in São Tomé and Príncipe to the 586,803 hectare Gashaka-Gumti National Park (NGA5) in Nigeria. Taken together, the 40 priority sites cover 53,184 km², equivalent to nine percent of the total area of the hotspot (Figures 12.2 and 12.3).

Table 12.2 Priority Sites for CEPF Investment in the Guinean Forests Hotspot

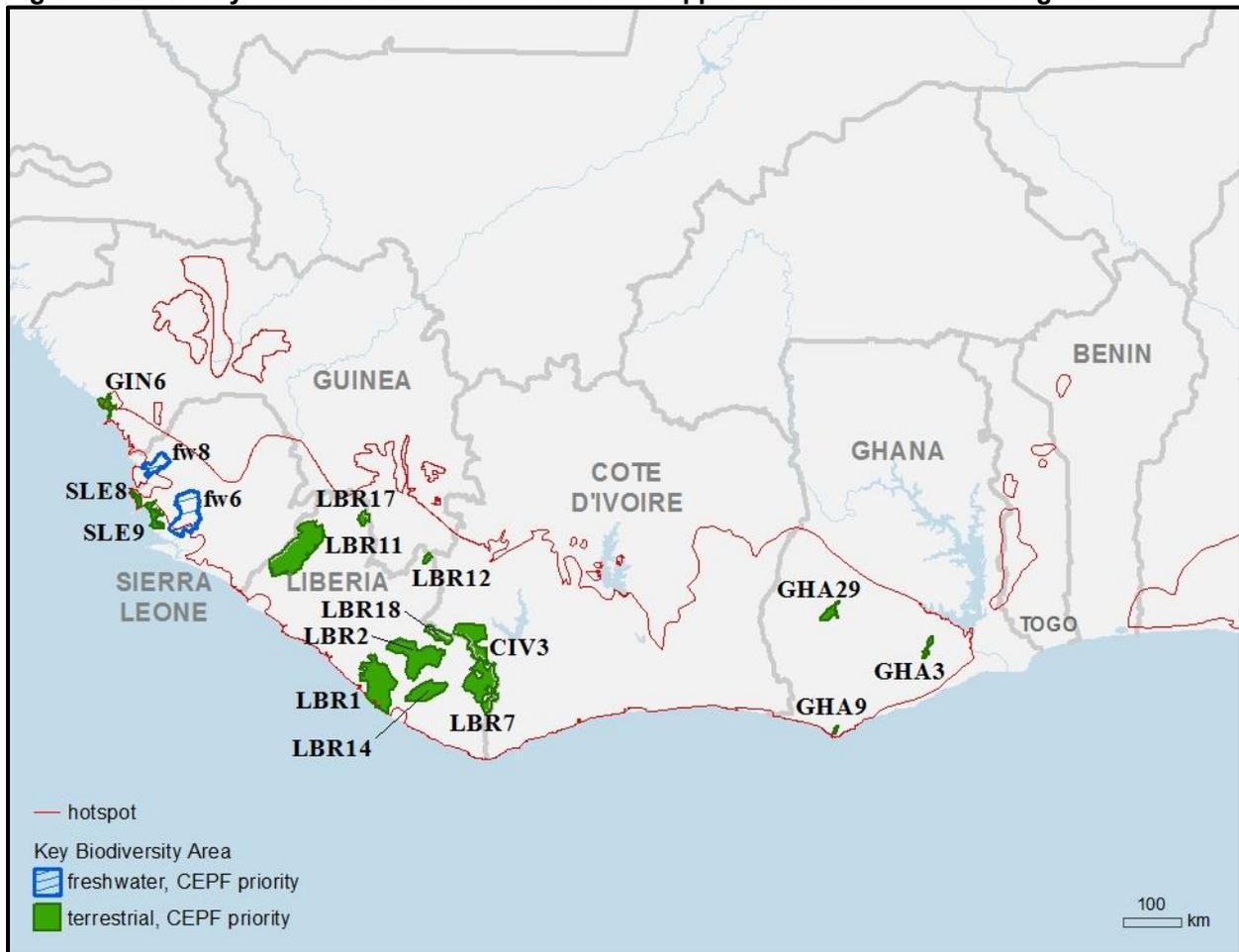
Code	Priority Site	Realm	Total Area in Hectares	Priority Score
CAMEROON				
CMR1	Bakossi Mountains	Terrestrial	75,581	1
CMR2	Bali-Ngemba Forest Reserve	Terrestrial	899	2
CMR3	Bamboutos Mountains	Terrestrial	7,396	1
CMR6	Mbi Crater Faunal Reserve - Mbingo forest	Terrestrial	3,233	1
CMR12	Mount Cameroon and Mokoko-Onge	Terrestrial	107,143	1
CMR15	Mount Oku	Terrestrial	16,353	1
CMR16	Mount Rata and Rumpi Hills Forest Reserve	Terrestrial	45,200	1
CMR18	Tchabal Mbabo	Terrestrial	312,347	1
CMR19	Yabassi	Terrestrial	264,867	2
fw1	Lake Barombi Mbo and surrounding catchments	Freshwater	176,536	1
CÔTE D'IVOIRE				
CIV3	Forêt Classée de Cavally et Goin - Dédé	Terrestrial	197,925	2
EQUATORIAL GUINEA				
GNQ1	Annobón	Terrestrial	2,871	1
GNQ2	Caldera de Lubá Reserva Científica	Terrestrial	51,075	3
GNQ3	Pico de Basilé National Park	Terrestrial	32,256	1
GHANA				
GHA3	Atewa Range Forest Reserve	Terrestrial	21,111	2
GHA9	Cape Three Points Forest Reserve	Terrestrial	4,545	2
GHA29	Tano-Offin Forest Reserve	Terrestrial	43,061	2
GUINEA				
GIN6	Konkouré	Terrestrial	45,744	1
LIBERIA				
LBR1	Cestos - Senkwen	Terrestrial	350,405	2
LBR2	Cestos/Gbi Area	Terrestrial	316,490	4
LBR7	Grebo	Terrestrial	282,195	2
LBR11	Lofa-Mano Complex	Terrestrial	437,854	2
LBR12	Nimba mountains	Terrestrial	13,254	2
LBR14	Sapo National Park	Terrestrial	155,084	2
LBR17	Wonegizi mountains	Terrestrial	28,868	2
LBR18	Zwedru	Terrestrial	64,458	1

Code	Priority Site	Realm	Total Area in Hectares	Priority Score
NIGERIA				
NGA4	Cross River National Park: Oban Division	Terrestrial	268,952	3
NGA5	Gashaka-Gumti National Park	Terrestrial	586,803	4
NGA7	Mbe Mountains and Cross River National Park: Okwangwo Division	Terrestrial	95,288	2
NGA9	Obudu Plateau	Terrestrial	70,743	2
fw10	South East Niger Delta - near Calabar	Freshwater	269,451	2
fw13	West Niger Delta	Freshwater	493,149	2
SÃO TOMÉ AND PRÍNCIPE				
STP1	Parque Natural do Príncipe	Terrestrial	5,670	1
STP2	Parque Natural Obô de São Tomé e Zona Tampão	Terrestrial	44,830	1
STP3	Zona Ecologica dos Manguezais de Rio Malanza	Terrestrial	229	2
STP4	Zona Ecológica de Praia das Conchas	Terrestrial	522	1
SIERRA LEONE				
SLE8	Western Area Peninsula Non-hunting Forest Reserve	Terrestrial	16,414	1
SLE9	Yawri Bay	Terrestrial	54,674	2
fw6	Gbangbaia River Basin	Freshwater	266,478	2
fw8	Rhombe Swamp and Mouth of Little and Great Scarcies Rivers	Freshwater	88,460	1

There are 17 priority sites in the Upper Guinean Forests, comprising 15 terrestrial KBAs and two freshwater KBAs. The largest concentration is in Liberia, including five sites adjacent to neighboring countries, which provide opportunities for transboundary cooperation. Another concentration is in the coastal zone of Sierra Leone and neighboring Guinea, which provides opportunities for conservation of mangroves and other important coastal ecosystems, as well development of payment for ecosystem service mechanisms.

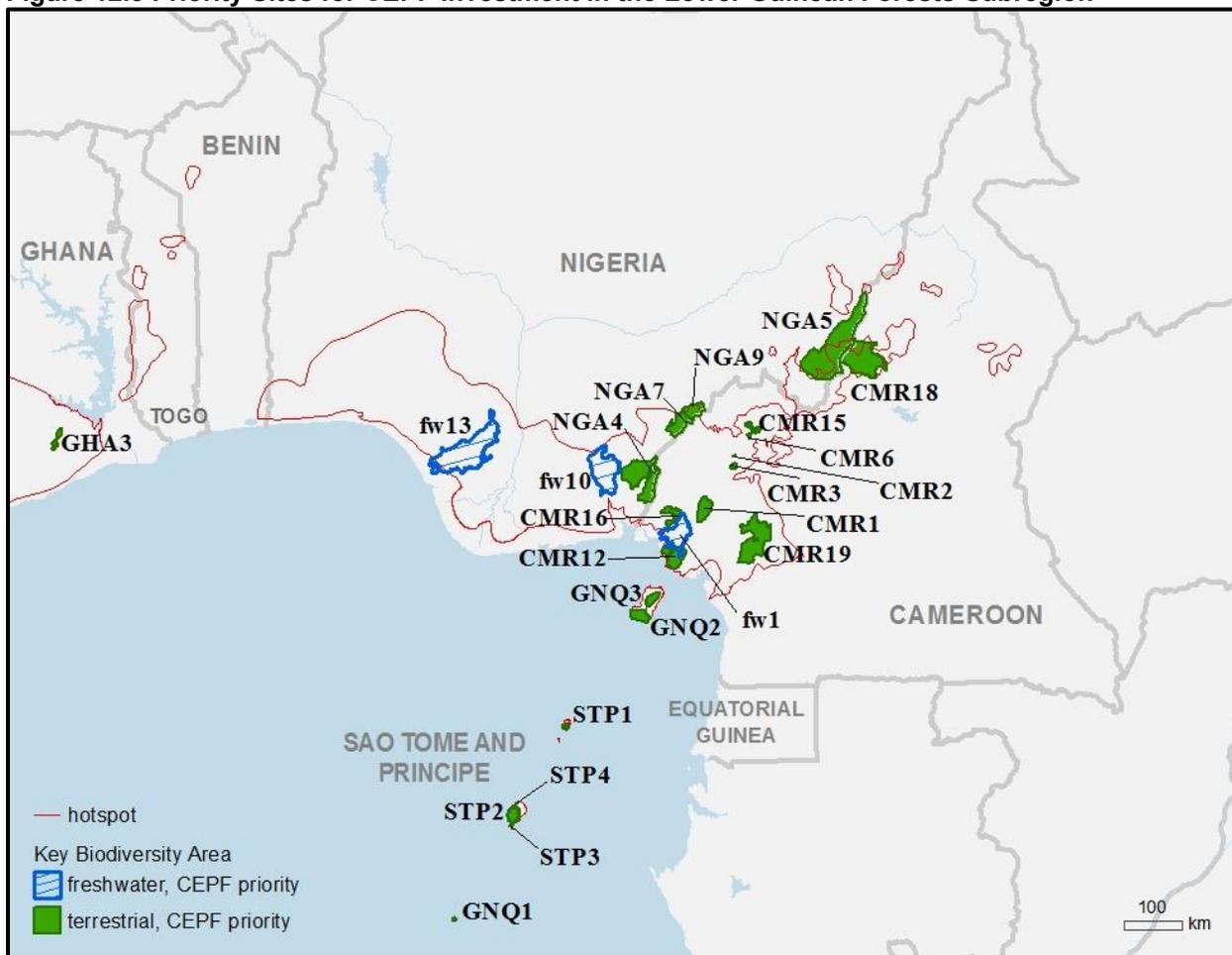
There are 23 priority sites in the Lower Guinean Forests, comprising 20 terrestrial KBAs and three freshwater KBAs. Most of the priority sites are located along the chain of volcanic mountains that stretches across northwestern Cameroon and into the Gulf of Guinea. These sites all support localized endemism: those in Equatorial Guinea and São Tomé and Príncipe because they are oceanic islands; and those in Cameroon because they are islands of montane habitat. There is another concentration of priority sites along the border between Cameroon and Nigeria, which, again, provides opportunities for transboundary cooperation.

Figure 12.2 Priority Sites for CEPF Investment in the Upper Guinean Forests Subregion



The 40 priority KBAs represent a mix of protected areas in need of management improvement and strengthened community participation in conservation, and areas outside of protected areas that are very vulnerable to threats and in need of conservation management. In most cases, the conservation need for these ‘unprotected’ sites is not for inclusion within national protected area systems (which are severely underfunded, meaning that expansion would be likely to result in the creation of ‘paper parks’) but for innovative, locally appropriate conservation models that involve communities, local government and, where relevant, private sector actors in collaborative actions. Six priority sites are wholly included within protected areas in IUCN categories I to IV, and three have between 25 and 75 percent of their area included. The remaining 31 priority sites are not included within protected areas in IUCN categories I to IV, although some are under other management designations at least nominally consistent with biodiversity conservation, such as forest reserve (*forêt classée*).

Figure 12.3 Priority Sites for CEPF Investment in the Lower Guinean Forests Subregion



Based on the results of the initial biological prioritization, 21 terrestrial and six freshwater KBAs were assigned the highest priority score. These sites are the highest biological priorities for conservation in the hotspot, because the loss of any of them would result in the global extinction of at least one species. Seventeen of these KBAs were included in the final list of priority sites agreed during the final stakeholder consultations. Five of the exceptions were in Cameroon, which, with 10 priority sites selected, more than for any other country, was considered to present adequate opportunities for engaging civil society in conservation of the highest global conservation priorities. Another exception was Gola Forest Reserve (SLE1), which was considered to have a relatively low need for additional conservation investment, due to major past investments by the European Union, and a planned voluntary carbon offset. Finally, four Priority 1 freshwater KBAs were not selected as priority sites for various reasons, including that stakeholders considered there to be limited opportunities for engaging CSOs in their conservation.

Of the remaining 23 priority sites, 19 were assigned a priority score of 2. The remaining four were all included because stakeholders at the final consultation workshops considered them to have high relative biological importance that was not well captured by the prioritization scheme, including important populations of primates and other emblematic species.

Some of the KBAs not selected as priority sites were excluded mainly due to lack of information. In addition, several candidate KBA sites were proposed during the final consultation workshops, which had not been identified during earlier exercises. This indicates that there is a need to fill knowledge gaps and integrate new information into the identification of KBAs and, eventually, an update of priority sites for CEPF investment strategy. Opportunities for doing so may arise at a later stage of the investment process or during a future update of the ecosystem profile.

12.2 Strategic Directions and Investment Priorities

The aim of this section is to present a five-year investment strategy for CEPF to support CSOs to conserve global biodiversity in the Guinean Forests Hotspot. This will be done by targeting investment towards 13 investment priorities grouped into five strategic directions (Table 12.3). This is only a subset of the investment priorities that were identified during the stakeholder consultations, because not everything could be addressed over five years with the level of funding available and considering the absorptive capacity of civil society in the hotspot. A shortlist of candidate investment priorities was developed through the consultation process, drawing on the results of the situational analysis, especially the analysis of threats and drivers, which informed the types of conservation action needed to address immediate threats and their root causes, and the analysis of the civil society context, which informed the types of investments required to engage and strengthen civil society, especially local groups. This list was then narrowed down during the final consultation workshops by applying the following four criteria: (i) need for additional funding (informed by the analysis of conservation investment); (ii) appropriateness for implementation by civil society; (iii) availability of CSOs with the necessary skills and connections for implementation; and (iv) urgency for implementation during the next five-years.

The resulting investment strategy includes actions appropriate for civil society to lead at local, national and regional levels. At the local level, the focus is on demonstrating practical solutions to conservation and development threats and problems that have the potential for wider replication. At the national level, the focus is on empowering civil society to influence conservation policies and private sector business practices in ways that positively affect biodiversity conservation, through partnerships and dialogue. Since some priority KBAs and conservation corridors are transboundary in nature, for example the Korupmba-Obachap Corridor, support will also focus on regional and transboundary actions that facilitate conservation of transboundary clusters of KBAs, facilitate regional dissemination of information and conservation models, and contribute to the emergence of a regional conservation movement.

Furthermore, since most countries in the hotspot have identified the conservation of biodiversity as their major nature-based solution to climate change, especially through their engagements in ongoing REDD+ preparatory processes (as reflected in relevant REDD+ Strategy Documents), it is logical for this strategy to encapsulate climate change as a theme. Specifically, CEPF will support civil society to participate in an influence the climate change discourse in favor of mitigation and adaptation responses beneficial to biodiversity conservation, such as REDD+ and ecosystem-based adaptation. In addition, the strong focus on capacity building that runs through the investment strategy will enable local CSOs to play an increasingly important role in conceiving, implementing and monitoring climate change mitigation and adaptation projects.

Table 12.3 CEPF Strategic Directions and Investment Priorities in the Guinean Forests Hotspot

Strategic Directions	Investment Priorities
1. Empower local communities to engage in sustainable management of 40 priority sites and consolidate ecological connectivity at the landscape scale	<p>1.1 Strengthen the elaboration and/or implementation of land-use planning, land tenure and forestry reforms to facilitate good governance in the management of community and private reserves and concessions</p> <p>1.2 Promote preparation and implementation of participatory management plans that support stakeholder collaboration in protected area management</p> <p>1.3 Demonstrate sustainable livelihood/job creation activities for local communities that will act as incentives for the conservation of priority sites (e.g. domestication of wildlife species, sustainable logging from locally-controlled forests, harvesting of NTFPs, sustainable agriculture, etc.)</p>
2. Mainstream biodiversity conservation into public policy and private sector practice in the nine conservation corridors, at local, sub-national and national levels	<p>2.1 Conduct policy-relevant research, analysis and outreach that informs and influences the development of national government conservation policies, including on protected area management, payment for ecosystem services, REDD+ and ecosystem-based adaptation to climate change</p> <p>2.2 Generate locally-relevant information on natural ecosystems (e.g., economic valuations of ecosystem services) to influence political and economic decision-making in favor of their conservation</p> <p>2.3 Facilitate partnerships among local communities, private sector and government to demonstrate models for best practice mining, sustainable forestry and sustainable agriculture by private companies</p>
3. Safeguard priority globally threatened species by identifying and addressing major threats and information gaps	<p>3.1 Support the implementation of Conservation Action Plans for Critically Endangered and Endangered species on the IUCN Red List</p> <p>3.2 Update the KBA analysis by incorporating recently available data, including on Alliance for Zero Extinction sites and global Red List assessments and by conducting targeted research to fill critical knowledge gaps</p>
4. Build the capacity of local civil society organizations, including Indigenous People's, women's and youth groups, to conserve and manage globally important biodiversity	<p>4.1 Strengthen the capacity of local civil society organizations in financial, institutional and project management, organizational governance, and fundraising</p> <p>4.2 Establish and strengthen women-led conservation and development organizations, associations and networks to foster gender equality in natural resource management and benefit sharing</p> <p>4.3 Strengthen the communication capacity of local civil society organizations in support of their mission and to build public awareness on the importance of conservation outcomes</p>
5. Provide strategic leadership and effective coordination of conservation investment through a Regional Implementation Team	<p>5.1 Operationalize and coordinate CEPF's grant-making processes and procedures to ensure effective implementation of the investment strategy throughout the hotspot</p> <p>5.2 Build a broad constituency of civil society groups working across institutional and political boundaries to achieve common conservation objectives</p>

13. SUSTAINABILITY

One of the major findings of the consultation process was that some conservation projects in the hotspot were ultimately unsuccessful because they did not incorporate long-term financing mechanisms. Also, some conservation initiatives lacked the necessary human capacity, and policies and legislative frameworks to create real impact on the ground. Unfortunately, when this happens, funds are wasted, time is lost, hard-earned results crumble, and, above all, local and indigenous populations are discouraged from participating in future conservation initiatives.

Most stakeholders consulted during the preparation of the ecosystem profile emphasized the need to emphasize sustainability in the design of individual projects and the portfolio as a whole. A strong focus on sustainability will ensure that the impacts of CEPF-funded projects continue to be felt after funding ends. Above all, building partnerships with other donors, government agencies and private sector actors to leverage funds, train conservation actors, and reform and better implement policies was felt to be a very important component of any sustainability strategy. Other components of the sustainability strategy for CEPF in the hotspot included establishment of sustainable financing mechanisms, capacity building for local civil society at individual, organization and network levels, and mainstreaming of results into policy, legislative and regulatory frameworks.

Within the investment strategy, Investment Priority 2.3 focuses on facilitating partnerships among local communities, private sector and government to demonstrate best practice models in the three priority sectors addressed by CEPF investment, while the other investment priorities under Strategic Direction 2 aim to empower civil society to influence governments to recognize the values of natural ecosystems and reflect them in their policies and decisions, including with regard to budgetary allocations for conservation finance. Beyond the use of grants to facilitate strategic partnerships between civil society and other sectors, the CEPF Secretariat and RIT will need to work closely together to forge strategic partnerships with some of the other major donor-funded initiatives in the hotspot, including the West Africa Biodiversity and Climate Change program of USAID, *le Program de Petites Initiatives* (PPI) of FFEM, and the EU Wildlife Conservation Strategy for Africa.

One of the key elements of the sustainability strategy will be capacity building, which emerged as a cross-cutting priority theme during the consultation process. Within the investment strategy, Strategic Direction 4 has an explicit focus on capacity building for local CSOs, especially Indigenous People's, women's and youth groups. This will be complemented by capacity building provided by the Regional Implementation Team under Strategic Direction 5, to enable CSOs, especially newer organizations and grassroots groups, to access CEPF funds, and design and implement effective conservation actions. In addition, it can reasonably be expected that capacity building will be integrated into many of the grants awarded under other strategic directions, in order to facilitate the emergence of a stronger conservation-focused civil society at national and regional levels that can sustain and build upon the results of the next five years of CEPF investment.