

# CHAPTER 4

## THE FORESTS OF EQUATORIAL GUINEA IN 2008

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### Introduction: The Macro-Economic and Political Context

The mainland of Equatorial Guinea is located just north of the Equator; the continental part borders Cameroon to the north (2° 10'N parallel and Ntem River) and Gabon in the south (parallel 1° N and estuary of the Muni) and east (11° 20'E and Kie River). The western boundary of the continental territory is defined by the western Atlantic (9° 30'E). The continental region comprises three different regions, from west to east: (1) the coastal zone; (2) a more rugged terrain with a chain of seven mountains, the Wele depression, the Niefang chain (Monte Alén) and the massif of Monte Mitra; and (3) the plains in the north-eastern section of the country (from the Kie Ntem peneplain to the central peneplain). Bioko island, of volcanic origin, is dominated by the Pico Basile (3,011 m).

The climate is equatorial with two short dry seasons between two rainy seasons. Rainfall varies from 3,500 mm on the highest parts of the mainland to less than 2,000 mm on the peneplains. The southernmost part of Bioko Island experiences some of the strongest rainfall in Africa with more than 10,000 mm per year. The main dry season is from December to March and the longest rainy season starts late March or early April and ends in June (Atlas of Equatorial Guinea, 2001).

Mainland soils are metamorphic (gneiss, granite), except for the coastal strip, which is of sedimentary origin.

The territory of Equatorial Guinea covers an area of 27,211 km<sup>2</sup>, divided between the mainland, called Rio Muni (25,015 km<sup>2</sup>), and the islands, including Bioko (2,196 km<sup>2</sup>) and Annobon (17 km<sup>2</sup>). The maritime territory (Exclusive Economic Zone) of Equatorial Guinea covers approximately 312,000 km<sup>2</sup> (Atlas of Equatorial Guinea, 2001).

According to UN estimates, the population of Equatorial Guinea was around 484,000 inhabitants in 2006 and is expected to reach 545,000

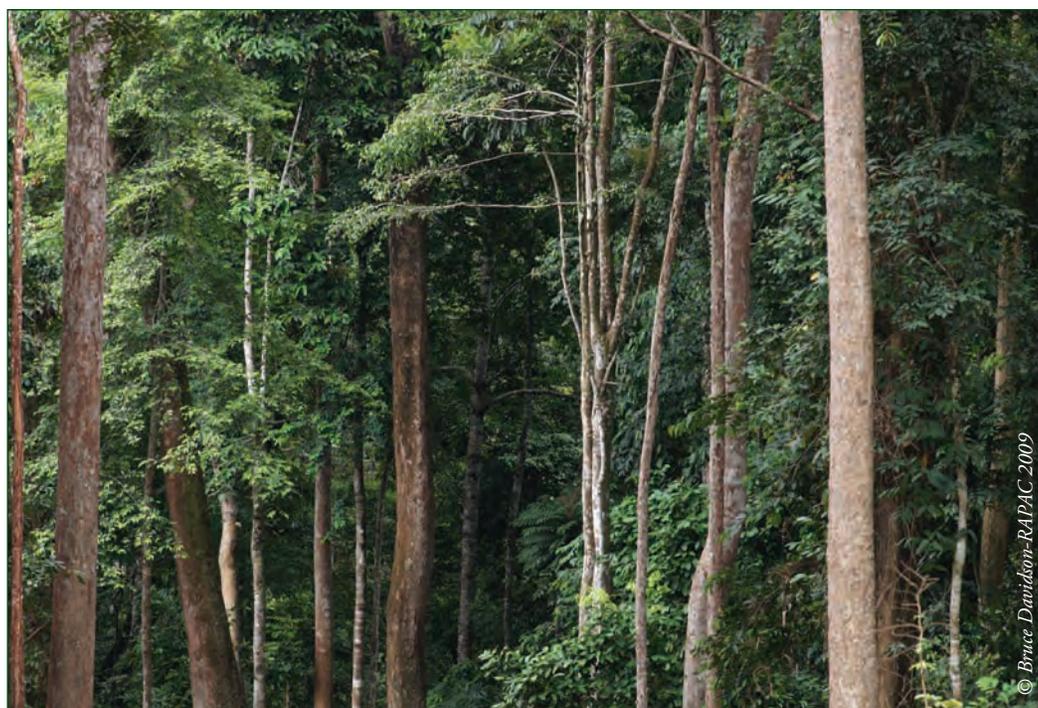
inhabitants in 2010 (United Nations, 2006). However, according to the government census of 2002 published in 2004 by the Ministry of Planning and Economic Development, the population was estimated at 1,014,990 inhabitants, a significant population increase as the population was estimated at 450,000 inhabitants in 1994. This increase can be largely attributed to the development of oil reserves over the last ten years. This development led to the massive return of Guineans who had emigrated and an equally massive immigration of workers (mainly from western and northern Africa). Another reason for the population increase is the improved health system, which caused a drop in mortality rates. Most of the population lives in rural areas, but is increasingly drawn to the main urban centers (Bata, Malabo). There is considerable pressure on natural resources because population densities are high and traditional rural activities are not compatible with this level of population (poaching, slash-and-burn shifting cultivation). Pressure is particularly strong on Bioko Island.

GDP has increased on an unprecedented scale, thanks to oil revenue, standing at CFA 5,130 billion in 2007 (€ 7.8 billion) versus CFA 83 billion in 1995 (CEMAC, 2008). More than 90 % of GDP originates from oil. In 2008, GDP *per capita* stood at \$ 7,400, a significant increase despite the dramatic increase in population. In 1994, it stood at \$ 201 *per capita* (CEMAC, 2008).

Equatorial Guinea does not have a structural adjustment program. In 2006, it had outstanding loans worth approximately \$ 150 million from the African Development Bank and the International Development Association (IMF, 2008).

The contribution of the forestry sector to the national economy is constantly shrinking, due to the large predominance of the oil sector. The forestry sector accounted for only 0.2 % of the GDP in 2007, with a contribution of around CFA 15 billion.

Photo 4.1: Profile of a low altitude dense forest.



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## Forest Resources and Land Cover Change since 1990

### Forest Areas

*Table 4.1: Forested area of Equatorial Guinea by land cover category*

Land cover	Area (ha)
Lowland dense rainforest	1,972,044
Sub-montane forests (900-1500 m)	27,450
Mountane forest (>1500 m)	2,619
Swamp forest	0
Mangrove	351
<b>Total dense forests</b>	<b>2,002,464</b>
Forest-cropland mosaic	624,438
Forest-savanna mosaic	28,647
Dense deciduous forest (Miombo)	0
Other plant formations	39,231
Cultivated land	2,637
Other land use (town, villages, industrial sites...)	23,688
<b>Total</b>	<b>2,721,105</b>

Source: compilation of land cover data produced by UCL, JRC and SDSU.

### Change in Forest Cover since 1990

According to the FAO, the deforestation rate has increased substantially, from 58.2 km<sup>2</sup> per year in 1990 to 150 km<sup>2</sup> per year over the period

1990-2005, due to deforestation for agriculture and highly intensive logging. These figures correspond to a deforestation rate of 0.9 % (FAO, 2005).

## Legal and Institutional Framework for Managing Biodiversity Resources

Natural resource management in Equatorial Guinea is the object of many laws and the government structure provides for *ad-hoc* arrangements to carry out the mission of nature conservation. According to the Constitution: “[the] State shall ensure the conservation of nature [...] so that development and conservation are emerging as two inseparable components to be combined so that the well-being to which the country aspires shall be sustainable.” However, nature conservation in

Equatorial Guinea faces many obstacles, including the lack of financial, human and technical resources throughout the administration.

Equatorial Guinea is also firmly committed to regional initiatives, as demonstrated by its active participation in the declaration of the Heads of States in Yaoundé (1999) and its adherence to the 2005 COMIFAC convergence plan. Equatorial Guinea is also a signatory of many treaties (table 4.2).

**Table 4.2: Conventions and international treaties signed by Equatorial Guinea**

Text	Date of signature*
COMIFAC Treaty	05/02/2005
Ramsar Convention on Wetlands of International Importance	02/10/2003
UNESCO World Heritage	19/11/2003
Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	10/03/1992
Bonn Convention for the Conservation of Migratory Species	30/04/1983
Rio de Janeiro Convention on Biodiversity	24/11/1994
Kyoto Protocol - UN Framework Convention on Climate Change	16/08/2000
UN Convention to Combat Desertification	26/06/1997

\*Most conventions signed by Equatorial Guinea come into force upon simple signature as ratification is not required by the Constitution.

Source: MPMA-FORAF, 2008.

### Legal Framework

#### *Forestry Act*

The legal basis for regulating the natural environment in Equatorial Guinea stems from the 1/1997 (February 18) Act on forest use and management and from its derived directives (Decree 97/1997 of August 12). This Act establishes the conditions for the management and for the rational and sustainable utilization of forest resources to prevent their loss. The law covers the following aspects (FAO, COMIFAC, 2007):

- the legal, economic and administrative regime of the forestry sector;
- the classification and definition of forest products;
- the operation, use and management of forest resources;
- the conservation of ecosystems;
- the transportation, industrial processing and marketing of forest resources;
- the economic and taxation regime;
- checks, violations and penalties.

This law clearly defines two areas of forestry, production and conservation. It defines a classification of areas according to uses: national forest reserves, production areas and conservation or protection areas.

Article 58 of the Act creates a “Forest Ranger Corps” and elucidates its role in monitoring, protecting and conserving national forest resources.

#### *Environmental law*

Environmental regulation is based mainly on Law 7/2003 (27 November) for environmental regulation in Equatorial Guinea. This law represents the first legal instrument designed specifically for environmental regulation and protection in Equatorial Guinea, although it is not fully operational at present. This law covers air, water and soil quality, pollution, conservation of the environment, and emergency situations and administrative responses in these areas. It also covers public actions to prevent and control contamination.

This law provides some degree of decentralization and coordination between central and local governments. To that effect, the law provides for the establishment of the National Institute for Environment and Nature Conservation (INCOMA) (*Instituto Nacional de Conservación del Medio Ambiente*) and the National Environment Fund (FONAMA) (*Fondo Nacional de Medio Ambiente*). The law also creates a special Corps of Environmental Inspectors (*Cuerpo Especial de Inspectores Medio Ambientales*), like the Forest Rangers Corps (*Cuerpo Especial de Guardería Forestal*) under the Forest Act.

According to Law N°. 7/2003, mentioned above, the Ministry of Environment is responsible for classifying and managing protected areas such as natural parks, nature reserves, natural monuments, protected landscapes and scientific reserves.

### *Related texts*

The environmental sector has numerous texts (laws, legal decrees and ordinances). Some of these texts predate the laws mentioned above and are still in force. Only the most recent texts will be mentioned here as the 1990s proved particularly fruitful in this regard.

- Law N°. 4/1994 (May 31) on tax regulation, and parafiscal tax collection in the country. This law defines clearly the concept of tax and tax collection, and defines the payment modalities for any public service action related to wood products in the forestry sector (FAO, COMIFAC, 2007);
- Law N°. 1/2000 (May 22) on the redefinition of several forest taxes;

- National Forest Action Program (PNAF-GE);
- a policy paper for the forestry sector, developed in 2000 with FAO support;
- Decree N°. 172/2005 on trade in wildlife and flora species threatened with extinction. This document gives powers to the Ministry of Fisheries and the Environment in that domain.
- Decree N°. 60/2002 on the establishment of the National Institute for Forest Development and Management of Protected Areas (INDEFOR-AP). This institute was established to provide the scientific and technical resources needed to manage forest resources.

Various other decrees from the Ministry of Agriculture and Forestry complement existing legislation, including the following:

- N°. 61/2007: amendment to law enforcement rules on the use and management of forests. The decree prohibits the export of Guinean logs and provides for 100 % wood processing in the country;
- N°. 97/1997: regulations on law enforcement on forest use and forest management.

The Ministry of Fisheries and the Environment has also issued several decrees, including:

- N°. 17/2005: adoption of the Strategy Paper and Action Plan for biodiversity conservation;
- N°. 3 /1997: expansion of the Monte Alén National Park;
- Decree N°. 72/2007 to ban the hunting and consumption of apes and other primates in Equatorial Guinea.

## Land Classification Plan

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Law N°. 1/1997 provides for land classification according to land use (table 4.3) and article 8 of the Act defines the role to be played by the “National Commission for Land Classification

and Use” (*Comisión Nacional de Clasificación y Uso de las Tierras*). At this time, this Commission is not functional (Obama, 2007).

**Table 4.3: Land classification in Equatorial Guinea**

Name	IUCN type	Characteristics
National park	II	Village activities (NTPF, fisheries, hunting) possible in buffer zones, heart of the park reserved for scientific and tourist activities
Scientific reserve	I	Completely closed off, very strictly controlled
Natural reserve (national reserve)	IV	Includes towns and villages
Natural monument	III	Protection of landscapes of cultural and/or religious importance
Protected landscape	V	
Community forest	VIII	Example: <i>Reserva de poblados</i> . Permanent user rights granted to rural communities for traditional usage (these forests border rural communities)
Public production forest	VIII	
Private farming/forest properties		Family private properties for subsistence activities

Source: MPMA-FORAF, 2008.

## Institutions and Capacity

The monitoring of natural resource falls under the dual jurisdiction of the Ministry of Fisheries and Environment and the Ministry of Agriculture and Forestry, which potentially leads to conflicts of jurisdiction. A case in point being protected areas, where forests are under the Ministry of Agriculture and Forestry and where overall management lies with the Ministry of Fisheries and the Environment.

There are two other bodies dedicated to protecting the environment. First there is the National Institute for Forest Development and Management of Protected Areas (INDEFOR-AP) (*Instituto Nacional de Desarrollo Forestal y de Gestión de Áreas Protegidas*), located in Bata on the country's mainland. The Institute possesses a range of competencies in various fields, including fifteen technicians trained during the ambitious CUREF project (Conservation and Rational Utilization of Forest Ecosystems in Equatorial Guinea (1996-2002) --*Proyecto Racional Utilización y Conservación de los Ecosistemas Forestales de Guinea Ecuatorial*). The Institute also hosts a geographic information systems laboratory, the only public unit of its kind in Equatorial Guinea. The second body whose purpose is to protect the environment is the National Institute for Environment and Nature Conservation (INCOMA) (*Instituto Nacional de Conservación del Medio Ambiente*) created by the Environment Act. At this time that Institute is not yet operational. There also exists the High Council for Scientific Research and Technology (CICTE) (*Consejo de Investigación Científica y Tecnológica*) attached to

the Presidency, which coordinates relations between the scientific institutes and the Presidency.

For the time being, there are very few decentralized technical administrations, which limits the ground presence of state technical services. More importantly, the paucity of transportation (only 1 vehicle) for the rare existing local offices aggravates this situation. The state is developing programs to address this problem by creating local relays, in particular within the Ministry of Agriculture and Forestry.

The public administration in charge of forestry and wildlife employs 169 people. Less than a quarter of the staff works in decentralized structures. One third of the staff has a university degree, mostly from foreign countries (Russia, Cuba, Belgium, Spain, Germany, France...).

The National University of Equatorial Guinea (UNGE) remains to date the only university level institution in Equatorial Guinea. The university is relatively new (founded in 1995) and offers training courses, *inter alia*, in natural resource management (agriculture and fishing sections). Currently, the UNGE offers no doctoral training. Some NGOs (local and international) provide practical training on a variety of socio-economic and environmental topics. Several forestry and environmental projects are currently underway: ECOFAC for protected areas; Conservation International for specific forest areas; the CARPE program; and other actions conducted by ANDEGE (*Amigos de la Naturaleza y el Desarrollo de Guinea Ecuatorial*), such as the BBPP program (Bioko Biodiversity Protection Program) for the protection of protected areas in Bioko.

## Forest Logging and the Timber Sector

Logging in Equatorial Guinea began in the early 20<sup>th</sup> century (Nsue Ela, 1998).

Logging was first organized by the Spanish colonial authorities who granted logging concessions to Europeans. Their operation focused on okoumé and easily accessible areas (on the river bank and coast).

Later, the improvement of logging capacity resulted in the concentration of logging in more remote areas that were very rich in okoumé, particularly around the towns of Mbini and Kogo, on the southern coastal fringe of the country. The operation moved back from the coastal fringe by about ten kilometers from 1928 onwards.

After the Second World War, demand for okoumé dropped and its export share went from 95 % to only 20 %. Faced with the depletion of okoumé resources, the colonial government stopped granting concessions between 1930 and 1944. In 1945, the government proposed a first classification of forests.

In contrast to exploitation, colonial authorities passed forestry legislation, which forced operators to replant twenty seedlings for each tree felled (article 12 of the Act of 1928).

In 1950, Equatorial Guinea came under Spanish provincial status and logging continued. There were 70 concessions in 1955, covering areas ranging from 974 to 30,000 ha. The end of the colonial era (1968) signaled the peak of timber logging roads with over 1,200 km of forest roads

and tracks. During that same period, logging volume increased gradually to reach 330,000 m<sup>3</sup> in 1962, mainly exported to Spain. Okoumé alone accounted for nearly one third of this figure.

The years following the country's independence (1969-1979) marked a period of recession for forest operations and cash crops (cocoa, coffee). The government nationalized industrial logging, which reduced logging to an anecdotal level. Each Equatorial Guinean was entitled to fell four trees.

In 1979, the State restored a system of free trade and very quickly concessions were re-issued, mostly to Spaniards, for periods of five years. There were thirteen concessions in 1986 for areas covering 5,000 to 50,000 ha. The following year, exploited volume exceeded 200,000 m<sup>3</sup>, mostly for export.

Around the 1990s, a parallel logging industry began based on volume licences granted to residents but industrial logging operators ended up buying the rights from people. Although this system was terminated in 1990, it appears that logging operations in municipal forests were sometimes performed by industrial operators.

The concession system was strengthened during the 1990-1997 period and more than 70 titles were granted, on areas ranging from 2,500 to 50,000 ha. All production forests in the country were then allocated in concessions and logging took place across the entire country.



**Photo 4.2: Regular use by logging trucks can damage rural roads.**

### Typology of Forestry Titles

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The Forest Act distinguishes between three types of forest:

- forest plot;
- municipal forest;
- national forest;

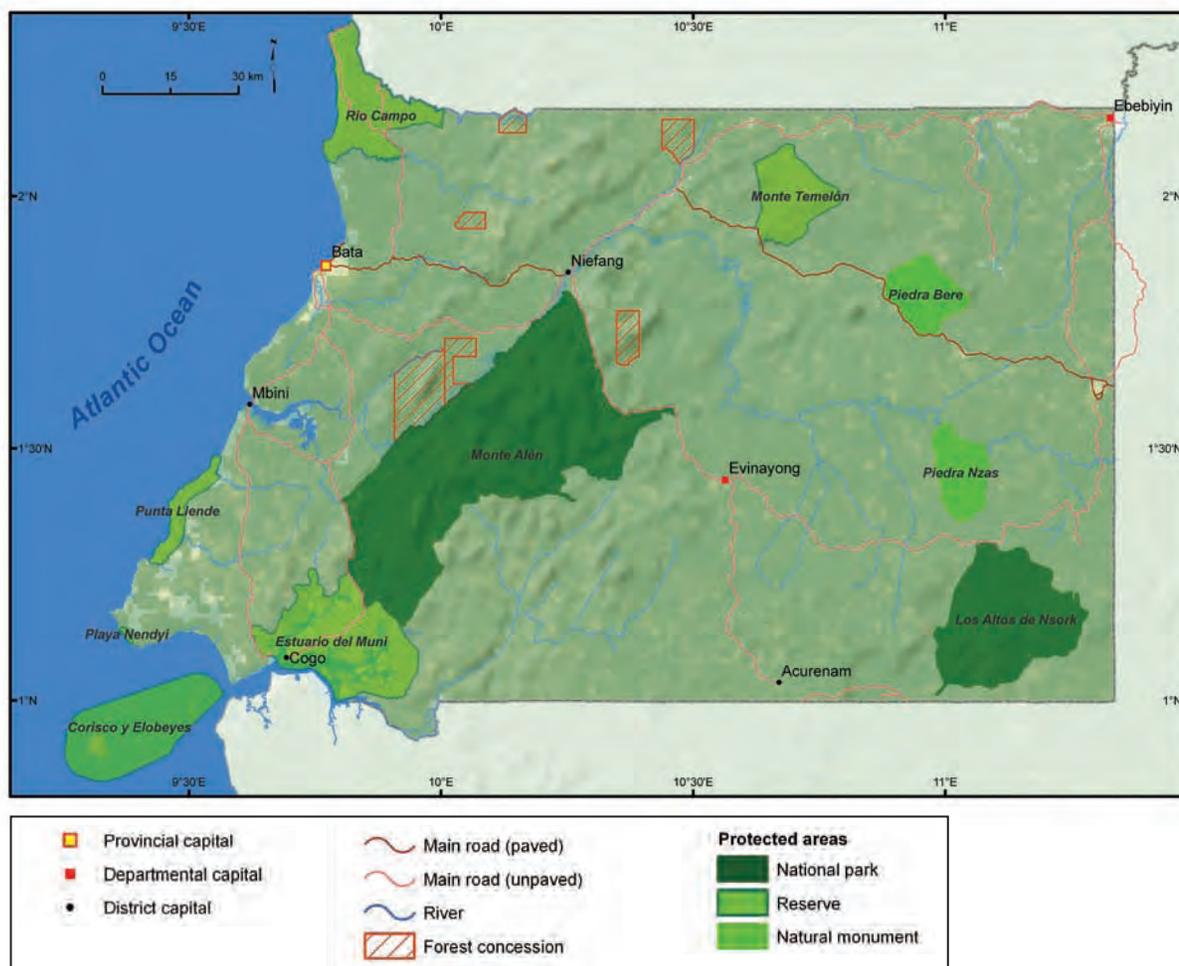
Within national forests, two types of forest title can be granted: forest concessions and special permits. All concessions have recently been cancelled.

### Formal Logging in Natural Forests

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Despite legislation, large-scale logging has taken place and has exceeded forest regeneration potential in Equatorial Guinea. In 1997, log production rose to more than 700,000 m<sup>3</sup>, 85 % of

which was okoumé, which is 50 % higher than the FAO's estimated level of sustainable production. Table 4.4 summarizes official production figures in recent years.



Sources: INDEFOR and FORAF

Figure 4.1: Forest concessions and protected areas in Equatorial Guinea

**Table 4.4: Evolution in log production in Equatorial Guinea from 2000 to 2007**

Year	Forest production (m <sup>3</sup> )
2000	689,169
2001	475,795
2002	574,155
2003	350,675
2004	464,979
2005	450,258
2006	602,854
2007	524,799
Average	516,585

Source: Ministry of Fisheries and Environment.

In 2006, harvested species by order of importance were: okoumé, which clearly dominates production, azobé, tali, and ilomba.

It should be noted that concession licenses have become concentrated, notably by Shimmer International, a subsidiary of the Malaysian

Rimbunan Hijau consortium. That company alone, which no longer operates in the country, produced in 2006 more than two thirds of the Guinean volume. Many special permits, covering several thousand hectares each, have been issued in recent years by the Ministry of Forestry. However, chronic overexploitation has resulted in forest thinning and for the past several years, many concessionaires have been handing their licenses back to the government.

The government forestry policy is to remove all concessions and only to grant special permits (six currently allocated) to allow forest regeneration.

All concessions are obliged to submit a management plan. To date, only one concession, working with the CUREF project, is operating with a management plan. All other concessions are paying a reforestation tax as an alternative. The revenue generated by this tax should allow the Forest Service to undertake plantings and forest enrichment programs. The Reforestation Service is not yet operational.

As concern the status of *reservas de poblados*, they were replaced by *bosques comunales* with better state control of forest management. Many communities are not aware of the change in status and therefore have no formal right to forests near

the village. Only the coastal strip, where access to information is better than in the rest of the country, has seen villages obtaining official licenses (Cayuela Serrano, 2000).

## Industrial Timber Processing

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Only a small fraction of the volume (ten to 15 %) of timber is processed on site into veneer (rotary peeling), and to a lesser extent sawn timber. The country has five industrial units (four rotary plants and one sawmill), four of them located in Bata. There are also some very small sawmills supplying local markets, some of them very recent. The species that are processed include okoumé

(predominantly), eyong, movingui, ilomba fraké, and Bilinga.

In 2006, Equatorial Guinea produced 26,000 m<sup>3</sup> of veneer and 1,500 m<sup>3</sup> of sawn timber. Almost the entireties of these volumes were exported to Europe (Spain, Italy and France) and China.



Photo 4.3: Peeling mill.

## Informal Sector

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The local population exerts great pressure on the forest. Significant population growth has substantially increased wood demand, and around major cities (Bata, Malabo, Evinayong) an increase in wood collection can be observed. This wood is used to build homes and there are many

*chavolismos* (wood-built slums) on the outskirts of major cities.

Fuel wood collection also leads to intensive degradation on the outskirts of cities. Finally, some areas are affected by the collection of wood for smoking fish (mangroves in Cogo, south-west of the country).

## Progress Towards the Sustainable Management of Production Forests

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Forest concessions were not managed in the past. Only one pilot management plan was drafted in 1998 by the CUREF project. After a period of strong overexploitation, Equatorial Guinea intends to implement a policy to recover its forest cover. The objective is to restrict logging by granting special permits that will be restricted to meeting the needs of still-functional local processing plants.

The scarcity of information available on the Guinean forests represents a major obstacle to im-

plementing this new policy. In the coming years, understanding of the terms and time required for forest regeneration should increase with the implementation of a national forest inventory.

In addition, a major effort should be made to formalize the forest sector. Equatorial Guinea should take advantage of its oil revenues and allocate a quota for environmental projects. Political will is beginning to grow, but so far no actions have materialized.

# Biodiversity Conservation and Development

## Biodiversity Components in Equatorial Guinea

### *Ecosystem diversity*

Dense forest covers almost 60 % of Equatorial Guinea, 1.6 million hectares, at altitudes ranging from 0 to over 1,500 m (CUREF, 1998). Most forests are at between 300 and 1,000 m of altitude. The east of the country includes many marshland areas, as well as woody fallow patches (young secondary forest). Several forest types are found in Equatorial Guinea. The most common forest type is the lowland and medium altitude dense rainforest. This forest type has suffered greatly from heavy logging in recent decades. There are still primary forests in the country that could soon disappear if commercial logging continues unabated. Young secondary forest at low and medium altitudes is also well represented, dominated by okoumé (*Aucoumea klaineana*).

A significant part of the mainland supports either permanent or temporary swamp-type formations.

The dense tropical humid sub-montane forest is located in the highest parts of the country and on Bioko Island. However, this type of forest accounts for only a small part of national forest cover.

Along the coast, there are mangroves (*Rhizophora*, *Avicenia*) in localized areas, bordering the estuaries of continental rivers and in narrow strips of 500 m wide and 15 to 20 km long.

In areas of high anthropogenic pressure, highly degraded forests are often the result of agricultural activity.

### *Species diversity*

Many wildlife and flora species in Equatorial Guinea are threatened. The most renowned endangered species include the elephant (*Loxodonta cyclotis*), the hippopotamus (*Hippopotamus amphibius*), the gorilla (*Gorilla g. gorilla*), the chimpanzee (*Pan troglodytes*), the mandrill (*Mandrillus sphinx*) and the marine turtles (Green turtle - *Chelonia mydas*, caret turtle - *Eretmochelys imbricata*, bastard turtle - *Lepidochelys olivacea*, and leatherback turtle - *Dermochelys coriacea*), which lay their eggs on the beaches of Equatorial Guinea. Even though there exists several large collections of flora specimens as well as multiple seminal works (e.g., Wilks and Issembé, 2000) the plant species are less known in Equatorial Guinea.

The country's islands are home to many endemic species: Bioko, for example, has two subspecies of endemic primates. Marine wildlife is also very important, and has not been comprehensively inventoried.



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**Photo 4.4:** *The tropical flora displays many different forms and colors, notably the Glory Lily (*Gloriosa superba*).*



© Jaap Van der Werf

**Photo 4.5:** *“Mole traps” are one of the many trapping systems being used in the region.*

## Formal Management of Biodiversity

The status of the 13 protected areas in Equatorial Guinea is defined by the Forest Act (Nº. 1/1997 Title III), and Act Nº. 7/2003, which

replaces Law Nº. 4/2000 on Protected Areas (Obama, 2007).

**Table 4.5: Protected areas in Equatorial Guinea in 2008**

Protected area	Type	Area (ha)	Year of creation	Staff	Location
Caldeira de Luba	Scientific Reserve	51,000	2000	14 guards and 4 technical officers	Bioko Island
Playa Nendji	Scientific Reserve	500	2000		
Monte Alén	National Park	200,000	1997	26 guards and 4 technical officers*	Monte Alén – Monts de Cristal
Altos de Nsork	National Park	70,000	2000	4 guards and 4 technical officers*	Monte Alén – Monts de Cristal
Pico Basilé	National Park	33,000	2000		Bioko island
Piedras Nzas	Natural Monument	19,000	2000	2 guards	Monte Alén – Monts de Cristal
Piedra Bere	Natural Monument	20,000	2000		
Rio Campo	Nature Reserve	33,000	2000	5 guards and 1 technical officer*	
Monte Temelon	Nature Reserve	23,000	2000		
Estuario del Rio Muni	Nature Reserve	60,000	2000	2 guards and 1 technical officer	Monte Alén – Monts de Cristal
Punta Llende	Nature Reserve	5,455	2000	2 guards	
Corisco y Elobeyes	Nature Reserve	53,000	2000	2 guards and 1 technical officer	Corisco and Elobeyes islands
Annobon	Nature Reserve	23,000	2000		Annobon Island
<b>Total</b>		<b>590,955</b>		<b>57 guards and 15 technical officers</b>	

\* Part of the staff is supported through partner organizations.

Source: MPMA-FORAF, 2008.

To date, only one management plan has been produced, for the Caldera de Luba Scientific Reserve, by the Spanish Cooperation and the NGO *Amigos de Doñana*. However, during the fourth phase of the ECOFAC project, the management plan for Monte Alén National Park will be developed by the European Union, CI and the

State. Similarly, the management plan for Altos de Nsork National Park is being drafted, with financial support from CARPE, by ANDEGE and CI. This will also be the case for the Rio Campo Nature Reserve, where RAPAC is also providing support to ANDEGE (2008-2009).

### Economic Development of Biodiversity

Non-timber forest products (NTFP) are crucial for the entire population of Equatorial Guinea. Indeed, Obama (2000) indicates that NTFP represent around 42 % of household incomes in rural areas. This industry remains highly informal and concerns a large percentage of women, 90 % of them are either involved in production or trade (FAO-COMIFAC, 2007).

The NTFP sector is relatively lightly regulated although it is mentioned in the Environment Act (7/2003) and, more exhaustively, in the Forest Act (1/1997). Products in the NTFP sector include: condiments (*Piper guineensis*), wild fruits (*Dacryodes macrophylla*), medicinal plants (*Alstonia bonnei*, *Enanthia chlorantha*, *Elaeis guinensis*), bushmeat, bamboo (*Bambuza vulgaris*) and other handicrafts made of rattan (*Melongos*). The case of *Prunus africana*, an endangered species,

is unique as its production and trade are highly regulated. Most production is done by a company called APRA (*Aprovechamiento Productos Agrícolas*).

NTFP are widely present in local markets but are also exported to neighboring countries in significant quantities. Obama (2002) reports an annual export of 250 tons of *Piper guineensis* to Nigeria.

Tourism is very limited in Equatorial Guinea. The ECOFAC project facilitated the opening of a 10-room lodge in Monte Alén National Park. At this moment, this project is still very small, employing four guides and welcoming 45 tourists in 2007. Hotel capacity in Malabo and Bata has improved significantly in recent years.

## Conclusions

The Guinean forest is poorly known, and intensive logging over the past two decades has led to a general impoverishment of the forest, especially for good quality timber. While forests are becoming less interesting economically due to the scarcity of high value timber, they are becoming more interesting for conservation purposes. Led by local technicians and international NGOs (CI in particular), initiatives are being prepared to promote forest recovery. The State appears ready to engage in protecting landscapes and biodiversity. The exponential growth of oil revenues suggests that financial resources could be mobilized. But, before committing significant resources, it is necessary to better know the state of the forests in Equatorial Guinea, both in terms of forest stands and biodiversity.



*Photo 4.6: Non-timber forest products in a rural market.*

