

THE FORESTS OF THE CONGO BASIN

State of the Forest 2008

Highlights from the State
of the Forest 2008 Report

The full French and English
reports are available via:
CBFP (<http://www.cbfp.org>)
and COMIFAC (<http://www.comifac.org/>)

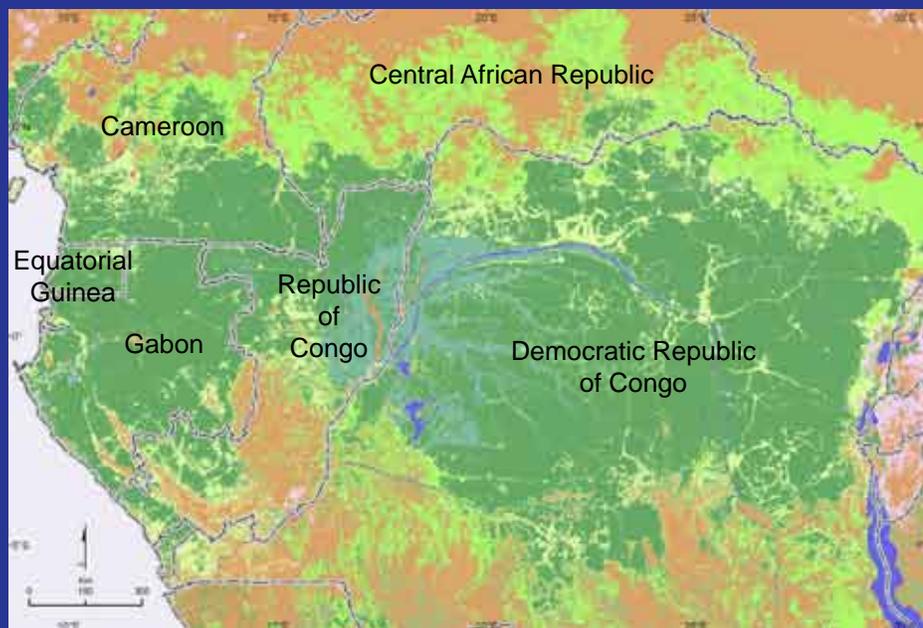
What is the State of the Forests in the Congo Basin?

The objective of the State of the Forest (SOF) report, a collaborative effort of the Congo Basin Forest Partnership (CBFP), is to answer this question. The SOF report provides CBFP members (states, international organizations, non-governmental organizations, private sector companies, research organizations) as well as international and civil society, reliable information to support both political and technical decision-making, with the overall objective of **improving the living conditions of populations and conserving biodiversity through improved forest management**.

The SOF report responds to the second axis of the Central African Forest's Commission's (COMIFAC) "*Plan de Convergence*" by bringing together actors concerned with monitoring forest resources to establish baselines and regularly present updated information on the state of forests in the Congo Basin. The 2008 SOF report incorporates indicators at three levels: regional, national and management unit (specifically, logging concessions and protected areas).

This brochure provides highlights of the full 2008 State of the Forest report, which features:

- **national and regional summaries** that examine the status and trends of forest cover, the management of production forests and the conservation of biodiversity;
- **regional thematic chapters** that present the most current information available on a series of environmental services; and
- **CBFP landscape chapters** that detail progress on land use planning and report on biological and socio-economic indicators.



The report examines the status of dense moist forest in the Congo Basin, focusing on six Central African countries: Cameroon, Central African Republic, Republic of Congo, Democratic Republic of Congo, Equatorial Guinea and Gabon.



Sources: UCL, JRC, SDSU, FORAF, 2008

*The State of the Forest report was a collaborative effort of over **100 individuals** representing a diversity of institutions and the forest administrations of the Central African countries. It benefited from financial support from the European Union, France, Germany, and the United States as well as the ECOFAC Program and UNESCO.*

National and Regional Summaries

Forest cover and change

- The overall deforestation rate in the Congo Basin from 1990 to 2000 was **0.17%**, significantly lower than FAO estimates for Indonesia (1.7%) and Brazil (0.5%).
- Net deforestation rates were highest in DRC and Cameroon. The relatively high population growth in these two countries exerts an increased demand for wood energy and land for agricultural development.



Formal forest sector and economic development

- In rural forest areas, the formal timber sector is by far the largest private employer.
- The sector's contribution to GDP has decreased, especially for countries where the oil sector has been growing, notably in the Republic of Congo, Gabon and Equatorial Guinea.
- The main destination of timber exports is the European Union. The importance of Asia is growing.

Sustainable forest management

- Forest governance is being improved through FLEGT (Forest Law Enforcement Governance and Trade), independent third party observers and timber certification and/or legality systems.
- The **FLEGT process** is working to establish bilateral **Voluntary Partnership Agreements (VPA)** between all the timber-exporting countries of the sub-region and the European Union.

- From zero in 2006, FSC (Forest Stewardship Council) certified forest had ballooned to **over 3 million hectares** in 2008.

Central African timber production in 2007

| Country | Production (m ³) |
|-------------------|------------------------------|
| Cameroon * | 2,296,254 |
| Republic of Congo | 1,330,980 |
| Gabon | 3,350,670 |
| Equatorial Guinea | 524,799 |
| DRC | 310,000 |
| CAR | 537,998 |
| Total | 8,350,701 |

* 2006 data

Source: Central African Forestry Administrations

Biodiversity

- In contrast to the Amazon Basin, large mammals continue to play an important role in the Congo Basin's forest ecosystems. Protected areas are central to their survival and since the launch of the CBF, Central African administrations have significantly increased the size and number of national parks.
- Despite the potential offered by the region's exceptional biodiversity, the biodiversity related tourist sector remains underdeveloped.

National Parks in Central Africa

| Country | No. of National Parks | Area (km ²) |
|-------------------|-----------------------|-------------------------|
| Cameroon | 15 | 26,824 |
| Republic of Congo | 3 | 21,892 |
| CAR | 5 | 31,887 |
| DRC | 7 | 82,400 |
| Gabon | 13 | 21,914 |
| Equatorial Guinea | 6 | 3,030 |
| Total | 46 | 187,947 |

Source: FORAF, 2008



Important Environmental Services

Payments for Environmental Services (PES)

The rationale behind PES schemes is simple: external beneficiaries of environmental services make direct, contractual and conditional payment to the owners or users of the sites if they adopt practices to secure the conservation/restoration of the ecosystem and thereby generate environmental services.

At present, focus is on three main environmental services: carbon sequestration, biodiversity conservation and watershed maintenance.



Water Resources

The Congo River basin is the largest basin in Africa with an area of approximately 4 million km² and an annual average discharge at Brazzaville of about 41,000 m³/s, second only to the Amazon. The river basin is a dense and complex hydrological network, including vast inundated forests and lakes. Among the hydrological services the Congo provides are navigation, fisheries, hydroelectric power generation and biodiversity habitat.



Hydroelectric Power

Hydroelectric power is the principal source of power in the Congo Basin. The installed hydroelectric power capacity (6,490 MW) represents only a small fraction of the estimated potential.

Fisheries

Fish are an important source of animal protein for rural communities.

The value of the catch from fisheries represents an important proportion of the gross national income in the rainforest zones in the Congo Basin.



Navigation

With outdated railways and relatively few roads, the complex system of waterways is vital for local economies throughout the Congo Basin.



Biodiversity



Bushmeat Trade

In the Congo Basin, large and medium-sized fruit and seed eating mammals, particularly apes, monkeys, ungulates (duiker, wild pigs) and elephants are known to play a key role in the regeneration of the forest. The bushmeat trade is leading to **unsustainable levels of harvesting** particularly with respect to large bodied, slow reproducing mammals. Opening up of the forest through road building and industrial extraction activities (particularly timber) are known to facilitate the bushmeat trade.

Wood Energy

Wood energy in Africa represents over **80% of total domestic energy** consumption and will continue to play a dominant role for decades to come in Central Africa. It is responsible for more than **90% of total timber harvesting** in forests and woodlands. Linked to ever-increasing and persistent urban poverty, wood energy consumption remains the main cooking method (and/or heating) in many Central African cities. Only in cities where gas is subsidized (e.g. Libreville) has there been a real change in consumption.

Importance of wood energy in DRC

| | Annual volume (x 1,000 m ³ /yr) ¹ | % | Economic value (x 1000 \$/yr) ² | % |
|-----------------|--|----|---|----|
| Formal sector | 500 | 1 | 40,000 | 4 |
| Informal sector | 5,000 | 9 | 50,000 | 5 |
| Wood energy | 50,000 | 90 | 1,000,000 | 91 |

Sources: (1) Van de Ven, (2) Debrox

For the megacity of Kinshasa (8 to 10 million inhabitants), wood energy supply is 5,000,000 m³ per year, almost exclusively from informal harvesting of degraded forest galleries within a radius of 200 km.



Non Timber Forest Products (NTFP)

More than 90% of the people of the Congo Basin depend to varying degrees on natural resources, including agriculture and non-timber forest products (NTFP), for food, medicine, income and timber.

Tourism

Mountain gorilla viewing in the Great Lakes region (Virunga volcanoes and Kahuzi-Biega) brings in millions of dollars annually for the three countries that share their range.



Carbon Stocks and REDD issues

COMIFAC countries are aware that the size and quality of their forests represent a huge responsibility for their own people and the whole planet. The idea behind the concept of **reduced emissions from deforestation and forest degradation** is to provide financial incentives to help developing countries voluntarily reduce national deforestation rates and associated carbon emissions below a baseline.

In the Congo Basin:

- Deforestation and forest degradation are historically low and that it will be difficult to reduce them significantly.
- Conservation and forest management play a clear role in forest preservation and justifies compensation.
- Forest management fulfills the triple functions of conservation, economic growth and poverty alleviation, and must be strengthened.



“An estimated 46 billion metric tons of Carbon are stored in the Congo Basin”

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The State of the Forest report estimates that **46 billion metric tons** of carbon are stored in the Congo Basin. Closed evergreen lowland forest represent more than 60% of the carbon stored in the sub-region, for only 38% of the area. Based on the estimation of deforestation between 1990 and 2005 (about 43,000 km²) and on the average Carbon stock of dense humid forests (145 tC/ha without considering soil organic carbon), the report estimates that the region has released approximately **0.62 billion metric tons** of carbon in 15 years.

Total Carbon stock estimates for the Congo Basin

| Land Cover Classes (LCC) | Area | Carbon pools (t/ha) | | | | Total C (million tons) |
|-------------------------------------|--------------------|---------------------|-------|-----|-----|---------------------------|
| | (km ²) | AG C | R/S | SOC | C | |
| 1. Closed evergreen lowland forest | 1,421,834 | 125 | 0.235 | 38 | 192 | 27,299 |
| 2. Swamp forest | 123,264 | 85 | 0.235 | 38 | 143 | 1,761 |
| 3. Sub montane forest (900-1,500m) | 63,100 | 68 | 0.235 | 38 | 122 | 770 |
| 4. Montane forest (>1,500m) | 9,754 | 68 | 0.235 | 38 | 122 | 119 |
| Total humid forest (1-4) | 1,617,952 | 147 | | | 185 | 29,949 |
| Closed deciduous forest (Miombo) | 304,808 | 42 | 0.275 | 38 | 92 | 2,791 |
| Mosaic forest/ croplands | 370,123 | 54 | 0.275 | 38 | 107 | 3,955 |
| Mosaic forest/ savannas | 588,011 | 14 | 0.42 | 38 | 58 | 3,403 |
| Deciduous woodlands | 630,890 | 21 | 0.322 | 38 | 66 | 4,149 |
| Grassland, shrub land, sparse trees | 392,414 | 5 | 0.42 | 38 | 45 | 1,770 |
| Congo Basin sub-region (TSR) | 4,048,470 | | | | | 46,016 |

C: Carbon; AG C: Above Ground Carbon; SOC: Soil Organic Carbon; R/S: Root/Shoot ratio
Source: SOF, 2008

CBFP Landscapes

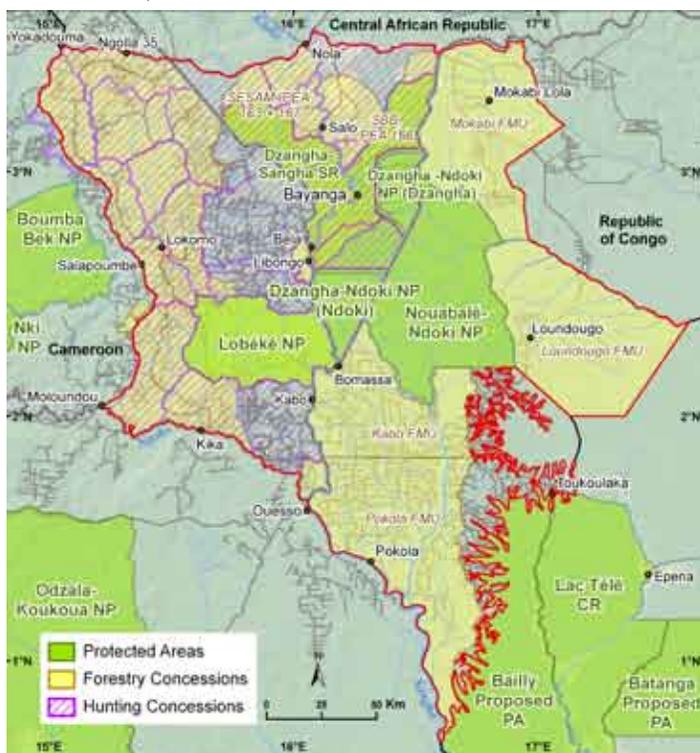
Land Use Planning

With 12 landscapes covering **839,128 km²**, CBFP partners are working to advance land use planning (LUP) across the Congo Basin. LUP incorporates opportunities for involvement by local communities, government, relevant industry and other stakeholders. Gaining consensus from these groups is essential to implement land use plans.

Landscape level planning incorporates different types of macro-zones: protected areas (PA), whose predominant purpose is the conservation of natural resources; community-based natural resource management (CBNRM) areas where communities have some form of natural resources use rights; and extractive resource zones (ERZ) which include forest concessions, large-scale private plantations, mines, safari hunting zones, and energy and transportation infrastructure.

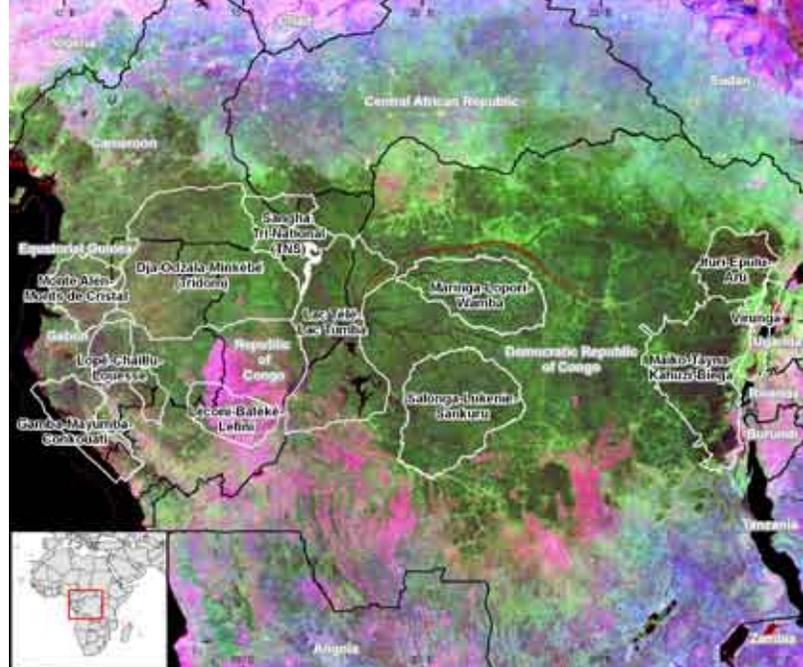
| Macro-zone | Number | Area (km ²) |
|--------------|------------|-------------------------|
| PA | 34 | 170,431 |
| CBNRM | 61 | 200,808 |
| ERZ | 34 | 137,368 |
| Total | 129 | 508,607 |

Source: CARPE, 2008



Source: SOF, 2008

With a landscape land use plan adopted by the governments of Cameroon, Central African Republic and Republic of Congo, activities in Sangha Tri National Landscape (above) are being supported in part through a conservation trust fund.



Sources: UMD-CARPE, SDSU, OSFAC, NASA, 2008

Large mammal and human impact monitoring

Since the early 1990's, it has been recognized that hunting, not deforestation, is the most serious threat to wildlife biodiversity in the region. Over **100 surveys** completed since the launch of the CBFP confirm the importance of



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protected areas to species like elephants, hunted largely for their ivory, and detail the status of great ape populations across the Congo Basin.

Human Livelihoods

Recognizing that human populations across the Congo Basin rely on local natural resources for their subsistence and as their principal source of income, the SOF report is working to track market indicators from the bushmeat trade and alternative activities, such as agriculture.



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"The 2008 State of the Forest report would not have been possible without the financial, technical and scientific support of many CBFP partners. This document reflects a strong desire for collaboration from partners that transcends institutional divisions and ideologies."

*Emmanuel Bizot (COMIFAC President)
Hans Schipulle (CBFP Facilitator)*



Federal Ministry
for Economic Cooperation
and Development

