

Lac Télé – Lac Tumba Landscape

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Introduction

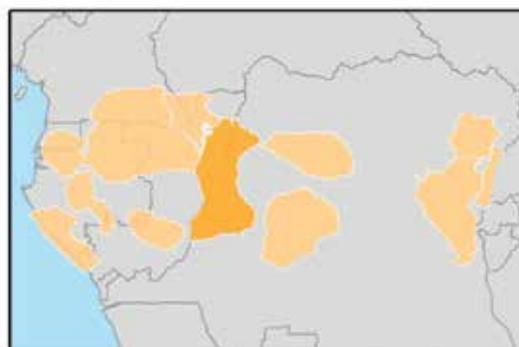
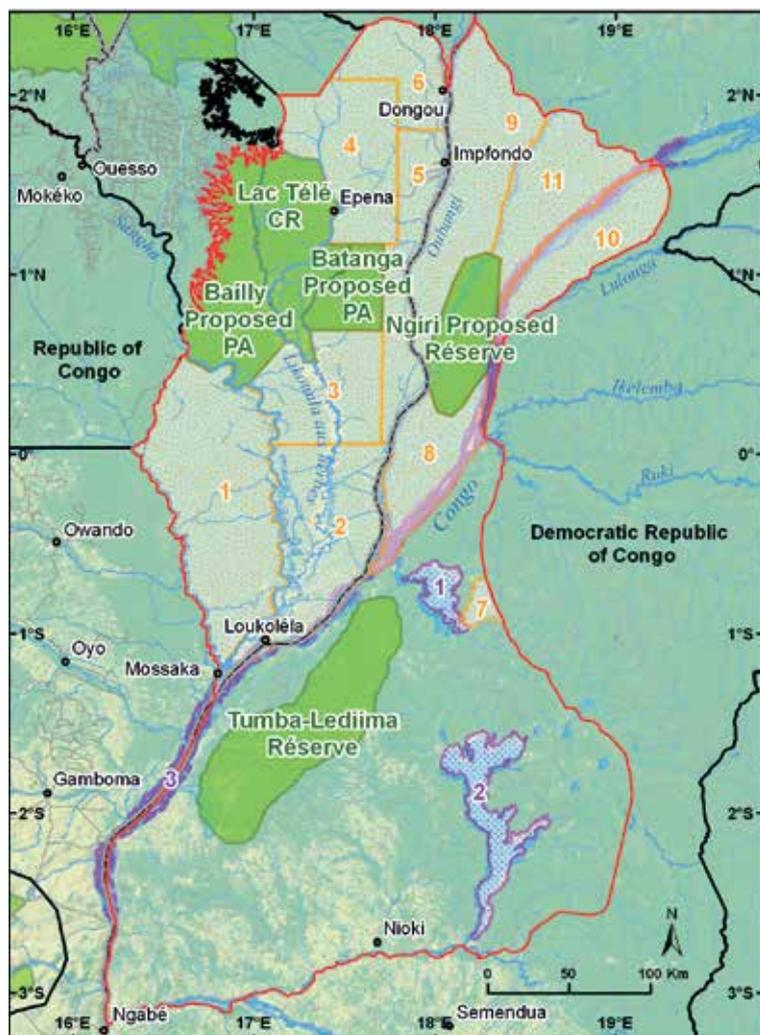
Situated at the centre of the Congo region, the Lac Télé – Lac Tumba landscape covers a surface area of 126 440 km² with 72 439 km² in the eastern part located in the Democratic Republic of the Congo (DRC) and 54 001 km² in the western part in the Republic of the Congo (RC).

The landscape is mostly humid forest – it is the second largest area of humid forest in the world, consisting of approximately 70 percent of swampy, seasonally flooded forest. The remaining 30 percent consists of dry land and

savannah. The landscape plays an essential role in the climate and hydrology of the Congo Basin, as well as in the management of water resources in Africa and the rest of the world.

Population

The landscape population is estimated at two million, with almost 800 000 living in the city of Mbandaka, i.e. 40 percent



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- 1 Mossaka Proposed CBNRM
- 2 Sangha-Liranga Proposed CBNRM
- 3 Bouanela Proposed CBNRM
- 4 Tanga Proposed CBNRM
- 5 Impfondo Proposed CBNRM
- 6 Dongou Proposed CBNRM
- 7 Bikoro-Itipo Proposed CBNRM
- 8 Bobangi Proposed CBNRM
- 9 Imese-Boboke Proposed CBNRM
- 10 Bolombo-Losombo Proposed CBNRM
- 11 Bomongo-Lubengo Proposed CBNRM
- 1 Lac Tumba ERZ
- 2 Lac Mai-Ndombe ERZ
- 3 Congo River ERZ



Lac Télé – Lac Tumba landscape

Photo by Julie Gagoë/RAFM

of the landscape's population. The rest of the population is mostly found in villages located on the shores of rivers and lakes. The southeastern part of the eastern section is inhabited by six different groups of Mongo, who cohabitate with a minority of indigenous populations (Pygmies and Batwa).

Vegetation

The Lac Télé – Lac Tumba landscape is one of the largest humid forest zones in the world and includes swampy areas. The northern part consists of a variety of forest types distributed as follows: mixed dry land forests, floodplain forests, swampy forests, limbali forests and secondary forests.

Deforestation

Because they are usually flooded, the forests of the Lac Télé – Lac Tumba landscape are not very affected by deforestation. Although no precise figures can be given due to the lack of specific studies, this area of the Republic of Congo is associated with very low deforestation and degradation rates. The current deforestation rates are estimated at 0.1 percent.

In the western section of the landscape, forests are still untouched because of their inaccessibility (on foot or by road). In the eastern section, deforestation has developed rapidly around the city of Mbandaka, both for construction and for firewood. Traditional or family agriculture, which is very commonly practiced in these forested areas, consumes a

lot of space and relies heavily on tree clearing. By order of importance, the direct causes of deforestation in the landscape are as follows:

- Non-sustainable tree felling and burning
- Non-sustainable production and consumption of wood-fuel
- Non-sustainable and even illegal timber logging
- Urban development

Biodiversity

Although a great number of mammals can be found in the Lac Télé – Lac Tumba landscape, the landscape biodiversity is characterized by its substantial populations of the three great African primates (gorillas, chimpanzees and Bonobo). Gorillas densities in western lowlands are among the highest in Central Africa. Recent studies have shown that the surroundings of Lac Tumba could be inhabited by almost 25 percent of the total known population. Great primate populations in the landscape are estimated at 13 000 gorillas, 3000 chimpanzees and 7500 Bonobo. In order to protect its exceptional biodiversity, the landscape has been divided into four protected areas:

- In the DRC:
 - Mabali Scientific Reserve
 - Tumba Lediima Natural Reserve
 - Ngiri Reserve
- In the RC:
 - Lac Tele Community Reserve (an extension has been proposed to better protect the biodiversity outside the current boundaries).



Fisherman on the Congo River, DRC

Photo by Olivier Girard/CIFOR

Threats

The biodiversity and natural resources of the landscape are increasingly threatened by intensive poaching coupled with habitat destruction which is driven by factors such as timber logging, non-sustainable subsistence activities, intensive fishing, road construction, bush fires, and the presence of refugees in the landscape.

- **Non-sustainable exploitation of natural resources for external markets:** bush meat and fish are supplied to the markets of Kinshasa, Brazzaville, Mbandaka, Bikoro, Inongo and beyond.
- **Non-sustainable timber logging for external markets:** focused on the most expensive forest species, in particular, *Mellitia laurentii* (or *wenge*, a black-colored hardwood). In the northern part of the landscape in the DRC, 14 forestry concessions were allocated during the past few decades. In 2002, a limitation was imposed on forest exploitation activities and on the emission of new permits. Unfortunately, despite the ban, timber logging continued unabated and permits were still being awarded during that period. A real call for concern is that the concession boundaries overlap with the Lac Tumba–Lediima Reserve, and hardly any of them have management plans. In the RC, only one concession of 112 000 ha has been allocated in Bois Kassa. This concession is now operational and a second is awaiting approval, together with the construction of a road along the Oubangui river.
- **Bush fires:** they occur across the landscape, in particular in the combined forest–savannah areas and along major

ivers. They destroy a substantial area of savannah and forest borders during the dry season.

Land use types

The landscape is now divided into 23 macro-areas, including four proposed protected areas, 13 areas of community management resources areas and six areas of natural resource extraction. These areas are currently being established as part of a land use planning process.

The establishment of a transborder Ramsar site in the landscape is also considered an important strategy for land use planning because it provides an opportunity for putting in place an international legal instrument.

Institutional partners

The main institutional partners managing the Lac Télé – Lac Tumba landscape are:

- FORAF (African Forests)
- OSFAC (satellite observation of Central African Forests)
- USAID's Central African Regional Program for the Environment
- Wildlife Conservation Society
- WCS (Wildlife Conservation Society)
- UMD-CARPE (University of Maryland- Central Africa Regional Program for Environment.)
- ICCN (Congolese Institute for the Conservation of Nature; it is the Congolese Wildlife Authority)
- World Wildlife Fund for Nature.

Opportunities, adaptation and REDD+

Because of their ability to store enormous quantities of carbon (and to absorb carbon dioxide), forests play an important role in strategies for mitigating and adapting to climate change. Conversely, deforestation accounts for around one-fifth of global greenhouse gas emissions.

In the Lac Télé – Lac Tumba landscape, deforestation rates are still quite low. However, the risk of deforestation (and thus greenhouse gas emissions contributing to climate change) could be aggravated by other factors, such as the growing urban demand for wood energy and other food stuffs, bushfires, non-sustainable exploitation of natural resources, and the lack of clearly defined land uses.

In order to fight against deforestation, which could destroy livelihoods and add to carbon dioxide emissions, the challenge is to protect and sustainably manage the forest while contributing to the economic and social development of poor human communities who depend on forest resources.

The two countries to which this landscape belongs have ratified the United Nations Framework Convention on Climate

Change (UNFCCC), and are equally fully engaged in the REDD+ process. In this context, information and awareness-raising campaigns are necessary, as well as research to improve our understanding of the vulnerability of forests and local communities, and thus help develop concrete strategies to adapt and preserve their livelihoods.

Challenges and constraints

The main challenges and constraints are:

- Uncontrolled hunting and fishing activities for commercial purposes
- Bush fires
- Unknown gorilla populations
- Incomplete herpetology knowledge
- Climate change, and hydrological disturbances as an additional challenge to problems such as poverty, poor health, lack of infrastructures and the need for alternative livelihoods
- Forest vulnerability to climate change and low adaptation capacity in the region
- Extreme climate events affecting the Basin forest ecosystems that constitute a strategic carbon sink to be protected.

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