



"ANTHROPIC ACTIVITIES AND SUSTAINABILITY OF THE NATURAL RESOURCES OF THE LOMAKO-YOKOKALA FAUNA RESERVE (RFLY) IN DR CONGO"

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INTRODUCTION

Located in the territories of Befale and Bongandanga, Sectors of Lomako and Bongandanga, in the provinces of Tshuapa and Mongala, the Lomako-Yokokala Wildlife Reserve "RFLY" covers an area of 3.625 km² and was created in June 2006. The flora of the RFLY is very diversified and is constituted by all classes of the plant kingdom from thallophytes to spermatophytes through pteridophytes. The reserve is also a refuge for almost all of the great diversity of species of the tropical forests of Central Africa such as: *Antiaristoxicaria*; *Annonidiummannii*; *Austranellacongolensis*; *Dialiumsp*; *Ficuspp*; *Gambeyalacourtianum*; *Pancovialaurentii*; *Parinari excels*; *Polyalthiasuaveolens*; *Treculiaafricana*. These species give this reserve the opportunity to become a natural laboratory for forest biodiversity studies. (Sankiana et al, 2018, Ntumba 2012, Omasombo 2011, MECNT 2006, Vande 2004)

Several wildlife species in the SFRY are important internationally for conservation. The most famous species of the RFLY are undoubtedly the bonobo (*Pan paniscus*), the Congolese peafowl (*Afropavocongolensis*), the bongo (*Trevelaphusspekei*) and the elephant (*Loxodonta africana*). Although the bongo and the elephant are found in other forests of Central Africa the bonobo and the Congolese peacock are endemic to the DRC and characteristics of the RFLY. (Sankiana et al, 2018, Sankiana 2012, Ntumba 2012, Omasombo 2011, Dupain et al 1996). Unfortunately, this site is threatened because of the growing needs of local communities that are leading slash-and-burn agriculture, the search for wood for energy thus causing deforestation, the loss of wildlife habitat; this threatens the extinction of the wildlife population and creates new opportunities for hunting for the production of bushmeat. (Sankiana et al, 2018, Sankiana 2012, Balimbaki 2012, Omasombo 2011, Vande 2004).

It is with this in mind that this study is initiated with the main objective of understanding how the activities related to the exploitation of natural resources are articulated and to evaluate their negative impacts on the natural resources of the Wildlife Reserve. from Lomako-Yokokala.

MATERIALS | METHODS

The methodology of research using the technic survey, supplemented by field observations and the analysis of documents and maps, led to the collection of in situ data from local populations (180 people), village chief (6), Group Leader (2), Area Manager (2), Territory Administrator (1), District Commissioner (1), RFLY Managers and local NGOs and partners of the RFLY.

OBJECTIVES:

- ❖ Inventory the various activities related to the exploitation of natural resources,
- ❖ Characterize the modes of access to natural resources,
- ❖ Describe their negative impacts on the Lomako-Yokokala Wildlife Reserve,
- ❖ Deduce the actors' perception of their sustainability.

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CONCLUSIONS

- ❖ The main findings that emerge from this study confirm the hypothesis according to which the populations bordering the RFLY get a substantial income by exploiting the reserve's natural resources by the practice of shifting agriculture, hunting, fisheries, small livestock and non-timber forest products and is economically dependent on it (100%). And that customary power is a key player in the process of land acquisition and access to natural resources in the province (100%).
- ❖ With significant population growth around the RFLY, there is strong pressure on natural resources to meet the daily needs of the local population. However 82% of the respondents believe that the natural resources have decreased considerably, because of the action of the man on the nature. Even if people recognized their harmful actions on nature, 73% of them feel they have no choice because natural resources remain their only source of income. 18% of people think that in any case it would be difficult to see the total disappearance of natural resources, which are still regenerating.

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* Activities related to the exploitation of natural resources

The activities related to the exploitation of the natural resources listed in the RFLY are the following: agriculture, hunting, fishing, gathering and breeding.

* Mode of access to natural resources

- ❖ 64% of respondents recognize the ban on the exploitation of natural resources in the RFLY. But claim, on the other hand, that the forest use rights of the neighboring populations give them access to the Reserve to exploit natural resources.

* Perception of actors on the sustainability of natural resources

- ❖ 82% of respondents believe that natural resources have decreased considerably as a result of human activities.
- ❖ 85% of respondents confirm that all these activities have led to deforestation, loss of soil fertility, loss of wildlife habitat, threaten wildlife populations and create breakthroughs for bush meathunting.
- ❖ 73% of the populations recognized their harmful actions on natural resources but they feel they have no choice because natural resources remain their only source of income.

RESULTS

* Impact of activities on natural resources

- ❖ Shifting cultivation, consisting of crop fields, contributes to the decline of the reserve's biodiversity and causes the loss of the mineral elements that the soil needs for its fertility.
- ❖ Hunting, consisting of traps, sockets and arrows, is the most common human activity in the RFLY and also in other protected areas of the DRC's entire network of protected areas. This activity is so damaging that animal species may disappear if adequate protection measures are not taken.
- ❖ Fishing, consisting of fish net, river barrier, scooping and river poisoning, is a disruptive factor of the Reserve's fish fauna because it is practiced all year round without taking into account seasonal fluctuations and places fish spawning while using the nets of different meshes not respecting the regulation.
- ❖ Harvesting with technics that have remained rudimentary is likely to affect the self-regenerating power of the species, hence their disappearance or rarefaction.