

# The Challenges of Decentralized Management of the Ngoyla-Mintom Forest Massif (South-East Cameroon)

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**Abstract**— This research is based on the participatory appraisal of the Ngoyla-Mintom Forest Resources Conservation and Sustainable Use Project. It allows the various stakeholders met to take stock of the success factors of the decentralized forest management project implemented in their region and the constraints related to its ownership. The grid for this participatory assessment is based on the framework for assessing the effectiveness of the management of protected areas developed by Hockings et al (2006) on behalf of the World Commission on Protected Areas (WCPA). This involves measuring the following six key aspects: the context for creating a protected area (potential and threats); site management planning; inputs (inputs - resources or means of action); the management process; the outputs in terms of immediate effects (outputs) and finally, the results in terms of sustainability (outcomes). The choice of this evaluation framework is justified by the fact that it has become the world benchmark for the management of protected areas and fits well with the purpose of this study. This reflection is based on data from secondary and primary sources. The main results obtained show that the impacts of the Ngoyla-Mintom Project are globally positive in ecological and socio-economic terms. As for the impacts on the living environment, we are witnessing the regeneration of flora and the repopulation of wildlife species.

**Keywords**— Ngoyla-Mintom, protected areas, forest massif, decentralized management.

## Les enjeux de la gestion décentralisée du massif forestier de Ngoyla-Mintom (Sud-Est Cameroun)

**Résumé**— La présente recherche repose sur l'évaluation participative du Projet de Conservation et d'utilisation durable des ressources forestières de Ngoyla-Mintom. Elle permet d'amener les différents acteurs rencontrés à faire le point sur les facteurs de succès du projet de gestion forestière décentralisée implanté dans leur région et les contraintes liées à son appropriation. La grille de cette évaluation participative s'inspire du cadre d'évaluation de l'efficacité de la gestion des aires protégées élaboré par Hockings et al (2006) pour le compte de la Commission Mondiale des Aires Protégées (CMAP). Il s'agit de mesurer les six aspects clés suivants : le contexte de création d'une aire protégée (potentiels et menaces) ; la planification de la gestion du site ; les intrants (inputs — ressources ou moyens d'action) ; le processus de gestion ; les extrants en termes d'effets immédiats (outputs) enfin, les résultats en termes de durabilité (outcomes). Le choix de ce cadre d'évaluation se justifie par le fait qu'il est devenu la référence mondiale en matière de gestion des aires protégées et cadre bien avec l'objet de la présente étude. La présente réflexion se fonde sur les données de sources secondaires et primaires. Les principaux résultats obtenus révèlent que les impacts du Projet Ngoyla-Mintom sont globalement positifs au plan écologique et socio-économique.

*Quant aux impacts sur le milieu de vie, on assiste à la régénération de la flore et au repeuplement des espèces fauniques.*

**Motsclés**— Ngoyla-Mintom, aires protégées, massif forestier, gestion décentralisée.

## I. INTRODUCTION

Since the resolutions of the Earth Summit held in 1992 in Rio de Janeiro, Brazil, the participatory approach now tends to be at the center of policies for the conservation and sustainable management of forest ecosystems, especially in developing countries, many of which depend on them. Today, following the observations that biodiversity is decreasing and becoming more and more valuable, sustainable and rational management is undeniable. This is all the more justified as ecosystems are now strongly threatened by excessive logging, destructive practices such as poaching, extensive and shifting slash-and-burn agriculture, as well as climate change. As a result, the planning and management of protected areas have undergone reforms in recent decades. In the past, they were characterized by the monopoly of the central government and were carried out on the basis of radical conservationism and the exclusion of local populations living in or near many protected areas (Roulet, 2007). This

is the reason why, in chapter fifteen of the Convention on Biological Diversity, it is emphasized that the participation and capacity building of local communities are essential elements for the protection and sustainable management of ecosystems in situ. As part of this study, the implementation of the Project for the conservation and sustainable management of forest resources in the Ngoyla-Mintom forest was assessed. It made it possible to assess the degree of involvement of local populations.

## II. METHODOLOGY

The Ngoyla-Mintom forest massif is located between the eastern and southern regions of Cameroon (Fig. 1). In 2010, the Eastern Region had 801,968 inhabitants spread over 109,002 km<sup>2</sup>, or 7.4 inhabitants per km<sup>2</sup>. The southern one, which covers 47,191 km<sup>2</sup>, had 692,142 inhabitants, or an average density of 14.7 inhabitants per km<sup>2</sup> (BUCREP, 2010). They are the least densely populated regions of Cameroon.

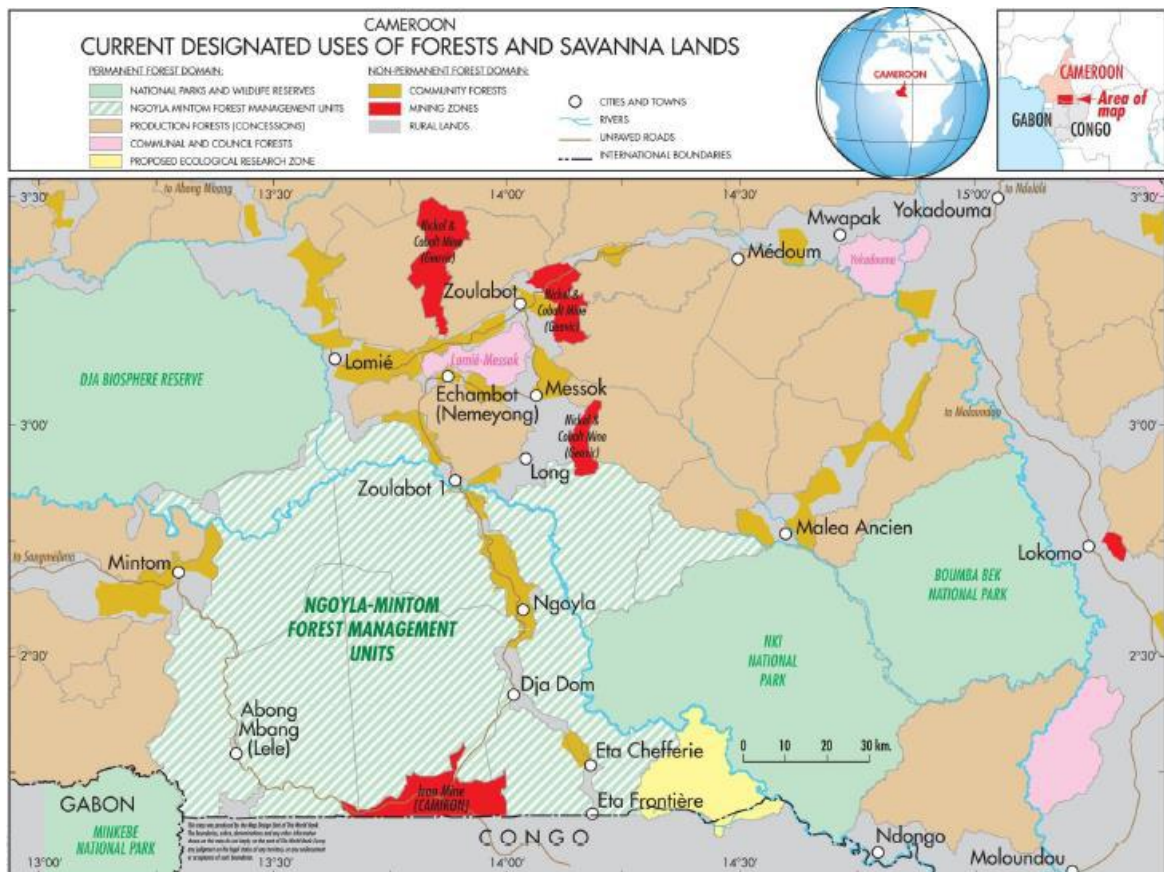


Fig.1: Location of the Ngoyla-Mintom Technical Operational Unit

Funded by the World Bank, the Ngoyla-Mintom Project aimed to develop and contribute to the sustainable management of the conservation core of the Ngoyla-Mintom forest massif for the benefit of local and indigenous populations. This project built on Cameroon's Vision 2035, which recognizes that planning and management of land use is essential to ensure integrated and sustainable development. In the same perspective, it proposes to put in place contractual obligations for the joint management of space by the main players: the State and decentralized authorities, the private sector and communities bordering the forest.

The project was also supported by the "rural sector" component of Cameroon's Growth and Employment Strategy Document (DSCE) 2010-2020, one of the objectives of which is to ensure better use and management sustainable natural capital, the basis of production. Indeed, the choice of the Ngoyla-Mintom massif as an experimentation site for the decentralized management of protected areas illustrates the political will of the Cameroonian Government to sustainably promote local development.

In order to carry out this evaluative research, use is made of existing documentation, direct observation, group interviews and individual interviews. Thus, twenty-one (21) group interviews were carried out, ie one hundred and ninety-one (191) informants and in addition to the group interviews. In addition, individual interviews were conducted in order to triangulate the information. In total, fifty-eight (58) individual interviews were carried out with the following people: four project managers (4), a representative of the development committee of each Municipality (4), twenty-eight (28) representatives of the services decentralized government and twenty-two (22) local actors (mayors, municipal councilors and heads of villages / districts). Research continued at the Project Management Unit level on an ongoing basis as needed. It should be remembered that our research is qualitative. As such, qualitative data analysis - the best known of which is content analysis - is considered to be the most popular method for examining interviews and qualitative observations.

### III. RESULTS AND DISCUSSIONS

#### 1. Contextualization of the Ngoyla-Mintom project

The Ngoyla-Mintom project is an alternative that can both help conserve the region's precious forest ecosystems and improve the living conditions of neighboring populations. On the legal and institutional level, the project was financed by the Global Environment Facility (GEF) under

a partnership agreement for a period of four years with an extension of 9 months, from 2013 to 2018. The main achievements of the project are summarized in the following seven points:

Studies on the regional profile: these focus on the biophysical, socio-economic and socio-cultural aspects of the area which have made it possible to orient the actions of the project.

- Training of local actors: it covers various modules related to decentralized forest management (participatory management of natural resources, participatory mapping and zoning techniques, ecological inventory and monitoring techniques, the concept of project, management of organizations, management of microcredits, etc.).
- Mapping and zoning of the territory: it is a participatory process.
- The establishment of decentralized structures.
- The implementation of sustainable forest management tools. These tools are multiple and can be summarized as follows:
  - o local forest management plans designed and implemented;
  - o awareness campaigns as environmental education;
  - o community monitoring of natural resources through actions to combat wildlife poaching and forest fires;
  - o the introduction of agroforestry and new techniques for the sustainable exploitation of forest resources; finally, the development of a master plan for the integrated management of the biodiversity of the Ngoyla-Mintom forest massif, awaiting its finalization with a view to implementation.
- The establishment of a financing mechanism: this is an accompanying measure aimed at promoting socio-economic and conservation activities.
- Promotion of social infrastructure.
- The project has produced ecological and socio-economic. These impacts were also analyzed, in order to assess their relevance and sustainability.

With regard to the impacts on the living environment, there is a gradual restoration of the ecological balance. In other words, we are now witnessing the regeneration of flora and the repopulation of wildlife species thanks to certain

strategies adopted and applied by the project. These strategies, which mainly focus on community awareness and surveillance, are deterrents. With regard to the flora, the determining factors having contributed to its regeneration are multiple. So we have, the zoning having aroused among the local populations a feeling of belonging to their living environment, as well as an environmental awareness;

- the application of new agricultural techniques linked to local traditional practices;
- combating bush fires;
- rational and sustainable exploitation of timber and non-timber forest products;
- forest management of private plots;
- the creation of a wildlife reserve and areas of hunting interest under community management.

The above factors have had positive effects on wildlife. However, the fight against poaching is one of the effective deterrent strategies that have favored the increase in the density of animal species, including those in danger of extinction such as elephants, large primates (gorilla and chimpanzee), among others. The two tools that made it possible to measure this wildlife density are the inventory and the ecological monitoring.

Socio-economically, the implementation of the project has generated significant benefits for the local communities, as well as for the whole region. In fact, the financing of income-generating activities via microcredits and the subsidy of social infrastructure, have contributed to improving the quality of life of neighboring populations. The indicators of the impact of microcredits are among others: job creation, increase in household purchasing power, increase in returns from the various economic activities promoted.

In short, the ecological and socio-economic impacts of the project are generally adequate. Its establishment has brought a lot to the population in terms of awakening environmental awareness and sustainable development. Because, all the actors met are unanimous and determined to perpetuate the achievements of the project. The decentralization of the project therefore made it possible to make local actors more responsible in the process of sustainable forest management in their territory.

It emerges that the decentralized management model of the Ngoyla-Mintom forest massif constitutes a great collective experience of sustainable development whose success factors are tangible. However, although this pilot project is generally positive, it also has contradictions and negative

side effects despite the good intentions. In other words, this study identified the strengths and weaknesses of the Project. These are the positive and negative aspects below.

## **2- The positive aspects of the Project**

The analysis of the process of appropriation of decentralized management methods of the Ngoyla-Mintom forest has identified four main factors that have enabled local actors to appropriate the achievements of the project. These factors are strengths and are summarized below.

### **2.1- The dynamics of the actors**

The dynamics of the actors as a positive factor of the project can be explained by the total transfer of the achievements of the project to local actors. This transfer has encouraged the emergence of local leadership through community initiatives for the development and integrated management of the massif's natural resources. The empowerment of local actors in the decentralized management of their forest heritage has created favorable conditions for a real appropriation of the assets bequeathed to them.

### **2.2. The contribution of the training of the various actors**

Within the framework of this project, the empowerment of local actors constitutes an incentive measure to take charge of the management of the massif. To this end, the local actors succeeded in effectively managing the achievements of the project thanks to the various appropriate trainings from which they benefited. These trainings covered several modules, including: - participatory and decentralized management of natural resources with the aim of strengthening the skills of local actors; leadership training aims to empower members of community structures for eco-development; training in basic accounting techniques consisting in building the capacities of managers of community enterprise funds granted to populations as grants. Moreover, they appreciate the acquired knowledge very well and still ask for additional training to improve their shortcomings in order to be more efficient.

### **2.3. The contribution of the financing mechanism**

Taking into account the testimonies of the various actors interviewed, it must be admitted that the mechanism played a catalytic role in the influence and anchoring of the Ngoyla-Mintom project despite the inconveniences caused by the microcredits granted, in particular the legal prosecution of borrowers. insolvent. Managed by representatives chosen by the local communities themselves, the mechanism enjoys great power in the sense that as an accompanying measure, it sealed the acceptance of the philosophy of the project, recreated a sense of

interdependence between village communities and the resources of their land. This mechanism therefore made it possible to build trust between the project and local communities and to reduce the pressure on natural resources by creating jobs and alternative sources of income. According to local administrative authorities, the microloans injected large sums of money into the area, helping to keep the regional economy going.

#### **2.4. The importance of participatory zoning of the forest massif**

It emerges from this study that zoning is an effective tool for decentralized forest management. Because, all the local actors interviewed are unanimous in recognizing that the limits of the zoning of each unit are generally respected and the populations are even jealous of them. In addition, we are now witnessing a change in mentality and environmentally friendly behavior. For example, today the populations monitor the activities of hunting, fishing, logging and non-wood forest products which previously took place in an anarchic manner. In addition, people now recognize the potential value and benefits that can be derived from the sustainable management of forest ecosystems. This positive cultural turnaround is an asset for the Technical Operational Unit concerned. Compliance mechanisms for legal texts relating to biodiversity, which are difficult to apply by the State, have become more operational through community ecodevelopment organizations.

As this project is considered as a pilot experiment in the operationalization of sustainable development, its full ownership and sustainability by local actors requires a few decades of intervention with significant resources. There are still major constraints that may hamper its viability. These constitute challenges inherent in the decentralized management of the Ngoyla-Mintom forest massif. These include financial, material and managerial constraints.

#### **3. The paradoxes and conflicts of the project**

Although the decentralized management model of the Ngoyla-Mintom forest massif is generally a success, this study made it possible to identify negative aspects that can be qualified as paradoxes, contradictions, conflicts of vision or of interest in the context of the use of this approach within this project. pilot. These weaknesses constitute major challenges likely to endanger the sustainability of the achievements of the project and challenge the theories associated with participatory governance. These aspects can be summed up in two points.

#### **3.1. Financial and material constraints**

The financial and material imperatives impute effects on the maintenance of the achievements of the project. In the case of the Ngoyla-Mintom forest massif, the second phase of the project not being funded, this prevents the consolidation of its achievements as well as the implementation of the master plan for the development and integrated management of forest resources. As the saying goes, money is the crux of the matter and no large-scale development project, centralized or decentralized, can succeed without sufficient or minimal financial support. This is an essential condition that is not always met, especially in the African context.

#### **3.2. Managerial challenges**

Finally, managerial challenges constitute a significant issue that was mentioned by a majority of the stakeholders questioned. These include the problems that hamper the proper functioning of the financing mechanism, the main source of sustainable income put in place. These problems particularly concern the legal proceedings instituted against the beneficiaries of microcredits and frequently deplored by the entire population. In this regard, our study reveals that although the financing mechanism is a powerful tool for local development that is highly appreciated, it has also negatively affected a part of the population through a debt process causing humiliating and frustrating legal troubles. These are unforeseen side effects likely to ruin the support or ownership of the local populations for the project, which is essential in a decentralized management project (Gumuchian et al. 2003).

### **IV. CONCLUSION**

At the end of this analysis, the decentralized approach advocated within the framework of the Ngoyla-Mintom project responds well to the beginnings of an overall sustainable development based on ecological, economic and social concerns. To this end, the redistribution of responsibilities, a direct consequence of decentralization, is a guarantee of success since a real change in behavior can only be envisaged by strengthening the feeling of belonging of the populations to their living environment and an appropriation of the decision-making and management mechanisms of their environment. Beyond that, is the future of protected areas in sub-Saharan Africa not conditioned by good environmental governance by all the actors concerned? It is important to consider prospective studies in various areas related to decentralization for wealth creation. The comparison between decentralized and community forest resource

management models promotes the sharing of experiences and knowledge in this area.

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