Forest and protected area management in Cameroon

Progress has been significant, but challenges remain

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AMEROON is located in Central Africa and is often considered as Africa in miniature due to the presence of various types of ecosystems and climates within its frontiers. Cameroon ranks fifth in terms of biological riches in Africa after Democratic Republic of Congo, Madagascar, Tanzania and South Africa (McNeely, 1988). Cameroon's forestry sector policy is considered one of the most advanced in the Congo basin (Carret 2000, Karsenty 2006). It was the first country to have produced and implemented a coherent forest code in the sub-region, immediately after the World Summit on Sustainable Development held in Rio de Janeiro (Brazil) in 1992. The elaboration of sector policies relating to the conservation of biodiversity and sustainable development in Cameroon mainly includes the Forest and Wildlife Policy (enshrined in the Forestry and Wildlife Law No 94/01 of 20.01.94) and its various implementing decrees, the objectives of which include:

- protection of the nation's forest and wildlife heritage by participating in the conservation of the environment and the preservation of biodiversity in a sustainable manner, as well as renewing the forest and wildlife resources through better management;
- regular supply of forest and wildlife Photo: T.J. Cl products in a sustainable manner for present and future generations; and
- involvement of rural populations, partners and stakeholders in its implementation, notably by the ownership of community forests.

Cameroon's forest code is interesting because it takes into consideration the three main dimensions of the sustainable use of forests as formulated by the convention on biological diversity: the ecological, the social and cultural and the economic dimensions.

Growing for posterity

 Table 1: Protected areas and hunting zones in Cameroon

1995	2003	2007
7	10	14
7	6	6
3	3	3
-	1	1
_	45	62
4 264 803	7 211 800	8 138 800
9.0	15.2	17.1
	7 7 3 - - 4 264 803	7 10 7 6 3 3 - 1 - 45 4 264 803 7 211 800



Road to recovery: Forest concession in Cameroon's East Province five years after logging. The large tree in the middle is *Irvingia gabonensis*, the fruits and seeds of which are highly sought-after by local people for food and income generation. *Photo: T.J. Chupezi*

Dimensions of forest products use

In Cameroon, the evolution towards the sustainable use of forest products can be classified into five main dimensions: ecological, social, economic, institutional and technical. For sustainable forest management to be achieved, the social, economic and ecological aspects need to be properly integrated and understood by all stakeholders involved in the forest sector of Cameroon (Tieguhong and Ndoye, 2008).

Ecological dimension

The ecological dimension aims to promote and guarantee the conservation of forest resources for future generations. To this end, the Cameroon government carried out several logical steps: national inventory conducted to acquire better knowledge of the resource; the zoning of the country and land distribution into various land uses; and the enhancement of forest and wildlife control and monitoring mechanisms. The national inventory, conducted during the 1980s, led to the division of the forest zone into two main domains, namely the permanent and the non-permanent forest domain. The permanent domain comprises production forests also known as forest management units

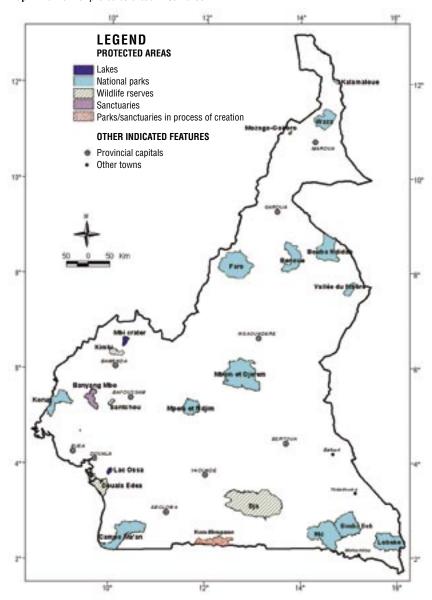
(FMUs), council forests, protected areas and hunting zones. The non-permanent domain is composed of land allocated for agricultural activities, community forests, community hunting and agroforestry zones.

Forest management units (FMUs) are assigned for the sustainable production of wood and other forest resources (eg. non-timber forest products) while maintaining conditions that ensure the preservation of forest ecological, environmental, and sociological functions. To date, a total of 83 FMUs have been allocated covering a total area of 1 835 367 ha. Two FMUs are in the process of allocation and nine have been reserved for the conservation of biodiversity. In the process of allocating a FMU to a given company, a preliminary three year agreement is signed between the forest administration and the timber company. The terms of this preliminary agreement states that the timber company has to produce, within three years of the agreement, a management plan in respect to the norms and regulations indicated in the forest law. At the end of the preliminary agreement, a definitive agreement is then signed between the timber company and the Cameroon government for a period of 15 years, renewable. More than 20 timber companies have produced their management plans, some of which are in the process of validation by an inter-ministerial Committee established to this end. The implementation of the management plan requires the company to respect the area of the forest to be exploited per year (blocks of about 2500 ha) and to respect the minimum exploitable diameter (DME) specified for each species. Community forests (about 5000 ha) are also exploited according to guidelines prescribed by what is known as a simple management plan. The community to which the forest is allocated has three main responsibilities including respect of the forest area to be exploited annually (one year exploitation block), respect of the minimum exploitable diameters for all tree species, and respect of the total volume of timber to be harvested.

Apart from production forests, protected areas and hunting zones are the other components of the permanent forest domain in Cameroon. The main target of the Cameroon government regarding biodiversity conservation is the transformation of 30% of the total land area into protected areas. The creation of national parks, nature reserves and zoological gardens represented the first direct involvement of the public sector in biodiversity conservation in the early 1930s. To date, the government has created 14 national parks, seven wildlife reserves, three zoological gardens, and one gorilla sanctuary (the latter with ITTO support). This gives a total of 25 protected areas covering a total area of 3 425 610 ha. In the foreseeable future, the gorilla sanctuary of Mengame covering some 95 616 ha will be transformed into Mengame complex, divided into the gorilla sanctuary and the national park of Nkom. The government also plans to create a sanctuary for great apes in the Ndeng Ndeng forest of East Province.

Well distributed

Map 1: Network of protected areas in Cameroon



The creation of sport and community hunting zones within the protected area network of the country has recently accelerated. A total of 43 hunting zones and 19 community hunting zones have already been created. Combining protected areas and hunting zones gives about 8 138 800 ha or 17.1% of the country's permanent forest domain under some form of protection or control. *Table 1* shows the evolution of the number of protected areas and hunting zones since 1995 in Cameroon. The national network of protected areas is made up of areas classified under different legal status and corresponding to the various levels of protection according to the IUCN classification.

Map 1 shows the network of protected areas in Cameroon including the 14 national parks, six of which have well-elaborated management plans. These are Waza, Benoue, Campo Ma'an, Korup, Mbam/Djerem, and Lobeke national parks. The management plans of three other protected areas (Dja, Mengame, and Nkom) are being finalized.

Less fraud, more money

Table 2: Forest taxes since the creation of the Forest Revenues Enhancement Program

YEAR/PERIOD	AMOUNT OF REVENUE (in billions of FCFA)	% INCREASE OVER 1999 FIGURE
1999	11	-
2000 – 2001	27	145
2001 – 2002	38	245
2002 – 2003	39	255

Source: PSRF 2004

Social dimension

This dimension states that local people may participate in the management of forest resources and may profit from the exploitation of those resources. Concrete measures undertaken by the Cameroon government in this direction include the obligation of timber companies or wildlife companies to develop social benefits and/or infrastructure in villages adjoining their areas of operations. This may involve creating schools and health centers for the benefit of the local communities, or paying a specified proportion of the annual forestry tax (redevance forestière annuelle) to local communities. The annual forestry tax is based on the area of the forest under exploitation. This tax is shared between the public treasury or the forest administration (50%), the local council (40%), and local communities (10%). The annual forest tax exists for both timber and wildlife (hunting) sectors (Kamga-Kamdem and Tiebou, 2006).

Experimental measures underway to protect wildlife include the involvement of local populations in the management of protected areas and the granting of community forests and traditional hunting concessions to local communities (Kamga-Kamdem and Tiebou, 2006). The Cameroon government intends to transform protected areas into pools of development, which provide alternative sources of livelihood for those who currently depend on poaching. To date, a total of 19 community hunting zones have been allocated to local people by the government.

Economic dimension

The exploitation of forest resources should contribute to the national budget. To achieve this objective, the Cameroon government revised the forest sector and initiated a forest fiscal reform (FFR) in the allocation of forest concessions. This was not easy, since the FFR did not only aim at increasing tax rates, but also to ensure the conservation of forest products through the implementation of reduced impact logging techniques. Although increasing tax rates was an unpopular measure, the goals of the FFR, (generating revenue and providing incentives for environmentally sustainable resource use) are widely accepted. These goals could only be achieved by other measures such as enhancing the enforcement and efficiency of existing fiscal measures as well as implementing the competitive allocation of concessions.

Cameroon has an estimated forest cover of 22 million hectares of dense forest. With recent economic crises,

the importance of the forestry sector generally, and the industrial use of timber, in particular, have increased within the national economy. The forestry sector contributes over 10% of GDP and 30% of export income.

According to Sholl (2005) and Betti (2007) a fair forestry tax should increase forest revenues while conserving forest resources. The Cameroon government sought this balance through two important measures: the allocation of FMUs through competitive bidding and by the creation of the Forest Revenues Enhancement Program (FREP). The competitive allocation of FMUs ensures higher revenue generation, greater efficiency and fairer allocation of harvesting rights. The creation of the FREP in 1999 aimed to combat fraud in the payment of taxes and to ensure an increase of the contribution of forest revenues to the national budget. During the early years of implementing the FREP, forest revenues increased from 11 billion FCFA in 1999 to 39 billion FCFA in the 2002–03 fiscal year, a 255% increase (see Table 2).

Institutional dimension

Cameroon experienced a serious economic crisis in the 1980s and early 1990s but with the positive completion of its 1997-2000 three-year economic recovery program the government submitted an application to the Heavily Indebted Poor Countries (HIPC) initiative of the International Monetary Fund and the World Bank to reduce its public debt, which in October 2000 was accepted. The period of economic crisis was characterized by increased poverty and a deterioration in public morality (including high levels of corruption) with consequences on governance structures. To reverse these negative trends, the Cameroon government formulated both poverty reduction and good governance strategies. These strategies targeted all sectors of Cameroon's public life including the forestry sector. Given the potential contribution of the forestry sector to poverty alleviation, the Cameroon government included the sector in its Poverty Reduction Strategy Paper (PRSP).

The government focused on the formulation and adoption of a modern legal and regulatory framework for forest resource management with key elements enshrined in the 1994 Forestry, Wildlife and Fishery Law and its various implementation texts. The institutional framework was improved with the creation of the Ministry of the Environment and Forestry (MINEF), now the Ministry of Forestry and Wildlife (MINFOF). The government also created the Programme to Secure Forest Revenue (PSFR) that links MINEF/MINFOF to the Ministry of the Economy and Finance (MINEFI) with the aim of ensuring better collection of tax revenue from logging activities. MINEF set up an Urgent Action Programme (UAP) for the monitoring and regularization of logging concessions, with the aid and supervision of the donor community.

To ensure the control of logging and the protection of wildlife in the country, the forest administration created a National Brigade for the Control of Forest and Wildlife, which works closely with an independent national observer (Global Witness). The objective is to ensure conformity with Cameroon's forest law and to promote sustainable exploitation of timber and the sustainable exploitation of non-timber forest products (NTFPs). The forest code also aims to diversify and ensure that value is added to most forest resources. This has led to the establishment of appropriate and high performing processing units (industries), and to studies aimed at balancing industrial capacity with the availability of resources. Other related measures and rules include:

- the prohibition of log exports for many tree species;
- the implementation of additional taxes on log exports for the remaining tree species; and
- the obligation of logging companies to install a processing unit.

Following these measures, the number of forest industries increased, log exports declined and the volume harvested per hectare stayed relatively constant.

Technical dimension

A Computerised Forestry Information Management System (SIGIF) has been established which enables the partial monitoring of most forestry activity. Procedures for formulation, approval and monitoring of management plans are in the process of being developed. The Allocation Planning Strategy, adopted in June 1999 and revised in June 2000, is being implemented. The procedures for allocating concessions and sales of standing timber have resulted in greater transparency, thanks partly to the presence of an independent observer. This improvement in transparency is resulting in increased tax revenue from forestry. Certification and timber tracking tools are coming into the limelight in Cameroon with four logging companies already in possession of the Forest Stewardship Council (FSC) certificates and many others trying to follow suit by improving their operational, technical, social and ecological performance in the field. Sustaining this trend will mean a better future for sustainable forest management in Cameroon.

Conclusion

Sustainable forest and wildlife management is becoming a reality in Cameroon, especially with the implementation of the concession auction system and the creation of a significant number of protected areas with technical experts overseeing management. Cameroon has over the past two decades made institutional reviews of the forestry sector to enhance strategies for monitoring logging operations and protected areas. The need to strengthen capacities has resulted in several organizational metamorphoses shaping and reshaping the ministry in charge of forests as well as encouraging the participation of civil society in forest and wildlife management.

Collaboration and fine-tuning of management requirements by concessionaires, civil society and the public are yielding their first results, notably with the issuance of FSC certificates. A number of forest offences remain unresolved or difficult to resolve but with proper motivation of an adequate numbers of foresters and technicians, the future of forest management in Cameroon should be assured. Poor salary structures in the public sector still create the incentive for corruption, which once rooted is extremely difficult to exterminate. Problems also remain in ensuring equitable sharing of benefits with local communities and ensuring that the negative impact of logging on the availability of useful plant and animal products is minimized (Tieguhong and Ndoye, 2007). Cameroon's policy of increasing its total proportion of protected areas needs to be combined with rigorous efforts to ensure that such areas remain economically and socially viable. This requires major investments in both management and infrastructure development. Cameroon needs to work internally and with international partners to address these issues so that forests can reach their full potential in contributing to the country's development.

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