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## Forest Management in Africa: Is Wildlife taken into account?



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# Ongoing study on the integration of biodiversity concerns in management of forest concessions in Central Africa

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## Summary

*Central Africa is home to the world's second largest contiguous tropical rainforest, after Amazon. Depending on countries in the sub-region, between 10% to 15% (Nasi, Cassagne, Billand, 2006) of the forests' surface area is occupied by protected areas. Production forests represent 65% of the forests and have an enormous potential for biodiversity conservation. The important role played by production forests in maintaining biodiversity should be improved through increasing the percentage of forests that have management plans that take into account the different functions of the forest.*

*FAO and CIRAD (the Agricultural Research Centre for International Development) have assessed the status of integration of biodiversity and are striving to identify the difficulties encountered in this area.*

*This study is based on bibliographic research, documents such as management plans, forest regulations, national guidelines and a survey of professionals (administration, logging companies, consulting firms, NGOs and forest certification agencies) carried out from May to June 2008 in five countries of Central Africa.*

*Following analysis of the collected information and their validation, concerted actions and a set of programmes will be proposed to reinforce and harmonize practices for better integration of biodiversity conservation concerns in production forests of Central Africa subregion.*

## Introduction

Tropical forests are the most important custodians of terrestrial biodiversity essential for the maintenance of species' ability to adapt to environmental changes and changes in users' needs, and to support the functions of ecosystems. Moreover, tropical forests are the most threatened. In Central Africa subregion, depending on countries, between 10% to 15% of forests are categorized as protected area while production forests represent 65% of the forest ecosystem (Nasi, Cassagne, Billand, 2006). Thus, forests that are not formally protected have an enormous potential for biodiversity conservation.

Logging companies are now required by Law to contribute to biodiversity conservation (management plans are now obligatory) and they also have the option to embark on eco-certification. Within this context, FAO and CIRAD have launched a study on the integration of biodiversity conservation in forest concession management in Central Africa. In the framework of their collaboration with the Central Africa Forest Commission (COMIFAC) to implement COMIFAC's Convergence Plan, FAO and CIRAD have initiated a subregional study with major stakeholders in the sector (forest administrations, logging operators in the private sector and their partners) in order to assess the status of current practices (even without management plans) in central Africa. This study also seeks to identify the problems and constraints in addressing biodiversity issues in forest concessions and shorter term timber harvesting permits/licenses in central Africa.

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## Biodiversity conservation in logged forests under management

Tropical forest is so complex that it is not feasible to comprehend it all without long-term concerted efforts. Biodiversity abounds considerably in its broadest sense at the level of ecosystems, species and intraspecies. Thus, it is impossible to monitor and manage it comprehensively: there is a need to make choices (IUCN, 2007). For example, the behavior of fauna in rain forests (reproduction, feeding habits, etc.) as well as its interactions with other species and with their habitat and the vegetation remain largely unknown. Consequently, in several cases, data collected on fauna by logging companies during their management inventories, are new for the scientific world (Billand, 2005) with inventory methods constantly updated. Our knowledge of the field of study is limited and we are faced with vital issues: what are the aspects and priorities for the protection of logged forests; how to collect reliable data and how to establish a monitoring mechanism to assess the success of management measures that have already been put into operation (IUCN, 2007).

Currently, twenty five to thirty million inhabitants in Central Africa live in direct contact with this ecosystem and more than three million depend on it for survival (Billand, 2005). The human society as a whole is responsible for the environment and has to take drastic decisions. However, depending on the territorial scale and the country, protection priorities could vary according to various cultural values and different levels of economic and social development. Different choices will inevitably be made in terms of biodiversity conservation strategies and priorities. (IUCN, 2007)

The present format of forest management in central Africa subregion began emerging twenty years ago. The first forest management plan was formally implemented in 1998 (Concession IFB/Ngotto, CAR). However, the principles for the formulation of forest management plans originated from activities and studies several decades old (more than 60 years). It is estimated that more than half of forest concessions in Central Africa are in the process of drawing up plans for their management. Others are already being managed, with 30 millions hectares (Mha) out of approximately 55 Mha of concessions. These are part and parcel of the 130 Mha of production forests in the sub-region (Nasi, Cassagne, Billand, 2006).

The preliminary phase of management requires different studies that enable managers to know the presence, number and the distribution of species as well as their importance and threats. These studies consist of:

- Tree inventory
- Multi-resources inventory (fauna, Non-Wood Forest Product – NWFP)
- Socio-economic inventory

It is worth noting that, in these initial studies, the focus was mainly on the collection of data related to stumpage of commercial value. Consequently, the methodological settings of the inventories have been first calibrated to sample the variable 'tree' with the best cost-accuracy ratio possible. The statistical accuracy of forest management inventories is calculated today at 95%, a value commonly accepted by national standards, which translates into a sample ratio of about 1% to 1.5%. Concerns related to biodiversity and social issues were secondary. In most of the cases, biodiversity inventories and NWFP are aligned according to the measuring devices for trees, which is not necessarily optimal.

Laws differ according to countries concerning the types of studies to be conducted. Moreover, not all countries have at their disposal a framework or set of rules detailing the methods to follow. For example in the Democratic Republic of Congo, it has been obligatory since 2007 to follow operational guidelines for forest management in order to validate methods and results. The Central African Republic adopted national forest management standards in 2002.

FAO, CIRAD, CIFOR (Center for International Forestry Research), IUCN (International Union for Conservation of Nature), ITTO (International Tropical Timber Organization), ITTTA (International Technical Tropical Timber Association) and other organizations produce manuals and management guidelines to assist managers and logging operators. One of the most recent examples is the study on the

management plan for natural production forests in tropical Africa. In Part I of this study, 'ITTTA Forest production' was edited in 2001 and revised in 2006. Part II was focused on social aspects and a third on *the integration of faunal aspects in concessions* was later added. These technical documents integrate environmental and biodiversity issues at the level of the study, analysis, decision making and formulation of management standards and procedures.

The challenge of this study is to identify the different methods currently used by enterprises, during the different phases of study and analysis that led to the environmental orientations until their application in the logging concessions. The primary objective of this study is to assess the current situation on biodiversity integration in the logging companies (with or without management plans) in central Africa, by recording problems encountered by logging operators in the field. The second objective is related to the identification of needs for better management of biodiversity.

## **Method and programme**

Information is collected (through documentary studies and surveys, and when necessary through field visits taking advantage of synergies with other FAO and CIRAD-led projects) in order to assess the integration of biodiversity into forest concessions in Central Africa, especially concerning the following points:

- Achievements in collecting biodiversity data : concessions involved, methodologies, typology of existing data, with issues of rights to access data (public/private) for science and for biodiversity managers and decision makers ;
- Biodiversity management practices in concessions: measures taken in management plans, operational measures for low-impact timber harvesting, control measures and internal system for sanctions against staff, etc.;
- State of the art for the periodic monitoring of biodiversity in concessions. The establishment of monitoring is a must in the case of a certification procedure as certification is a pressing issue for companies exporting to other countries. However this procedure is based on systems of criteria and indicators that are imprecise, subject to various interpretations among auditors due to a poor state of the art;
- Emerging interactions between concessions and protected areas; need to search for long-term partnerships;
- Institutional arrangements and capacities for the integration and monitoring of biodiversity in concessions;
- A more global integration of biodiversity, for example in tracks of forests, according to a coherent territorial approach, taking into account groups of concessions in homogenous or complementary blocks.

Various types of documents were consulted, such as international reports, national regulations and guidelines, texts to facilitate application of decrees, inventory reports and available forest management plans.

Following each interview, the completed questionnaire is edited by a member of the team and returned to the interviewee for verification and additional information. The study is based on discussions with practitioners and stakeholders in the sector. During a second phase, the initial results will be presented to participants to cross check sources and gather comments while verifying the initial hypothesis. The set of data processed and analyzed will be synthesized and presented during a sub-regional workshop to be held at the end of 2008. This workshop which will bring together key active stakeholders will provide fresh opportunity to collect additional views and suggestions.

## Schedule

Clarification of approach and methodology of the study	April 2008
Collection and verification of information	May-August 2008
Synthesis of information and report writing	July-September 2008
Organization of workshop by COMIFAC to present results	September-December 2008

## Expected outputs

The report will be presented in two parts:

- A summary of surveys administered to logging operators and other key actors in central Africa subregion. It should outline current practices for the integration of biodiversity in forest concessions as well as requirements to improve these practices and build capacity. This summary will complement data from Forest Watch for Central Africa - OFAC (Observatoire des Forêts d'Afrique Centrale). It is an observatory recently launched, with an initial support from the European Union (EU) through the FORAF project. The project is intended to federate partners of the Congo Basin Forests Partnership (PCBF) under the aegis of COMIFAC.
- Based on the summary, assessment of the surveys, proposals will be put forth to reinforce and harmonize practices for the integration of biodiversity in forest concessions in Central Africa. These proposed actions will take into account initiatives in the sector at global, regional and national levels. A programme detailing some of the proposed actions will be identified and could serve as a basis for a project proposal to be undertaken by FAO in collaboration with other partners. Moreover, it could lead to the description of the main steps for a regional initiative for the harmonization and reinforcement of the integration of biodiversity conservation in forest concessions in the Congo Basin.

## Organizations involved in the study

This study is currently being carried out through the analysis of interviews to which more than thirty professionals of the sector (administrators, logging companies, NGOs, forest certification organizations, consulting firms) participated from 20 May to 24 June 2008 in Cameroon, Gabon, Congo, Central African Republic and Democratic Republic of Congo.

Organizations met by FAO and CIRAD:

## Observations

The main objective in establishing a forest concession remains the production of timber for industrial purposes. Through forest concessions the State, as the owner of the forest, transfers the right to exploit this economic resource in exchange for remuneration paid as a rent and a variable profit depending on production. The forest management plan is the tool that brings into balance the ecological functions of the forest and the requirements of industrial timber harvesting and commercialization. Today, in view of the international and local demand,

COUNTRY	LOGGING COMPANY	NGO	CONSULTING FIRM	FOREST CERTIFICATION ORGANIZATION
GABON	DLH	WWF	TEREA	PAFC
	LEROY	WCS	SYLVAFRICA	
	OLAM			
	PRECIOUSWOOD			
	RIMBUNAN HIJAU			
	ROUGIER			
	SUNLY			
	TBNI			
CAMEROON	ALPICAM		VERITAS	FSC
	DELCOVENAERE			
	SCIEB			
	SEFAC			
	TRC			
	VICWOOD			
	WIJMA			
Republic of Congo	Eucalyptus Fibre Congo	WCS		
	FORALAC / FORAMAK			
	Nouvelle TRABEC			
	TAMAN			
Central African Republic	SCAF			
	SEFCA			
Democratic Republic of Congo	ITB	WWF		
	SICOBOIS			
	SIFORCO			
	SODEFOR			
	SOFORMA			
Total	26	2	3	2

biodiversity issues as well as social issues have become an integral part of the forest management plan. In the context of the forest management plan, forest industries adapt their production tool to better integrate the different functions of the forest (economic, social and environmental).

Logging companies are responsible for their employees during working hours. They are not responsible; neither do they have the authority, to prohibit hunting by local populations. Logging firms are requested by the Law to make an inventory of big games. The study should indicate how information on fauna is used and how they influence the behaviour of logging operators and the people.

Based on a better knowledge of constraints, strengths and weaknesses of current practices related to the management of biodiversity in forest concessions, the study will suggest main actions to assist the forest industries through:

- Participatory formulation of and support to the pilot implementation of the operational mechanisms relative to logging industries. These have the potential of reducing the impacts of industrial timber harvesting activities on biodiversity;
- The concerted definition of protocols which combine scientific accuracy with acceptable economic and operational feasibility for the collection and monitoring of data on biodiversity. These monitoring protocols will be essential to assess the effectiveness of the implementation of the measures in the field.
- Support to Administrations in charge of the elaboration and implementation of biodiversity norms to which enterprises are subject. These administrations will need to enhance their human and operational capacities in order to carry out the monitoring.

This study is in line with the support that forestry administrations and the forest industrial sub-sector as a whole, have received over the last ten years. This is a remarkable progress from the limited focus on economic production of industrial wood to a more integrated approach of sustainable development.

## **ABBREVIATIONS**

ITTTA:	International Technical Tropical Timber Association
CIFOR:	Center for International Forestry Research
CIRAD:	Agricultural Research Centre for International Development
COMIFAC :	Central Africa Forest Commission
FSC :	Forest Stewardship Council
OFAC :	Institute for Central Africa Forests
ITTO :	International Tropical Timber Organization
PAFC :	Gabon Forest Certification Scheme
PFBC :	Partnership for the Congo Basin Forests
PFNL :	Produits Forestiers Non Ligneux
FORAF Project :	EU's Contribution to OFAC (see OFAC)
IUCN :	International Union for Conservation of Nature
EU :	European Union

WCS: Wildlife Conservation Society

WWF: World Wildlife Fund

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