

**COMMUNITY WILDLIFE MANAGEMENT IN  
CENTRAL AFRICA**

**A REGIONAL REVIEW**

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**Submitted to IIED August 1998, published February 2000**

***Since strangers hunt wildlife species protected by communities norms, but did not suffer any sanction from the gods, it meant that the people could also hunt these animals for sale; this marked breakdown of the community myth and ritual protection system (Vabi and Allo Allo 1998, in Vabi and Schoorl (eds) 1998). This may be compared to the history of Adam, Eve and the Snake (Satan) in the Eden Garden "(Holy Bible: Genesis 3, 1-14).***

## ABBREVIATIONS and ACRONYMS

AFAR	Association des Femmes Amies de la Reserve Dja
ACDE:	Agence Canadienne de Développement
AGCD:	Agence Belge de Coopération pour le Développement
ANN:	Alliance Nationale pour la Nature
ANZAS:	Association Nzambi Solidarité
APFT :	Avenir du Peuple des Forêts Tropicales
BSP:	Biodiversity Support Programme
CAR:	Central African Republic
CARE:	Co-operative of American Relief Everywhere
CARPE:	Central African Regional Program for Environment
CFD :	Caisse Française de Développement
CITES :	Convention on International Trade of Endangered Species /Convention sur la Commerce Internationale des espèces de flore et de faune menacées d'extinction
CEFDHAC:	Conférence sur les Ecosystèmes de Forets Denses Humides d'Afrique Centrale/Conference on Central Africa Rain-forest Ecosystems
COGEREN :	Co-gestion des Ressources Naturalles
CWM :	Community Wildlife Management
DFF :	Direction de la Faune et de la Flora (Departement of Fauna and Flora), Congo
DRC :	Democratic Republic of Congo (Congo-Kinshasa/ex-Zaire)
DREF :	Direction Régionale des Eaux et Forêts (Congo)
Dutch Gt :	Dutch Government
EC :	European Community
ECOFAC:	Programme de Conservation des Ecosystèmes Forestiers d'Afrique Centrale
FAC:	Fonds Français d'Aide à la Coopération
FAO:	Food and Agriculture Organisation
GC :	Government of Cameroon
GEF/FEM:	Global Environmental Facility/Fonds pour l'Environnement Mondial
GSUDAC :	Groupe des Spécialistes pour l'Utilisation Durable en Afrique Centrale/Central Africa Sustainable Use Specialist Network
GRAMUE.	Groupe des Amis de l'UNESCO et Environnement
GTZ:	Deutsche Gessellschaft für Technische Zusammenarbeit/ Deutch (Office Allemand pour la Coopération Technique)
H.E.L.P. :	Habitat et Liberté des Primates (Congo-Brazzaville)
HPLF :	Howlett-Port Lympé Foundation (Congo-Brazzaville)
IRF :	Intermediate Result Fund (BSP)
IUCN:	Union Mondiale pour la Nature
ITK :	Indigenous Technical Knowledge
NP :	National Park
NRM :	Natural Ressources Management
NGO:	Non-Governmental Organisation
ODA :	British Overseas Development Agency
ORSTOM :	Office (Francaise) de Recherche Scientifique et Technique d'Outre-Mer
RAAF :	Réseau Africain d'Action pour la Forêt
SUI :	Sustainable Use (of wild species) Initiative

UNDP/PNUD: Programme des Nations Unies pour le Développement  
UNEP/PNUE: Programme des Nations Unies pour l'Environnement  
USAID : United State Agency for International Development  
WCS: Wildlife Conservation Society  
WRI: World Resources Institute  
WSPA: World Society for the Protection of Animals  
WWF: World Wide Fund for Nature  
MINEF : Ministry of Environment and Forestry (Cameroon)  
WB : World Bank

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## Acknowledgements

*The Author wishes to thank IIED for the funds to carry out this study. At IIED, the Author is particularly grateful to Izabella Koziell, Christo Fabricius, Dilys Roe, and to Jo Abbot for useful documentation they sent to him, and which contributed to get acquainted with context and objectives of this study.*

The author thanks also the administration of the IUCN-Regional Office for Central Africa who facilitated the Author to carry out this work. The Author is particularly grateful to Dr Ndinga Assitou, Regional Co-ordinator of IUCN- Central Africa Programme for his invaluable advises and comments during the period of this study.

The draft version of this report was circulated among various experts for their comment. Sincere thanks are due to Dr Ndinga Assitou, Dr Bihini Won wa Musiti, Dr Guido Broekhoven, Dr. Jean Claude Nguingui of IUCN; Dr Guy Ramangason, Mr. George Mouncharou of IUCN-Dja Project; Dr. Timothy Fombet of University of Dchang Cameroon, Mr Wale Adeleke of WWF-Africa and Madadagascar; Dr Jo Abbot and Ms Izabella Kozziel of IIED, and to Herman Ngabo of The British Council. Their invaluable comments contributed for the improvement of this report.

The author owes much gratitude to Paris Bruno and his wife Marie Joe, and to the Conkouati Project administration for their hospitality during the war in Congo Brazzaville, especially after his evacuation from Brazzaville. Without this, it might have been difficult for the Author to continue this study.

Finally, the Author owes much gratitude to all the people who helped in so many different ways, especially those who directly or indirectly provided information which contributed to this study.

Elie Hakizumwami

# 1. INTRODUCTION

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## 1.1 Background to the study

This review of Community Wildlife Management (CWM) initiatives in Central Africa region examines a number of initiatives by local communities, researchers, governmental and non-governmental agencies concerned to involve communities in the management of wildlife and their habitat.

The review constitutes a contribution to the first phase of ‘Evaluating Eden Project’, a three years study (1996-1999) of environmental, and social and economic factors affecting the success and/or failure of CWM initiatives. This project focuses mainly on developing countries and aims:

- to contribute to the Community Wildlife Management (CWM) strategies at international, national, sub-national and local levels by providing governments and donors with information which could influence them to review their policies, and support Community Wildlife Projects, communities organisations and local governments to initiate ventures which meet their stated objectives ; and,
- to facilitate the exchange of information and experience between Community Wildlife Management policy-makers; researchers and practitioners in different disciplines and in different regions.

The idea to carry out the regional reviews arose about of the results of IIED’s Whose Eden study of the approaches to the wildlife management which mainly focused on Africa. The results of this study were published in 1994 as *Whose Eden? « an overview of Community Approaches to Wildlife Management in Africa*. It is in this context the review of CWM initiatives in Central Africa was carried out.

The review of CWM initiatives in Central Africa involved the identification of individual CWM initiatives, and analysis of social, economic, institutional and environmental conditions and/or factors, which could have influenced or may be influencing their endeavours to meet their objectives.

CWM initiatives from seven countries of Central African region namely Cameroon, Central African Republic (C.A.R), Congo-Brazzaville, Democratic Republic of Congo (D.R.C), Gabon, Sao Tome & Principe were examined.

The author expects that the results of this review would contribute to the Evaluating Eden Project and catalyses a regional reflection towards the improvement of wildlife management, and the establishment of mechanisms of exchange of information and experience at regional, national, and local levels

## **1.2 Limitations**

The situation of the insecurity resulting from the war in the region could not allow the author to visit the all countries concerned with this study as initially scheduled. Particularly, the war which broke out in Brazzaville at the beginning of this study had a significant impact on the initial schedule established for this review. It was also impossible to communicate with other countries, including those concerned with this study, until the author managed to move to Cameroon (in August 1997). This delayed the collection of information.

Most projects and programmes involved in community wildlife management are relatively recent and their experience is relatively limited. Therefore, therefore, it may be premature to conclude whether their achievements are sustainable or not.

## **1.3 Scope of the report**

This chapter introduces the objectives of this study and the limitations experienced in carrying out.

In Chapter 2, the methodology adopted to carry out this review is briefly described.

In chapter 3, focusing environmental, socio-economic and political, as well as institutional aspects, the background of wildlife management in Central Africa is given [3.1 – 3.6].

In chapter 4, key issues affecting CWM initiatives are analytically discussed [4.1-4.11].

In Chapter 5, achievements and impacts of CWM initiatives are briefly discussed.

In chapter 6, strengths and weaknesses and opportunities in the existing knowledge related to the CWM are outlined.

In Chapter 7 and 8, specificities of the region in terms of perspectives, views or concepts of key terms, related to CWM are briefly discussed.

In chapters 9 and 10, potential considerations for the success of Community Wildlife Management initiatives are outlined.

A series of fact comments are given to further support the arguments.

Appendix I, gives a list of resource persons who have been, formally or informally, contacted for information, or whom their views been considered in this review.

Appendices (II to VII), respectively, outline complementary information to this study (see table of contents)

## 2. METHODOLOGY

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Generally, multistage participatory approach was adopted to collect and cross-check information for this study. This mainly involved literature review and collection of primary data at different levels (regional, national, and local /village levels). The literature review targeted published and unpublished documents related to the CWM and enabled the author to get acquainted with the concepts related to the wildlife management and community participation. Related to this, documents were collected from libraries in the region, and additional documents have been sent to me by IIED (London).

Secondary data were mainly obtained from project documents; projects reports, and from reports of studies related to wildlife management carried out in the region. This documentation was mainly obtained during field visits at the headquarters of regional conservation agencies and at project offices in the region.

On the other hand, primary data/information were formally (through individual contacts) or informally (during the regional meetings) collected from targeted practitioners, policy makers (see the list on appendix I). Field visits (to some projects) allowed direct observation and development of further hypotheses which have been answered through talks to local practitioners, resource persons and members of local communities (individuals or user groups).

At the end of each visit, a meeting was organised with the practitioners of the project concerned to review the preliminary findings related to their project. This also permitted to collect the complementary information and to get the views of these practitioners. For countries which could not be visited, the author arranged to obtain required documentation by post mailing, fax and telephone call. Information obtained from documentation have been cross-checked through contacts with resource persons.

Apart from fields visits the author succeeded to participate at three regional workshops which brought together the practitioners, researchers, policy makers, and representatives of national and international NGOs involved in the conservation of the natural living resources including wildlife and their habitat. These are the IUCN Central Africa Inter-project meeting; CEFDHAC National Correspondents and conservation NGOs Representatives workshop; and the inaugural meeting of the Central African Sustainable Use Specialist Group. This was an opportunity to meet practitioners from different Organisations/Institutions and projects, policy makers and representatives of the donors, all involved in conservation of wildlife and their habitats. At these occasions the author succeeded to formally an informally discuss the preliminary findings related to this study and to get additional information. The out come of these meetings, have been also considered in this report.

Although security influenced the selection of the countries and projects to be visited characteristics such as ecosystem, the socio-economic aspect, the institutional aspect and the project experience (referring to when they started) have been taken into account.

### **3. BACKGROUND OF WILDLIFE MANAGEMENT IN CENTRAL AFRICA**

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#### **3.1 Characteristics of the region**

##### **3.1.1 Environmental context**

The Central African Region in the context of this study includes seven countries: Cameroon, Central African Republic, Congo-Brazzaville, Congo-Kinshasa, Equatorial Guinea, Gabon and Saõ Tomé & Príncipe. Generally these countries are characterised by a wide range of biomes, ecosystems, and habitats. These include tropical moist forest (representing about 80% of the dense forests remaining in Africa, and the second largest in the world after the Amazon), dry and evergreen forests, afro-montane forests, seasonally inundated forests and savannahs, woodland savannahs, dry woodlands, papyrus and peat bogs, the Congo river system, lakes and lagoons.

In terms of biodiversity, Central Africa supports more than 60% of African biodiversity. The region occupies the first place among African regions for several taxonomic groups; including over 400 species of mammals, 1'086 species of birds, 216 species of reptiles, at least 48 species of butterflies, and over 10'000 vascular plant species of which at least 3'000 species are endemic. More than 50% of Africa's forest species are found in the region.

The water system-large and small rivers, lakes, lagoons-, retained in the Central African forests harbour a wide variety of fauna such as fishes, crocodiles, African manatee, etc. It is believed that the rate of endemism for freshwater species in the Congo Basin's lakes and rivers is over 70%.

These diverse biological resources are of global importance, and are shared by several countries in the region, They are important for nutritional, economic, and social values for local as well as urban population in the region.

Since 1930's, some areas of the forests have been declared as 'protected areas' and were accorded the status of National Parks, Fauna Reserves, wildlife sanctuaries, game hunting areas, etc. These areas serve to protect natural resources and biodiversity and to preserve cultural and heritage features. They fall under Government control and their access is generally regulated by law. In most cases, villages have been resettled from such areas (see appendix III: III.4, III.8).

Other parts have been allocated to concessionaires for logging activities under licence provided by governmental departments.

With new context of wildlife management, in some areas, buffer zones or development areas have been delineated in the periphery of protected areas. In this areas, only hunting

for home consumption is formally allowed. Much of these areas are also used for activities such as logging, fruit and vegetable gathering, medicine harvesting, etc.

### 3.1.2 Social economic importance of forest resources

The region is characterised by low population density, and a high rate of urbanisation compared to other African regions. A significant proportion of the rural people live within forest areas (see table 1) where they rely on the use of natural resources harboured by forests surrounding them for their subsistence livelihood. They use without particular precautions, resources such as wood (construction timber, firewood), food (bush meat, fish, mushrooms, vegetables, honey), medicines, etc., required for their subsistence. A significant proportion of the resources harvested from the forest and fresh waters is also sold to urban to get money for basic needs.

The large scale activities such as logging activities, mining, oil exploitation and large scale farming are practised and are reported to have resulted in negative impact on biodiversity and degradation/destruction of wildlife habitats. Rural economy in Central African countries is based on commercial hunting, fishing and slash-and-burn cultivation. Poaching and illegal trade of endangered wildlife species, such as elephants, gorillas, chimpanzees, panthers, etc. mainly resulting from the external influence is widespread in practice in the region. These activities sometimes contribute to the degradation of wildlife resources and their habitats.

### 3.1.3 Resource bases

The following table illustrates the resources that may be directly or indirectly related to the management of wildlife.

**Table 1: Biophysical and socio-economic indicators related to wildlife.**

Information on Countries	Cameroon	C.A.R	Congo-Brazza	D.R.C	Equatorial Guinea	Gabon	Saô Tomé & Príncipe
Total area of the country (km <sup>2</sup> ) (2)	465'660	622'980	341'500	2'267'600	28'050	257'670	996
<b>Forest area</b>							
Tropical forest (km <sup>2</sup> ) (1)	155'330	52'236	213'400	1'190'737	17'000	227'000	299
Protected areas in the tropical forest	11'270	4'360	12'150	63'130	3'150	17'900	
Area of Fauna Reserves and National Parks (km <sup>2</sup> )(1)	20'491	63'449	18'557	101'464	3'167	17'900	290
<b>Human population</b>							
Population 1995 (2)	12 M	3.2 M	2.5 M	40 M	0.5 M	1'20 M	0.12 M
Population growth rate 1980-1990 (2)	2.8%	2.5%	2.7%	3.3%	1.9%	2.2%	2.7%
Average population density, 1992, (people/km <sup>2</sup> ) (2)	26	5	7	18	18	5	120
Rural population (%) (2)	58%	63.5%	30%	56%	-	27%	67%
Population living in forest areas (around and within) (2)	1'400'000	200'000	200'000	2'200'000	170'000	180'000	N.A.
<b>Biodiversity-Species</b>							
<b>Mammals (all species)</b>	<b>297</b>	<b>209</b>	<b>200</b>	<b>415</b>	<b>184</b>	<b>190</b>	<b>N.A</b>
Mammals -Endemic	10	2	1	1	25	3	N.A
Mammals-Threatened	27	12	12	15	31	17	N.A
<b>Birds (all species)</b>	<b>848</b>	<b>668</b>	<b>500</b>	<b>392</b>	<b>1086</b>	<b>617</b>	<b>N.A</b>
Birds-Endemic	11	0	0	0	23	0	N.A
Birds-Threatened	17	2	3	3	27	4	N.A
<b>Woody species (all species)</b>	<b>8260</b>	<b>3602</b>	<b>6000</b>	<b>3250</b>	<b>11000</b>	<b>6651</b>	<b>N.A</b>
Forest species-endemic	156	1000		66	3200	7	N.A
Threatened forest species	76	1	3	8	7	78	N.A

*Source: (1): De Monza et Vogel (eds), (2): Charancle 1996)*

## 3.2 Traditional systems of wildlife management

### 3.2.1 Traditional status of land and wildlife in Central Africa

In Central Africa, traditionally land is a sacred and common resource. It constitutes the mystic link between communities and their descendants. Despite new regulations, natural forest is informally subdivided into clan territories, which are naturally delineated. The clan respects others territory boundaries.

In remote areas, still land and its natural resources are under customary management regimes and resources are used mainly for subsistence purposes. As it may be noted, the use of wildlife is closely influenced by traditional managerial arrangements and regulations. In most cases, decisions to use land resources are based on ethic consensus and are in accordance with traditional management systems and responsibilities mostly based on relations between man and resources. The rights to use resources such as wildlife are underpinned by spiritual affiliations to land resources (forest, water, wildlife, etc.). Although members of society informally have equal right to use resources,

traditional owners (generally a given clan) are those with primary spiritual affiliation and have therefore the ultimate responsibility to control resources in their territories. Despite loss of traditional authority to control resources on land, communities still feel themselves owners of resources, such as wildlife, found in their environment. This could be observed through their protests to claim their customary right of ownership.

### 3.2.2 Traditional knowledge and social organisation for wildlife management

Central African communities possess a wealth of indigenous knowledge and traditional practices to deal with natural resources including wildlife found in their environment, and are traditionally interested to preserve them. This could be observed through their cultural strategies (direct and indirect) developed to regulate the use of natural resources, particularly through the management of their relations and mystic forces such as ‘genie’ and ‘siren<sup>1</sup>’ for the benefit of conservation of these; and through their initiatives to control outsiders from access to the resources in their customary territories.

**Comment Box 1:**

*In Korup area, Cameroon, the Ikenge people in the National Park have banned outside hunters from their portion of the forest. The ‘Ekpe juju’ was used to enforce the ban. Non-indigenous hunters were evicted from villages, anti-poaching committees were formed and illegal forms of hunting were increasingly reported to the authorities. Traditional rulers banned the use of industrial chemicals like Gammalin for fish harvesting during a Ndian Chiefs Conference in Ekondo-Titi in 1994 (Tamajong and Balinga, 1996).*

*In Waza, Extreme-North of the Cameroon, the role of traditional authorities (Sultan of Logone-Birni, the Lamido of Pete and the Lawans of Fadere and of Kossa) on the management of the national Park is very important. Their authority is extended on villages under their jurisdiction (including those in the periphery), and cover the domains such as customary justice, management of land and water as well as related activities. Access to certain resources (including those in the national Park), notably pasture, ponds and canals for fishing, hunting, fuelwood collection and gathering is mostly subject of payment of taxes to the traditional authorities.*

Local communities have also the knowledge on the dynamics of resources. They are able to determine which season periods people when people can hunt without negative impact on the sustainability of the wildlife. This practice probably aimed to ensure the sustainability of resources of a given community or clan for its survival.

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<sup>1</sup> Siren or Mamiwata is believed to live in water (sea, lakes/lagoon, rivers). It is also believed to be the regulator of fishes and other water animal species.

**Comment box 2:**

*In Congo Kinshasa, in the past, hunting was regulated by Customary Land Manager. He determined where to hunt and at which season hunting can take place. Hunting was allowed exclusively for subsistence and not for sale. This traditional management practices might have contributed to the sustainability of wildlife in the region (Luketa, 1997, pers. comm).*

### 3.2.3 Accessibility to wildlife

Generally, areas not significantly affected by outsiders (remote areas), hunting and fishing are still regulated by right of access as well as cultural beliefs. The access to a given territory is restricted to members of the clan owner, and this access is free provided traditional regulations are respected. The boundaries between clan territories are respected, and their violation may lead to confrontation or violent reactions between clans. For outsiders to establish themselves or to use resources, they must first consult customary owners who may authorise them under exchange of symbolic gift such as wine or simply the respect to the host clan.

**Comment box 3:**

*To get land to construction of the Headquarters of Conkouati Project in Ntandou-Ngoma village (Congo), the Project manager has to contact the Customary Land Manager (fumu si in vili dialect) who asked to provide drinks (bottle of red wine, a bottle of whisky, and traditional brew for the ancestors). These were given before the land could be openly accepted and showed to the Project Manager. (Paris, 1997, pers. comm.)*

### 3.2.4 Cultural beliefs and traditional practices related to wildlife management

As it could be noted in Central Africa, cultural beliefs, taboos, respect to sacred sanctuaries<sup>2</sup>, totems<sup>3</sup>, etc., are believed to influence community behaviour towards the use of natural resource, especially wildlife.

i. Taboos (nutritional and religion )

Taboos related to the use of wildlife can be distinguished following ethnic group, clan, gender, age, physiological condition or health status.

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<sup>3</sup> The animal totem is considered as a lord of clan for which it is linked to.

**Comment box 4:**

*Women don't eat reptiles such as Imbolo (crocodile), Ngandu (caiman), Mboma (python), Masséku ma tandu (tortoises), Mpili (snake), carnivores such as Tsobo (civettietis), Ndetsi (Felis aurata) and Mpungu (gorilla).*

*Pregnant or feeding women don't eat the following wildlife species not eaten due to the beliefs given below:*

- \* *Sifoli (fresh water fishes): inflation of feet and stomach of pregnant woman*
- \* *Ukuti (Cephalophus silvicolitor); difficult delivery*
- \* *Liganze (Tilapia); the baby may be born with white spots like burnings on her body especially in the anus.*
- \* *Ngola (Silure): the baby will suffer from galls (gale) and diarrhoea (pers.comm.)*

*Among tribal groups in the forest zone of the southern Cameroon, pregnant women and young girls who have not had children are forbidden from eating meat of forest crocodile; Bongo, Monitor lizard and some species of monkeys.*

*Most tribal groups in the forest zone of the southern Cameroon don't hunt nor consume Chimpanzee and Gorilla because of their semblance to the Homosapiens.*

It was noted that the respect to taboos mostly changes following the decrease of alternative resources or outsiders influence. Therefore, taboos may be related to symbolic reasons and availability of resources rather than nutritional quality.

**Comment box 5:**

*The Vili and the Loumbou in Conkouati area, (Congo), traditionally don't eat or kill gorillas and chimpanzees. However, due to the influence of outsiders this attitude is changing. Most young people already started to kill and/or eat these animals mainly due to outsiders who came in their region for commercial hunting, fishing and working for logging companies. (Yakee, pers. comm.).*

ii. Respect to sanctuaries and mystic forces

Apart from taboos, there are traditional rules related to mystic forces such as *genie, juju<sup>4</sup>, djengi<sup>5</sup>, siren*, etc., which are still respected in the use of wildlife. Communities believe these mystic forces to have an important role in regulating resources and protecting community members. They are believed to reside in *sacred sanctuaries* restricted to specific persons who play the role of 'intermediate' between the genie and their clan. They enter these places for ritual ceremonies. Traditionally, activities such as hunting, gathering, etc. are not authorised in such places. It is believed that if somebody enters sacred sanctuaries for hunting or any other activity, he may disappear or fail to catch any game. The mystic site of a given clan is recognised and respected by the neighbour clans. This restriction is believed to have contributed to the protection of animal and plant

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<sup>4</sup> Juju is believed to be important for conservation of culture and defence of the society, and to guarantee the welfare of the community. It also believed to punish the people engaged in misuse of resources including excessive hunting and fishing, deforestation, etc.

<sup>5</sup>In Cameroon, Djengi is a Pygmees (Baka) belief which has the power to reveal secrets, under the condition that it is offered bushmeat, honey, agricultural food. Fearing to lose services from Djengi, Baka would not like to see the disappearance of animals (Baka community, pers. comm.)

species located there, and to have made these places to serve as refuge to threatened wild living species.

**Comment box 6:**

*For Central African communities, particularly those living in rural areas, each clan is linked to a genie, believed to reside in the mystic site 'sanctuary' (generally in grove located near a stream) and linked to a given clan. It is believed to hold power to protect members of the clan it is linked to, and to guarantee the productivity of their women and their land. Genies also appear therefore as providers of rain, fish and wildlife, etc. The decrease of the fish and wildlife productivity is perceived as a sanction of genies to the community due to the transgression of ritual restrictions.*

*... Djengi protect us and provide us with power. It does not reside permanently in our village but comes when it is invited. We use honey, bush-meat and food to call our Djengi. If there will not be animals, we should not get bush-meat to call our Djengi...(Group of Baka in Payo village, Cameroon, 1997, pers. comm.).*

*Mamiwata (siren) is also one of the mystic forces respected by communities in most places of central African region. Mamiwata is believed to reside in water (sea, lakes/lagoon, rivers) and to regulate the productivity of fish and other water animal species. In fear to lose these resources, people avoid to annoy the Siren. People in most parts of the region believe that night fishing (especially using lights) annoys the Mamiwata, which in response takes away fish from the places where this is done.*

**Comment box 7:**

*During the meeting in Conkouati area (Congo), the Village Leader called his villager members for taking appropriate measures to discourage night fishing in their lagoon. (Ngoma, 1997, pers. comm.)*

iii. *Totem and dangerous animals*

Most Central African communities believe that, after the death of the human being, his spirit live within animal. Each clan has a particular animal species, which host the spirits of its dead members. This animal species represent their '*emblem, or Totem* and is highly respected and protected by members of the clan concerned. They cannot kill animals of this species unless in case of self-defence or against attack to livestock. On the other hand, hunting some animal species is not open to everybody for specific reasons including the fact that that they are dangerous or scarce. Complex ritual restrictions are set up to discourage hunting these animals. Restrictions were therefore set up to prevent death of community members or to protect scarce animals.

**Comment box 8:**

*In Congo to hunt 'Ngulu masi' (African Manatee: *Trichechus senegalensis*, hunter(s) must first obtain authorisation from the 'fumu si'. After this, a 'cianga'(ritual ceremony) is organised to beg the agreement of Nkisi si (genie); receive the 'mula' (benediction) of 'fumu si' (if the 'nkisi si' is favourable to this); use of 'tchimanga' (specific spear); cut the animal at the level of articulations; dispose off the rests (bones) carefully and bury the skull near the 'mwamba' (specific tree or palm-tree. Source: Ngunguri, 1996.*

Referring the section 3.2.4, it may be concluded that cultural beliefs combined with traditional practices related to the use of natural resources particularly wildlife contribute to their sustainability. For instance animal species not eaten due to cultural beliefs have more chance to survive.

Unfortunately, respect to some taboos is dying out especially among the younger generations mainly due to the economic constraints and outsiders' influence.

### 3.2.5 Traditional practices for hunting/fishing

There is a couple of hunting methods used by local communities in Central Africa. These include net hunting, trapping (using snare, trench); close hunting (using spears, arrows), etc. In most cases, their characteristics are related, among others, to the environmental situation and social organisation. Shift from one method to another is generally influenced by the availability of wildlife resources, the level of demand of wildlife products, and the environmental conditions.

**Comment box 9:**

*The Northern Congo is characterised by swamp forests. Due to this environmental condition, animals are concentrated to the terra firma within the forest. The access to these places is very difficult. To facilitate the access to these places for hunting, canals were dug out many years ago to connect villages to these places and canoes are used in hunting especially during rain season and allows villagers to carry a large quantity of game. During dry season the level of water in the canals decreases considerably or dry out, making navigation difficult or impossible. Many places become also firm allowing animals to spread from the permanent terra firma which makes hunting difficult. At the same time, the water decrease in the canals and rivers concentrate fish in limited areas with enough water for their survival. The concentration of fish in limited areas coupled with difficult hunting result in switch from hunting and other activities for fishing. Throughout the dry season villagers suspend their usual activities (hunting, farming, school, etc.,) and leave their villages and establish their fishing camps close to the rivers and canals. Fish collected are use for family consumption or sold. Blake (1993).*

*Therefore, during dry season, fishing constitutes an important alternative activity to hunting, which contributes to the sustainability of wildlife.*

The effect of hunting to the sustainability of wildlife vary from one practice to an other. As it could be observed in the following table (table 2), snare hunting is highly practised followed by the use of gun.

**Table 2 : Comparison of hunting time and catch percentage using various techniques two villages around Odzala National Park (Congo)**

Village		Trapping	Day shooting	Night shooting	Net hunting	Hunting using dogs	Total
Diba	Percentage of hunting time	79.1	17.9	2.7	0.3	0	100
	Percentage of game catch	53.5	26.9	19.4	0	0.2	100
Olémé	Percentage of hunting time	60.4	26.8	8.1	4.1	0.6	100
	Percentage of game catch	52.8	20.4	19.0	5.3	2.5	100

*Source : Vanwijnsbergbe 1996, quoted in Ape Alliance 1998*

It is believed that the shift from group hunting practice to individual hunting practice results from increasing demand of bush-meat and the availability of efficient and cheap hunting technology. Gun and snare hunting are cheap in time compared to net hunting or hunting using the dogs which require the mobilisation of a group of people for a small catch. Therefore, group hunting is significantly decreasing on the benefit of hunting individualisation.

### 3.2.6 Ethnicity and social status and wildlife management

In Central Africa, different social conditions affect rates of hunting and use of wildlife. It was noted during this study that the involvement of communities in the use of natural resources at some extent differ from one ethnic group to another or from one social class to another.

**Comment box 10 :**

*In the Dja area, in Cameroon, hunting is extensively practised by almost all residents. However, the methods and organisation mostly differ from one ethnic group to another. Pygmies mostly practice "close hunting" using spears and arrows and kill targeted animals). Contrary other ethnic groups, such as Bantu, mainly use guns and trapping with snares. As reported by communities in the area, these techniques are used within and outside the Wildlife Reserve and make part of daily life of the population especially younger generations (Hecketsweiler et al, quoted in Doumenge, 1992.*

As reported by many people in the region, hunting is a hard and risky activity in a such way that it is only tolerated by poor for their survival.

### 3.2.7 Distribution of wildlife products after hunting

In remote areas, generally after big animals or fish are killed, a special share is given to the Chief of the village recognised as responsible of natural resources within his village or clan territory. It is believed by communities that if no share is given to the Chief, this may curse hunting activities, rendering them unproductive. External hunters who could not provide share to the Village Chief may be chased out from hunting in the area under his control.

**Comment box 11 :**

*In southeastern Congo for instance, when hunters kill buffalo, special parts of the game such as tongue, and leg of lamb are given to the Chief of the village. For fishing this is applicable only for special species mainly the vigorous. Big animals like elephant when killed, should be largely shared among the community members. For instance, when fishermen caught tarpon, its head and dorsal fin are given to village leader members. (Chama, Mpella villager, pers. comm., 1997).*

*In Western Cameroon (around Mount Cameroon), settlers after hunting, must pay to the clan, -customary owners- of the forest from which they hunted, the share of meat together with drinks ( Ngwa Christopher, villager in Idenau, pers .comm. 1997).*

*In Northern Congo, poor households mostly receive the majority of meat as a gift from family members. Most wealthy households obtain the majority of bush-meat through purchase (Heather, 1996).*

### 3.2.8 Potential impact of traditional systems to the sustainability of wildlife

Despite non availability of sufficient information to demonstrate the impact of traditional systems or the sustainability of natural resources, one may assume that cultural beliefs (Genie, Juju, Djengi, totem, siren, sanctuaries, taboos, etc.), and traditional practices contributed to the conservation of natural resources, including wildlife. Unfortunately, these are deteriorating due to many factors including the economic constraints, the outsiders invasion and increasing demand of bush-meat by people living in urban areas stimulating the excessive hunting using efficient hunting techniques inter alia guns and the snares, etc.

To protect traditional systems for the use of natural resources, the existing traditional organisation need to be empowering taking into account the traditional land use systems and indigenous knowledge. In the other words, local communities must be supported to put into practice their existing capabilities and experiences. Meanwhile, close assistance and monitoring would be needed to avoid the misuse of resources as a result of external forces.

## 3.3 Modern systems of community of wildlife management

Since the introduction of colonial legislation, the status of the land and its natural changed for the benefit of public access. The management of natural resources became the responsibility of the Government. Policies and regulations were elaborated to define conditions under which wildlife resources must be managed. These include the definition of the legal status of wildlife and its habitat, management systems and accessibility to wildlife resources, and Management of wildlife of habitat particularly National Parks and wildlife reserves.

### 3.3.1 Legal status of wildlife and its habitat

The tenure and ownership of wildlife resources is formally invested in central governments, which retain the legal control over them and associated revenue. Access to wildlife especially for commercial purposes without a licence means breaking the law. It was noted during this study that government needs from wildlife are to some extent contradictory with that of the local communities. Local communities consider their natural environment as reservoir of inexhaustible resources where they can continuously

hunt different species of animals and collect other products for their survival while government primary concern is the conservation of biodiversity. Such divergence of perception can be observed through the response of the local communities by non-respecting regulations regarding hunting.

### 3.3.2 Management systems and Accessibility to wildlife resources

With the new systems of wildlife management, wildlife is controlled by Central Government authorities, which may delegate responsibility for management to governmental institutions, international and national NGOs, projects, and private initiatives. Such delegation is rarely (if at all) given to local communities, probably due to the fact that government fears losing its influence on the use of resources, or, simply because it don't their management capabilities.

Under this system, the law determines the conditions under which exploitation of wildlife must operate. This involves the right for hunting for subsistence especially accorded to people in the vicinity of wildlife reserves, and the licence for sport hunting provided to outsiders and well of individuals for generation of public income. The licences/authorisation determines the conditions under which hunting must be practised. These include the techniques to be used and the animal species to be killed. For instance, in Congo as reported in Adouki (1996), protected species could not be hunted unless in case of scientific studies. Capture for regulation of populations must be expressly authorised by the Minister in charge. Non-protected animals can be hunted by holders of 'right of use'<sup>6</sup> or 'licences for hunting'. However, in practice the classification of wildlife as defined in the laws is too removed to influence local communities behaviour.

#### **Comment box 12 :**

*During the study in Likouala area, in Northern Congo, hunters reported that they kill any edible forest animals with the exception of nocturnal primates, which are not culturally eaten. They consider that in the forest it is like a war, one must kill all the animals (Blake Stephen, 1993).*

*Despite fixation of the restricted season for hunting (01 Novembre-31 April), hunting is carried out year around and bush-meat is plenty in different urban market (Adouki, 1996, Agnagna et al., 1993, UICN/MINEF-Cameroon, 1993) Also elephant meat is frequently available on the markets (Adouki 1996).*

*In Gabon the hunting or capture of totally protected animal species which include Gorilla, Hippo, Kob, some species of Duikers, and trading of these animals or their products is forbidden law 1/1982 (art. 109) regarding water and forest resources. It is stated under this article that offender will pay a fine from 50'000 to 2'000'000 FCFA or of jail from three (3) to six (6) months or one of these fines. However, bush-meat of any animal species are found on Libreville (the capital city) market (direct observation, 1997)*

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<sup>6</sup> Right of use<sup>6</sup> is the right to a given population, to hunt for their subsistence (Adouki 1996)

### 3.3.3 Management of National Parks and Wildlife reserves

With new system of wildlife management, National Parks and Fauna Reserves were established by the National Authorities with financial and technical assistance from foreign aid and conservation agencies, rarely after the consultation of local communities.

**Comment box 13 :**

*In Payo village, Dja Lomié (Cameroon), pygmies reported to don't know the boundaries the Wildlife Reserves close to them. « ...MINEF officials limit us from hunting.... We don't understand why they arrest us while themselves they eat bush-meat. The seize our bush-meat because they need it. (Group of Baka (pygmies), 1997. Pers. comm.).*

Their management plans are implemented independently by such agencies with rare consideration of customary rights of local communities and traditional uses of these resources. In some areas this could have resulted in negative impact to the livelihoods of communities settled inside or in the periphery of such areas (appendix III: III.1, III.2, III.4, III.8, III.15, III.17, etc.).

Most practitioners met during this study acknowledged that management of National Parks and Fauna Reserves is field of tension and conflict between them and local communities who were traditional users for centuries.

To reconcile such a situation, governments together with projects and organisations involved in the programmes of wildlife conservation in the region are now attempting to introduce the alternative activities as compensation for the resources local communities have been deprived of. Alternatives introduced to local communities include job opportunities, agricultural activities, live-stock, etc.. Unfortunately, these attempts concluded with failure probably due to the fact that they are inappropriate to the socio-economic conditions, or simply because field of inefficiency of field practitioners in conflict resolutions.

### 3.3.4 Impact of new systems of wildlife management

Where exclusion of local communities from the use of wildlife is effective, the sustainability of wildlife is generally ensured. However, it is to be remembered that the appropriate management of natural resources is one respecting the well-being of man and empowering him for self-reliance. Most practitioners and researchers in Central Africa acknowledge that 'modern' legislation to some extent resulted in negative effect on community and sustainability of wildlife resources. Not only traditional authority towards the management of wildlife resources were deteriorated, but also it resulted in negative effect on community livelihoods (culture, nutrition, medicine, social organisation, ritual ceremonies, etc.). Consequently local communities no longer feel themselves responsible for the conservation of wildlife or to be involved in the project activities.

**Comment box 14 :**

*Created in 1934 as Hunting Reserve and transformed in National Park in 1968, Waza National Park is located in Soudano-Sahelian zone of the Extreme-North of Cameroon. With its gazettelement, many villages and camps of fishermen and herders established in the area have been driven out. The area covered by Waza National Park was very important to local population particularly for the exploitation of the Arabic gum, straw, fishes, pasture, fuel-wood, fruits, medicine, and bush-meat. It is believed that the exclusion of adjacent population from the use of National Park resulted in negative impact to their economy. Despite close interaction between Waza National Park staff and riverain communities, the lack of mutual trust characterised their rapport. This was observed through insufficient collaboration for the conservation of the National (UICN, 1997). To solve this problem, the project authorised local communities to collect some resources from the National Park, under condition they assist the project to control poaching (Ngantou,199, pers.comm.)*

Other impacts resulting from the new system of wildlife management include inter alia, the weakening of the traditional management systems of resources including wildlife ; the deterioration of the traditional administrative power and local institutions to control the access to the use of resources ; and high competition for access to wildlife resources, mainly generated by commercial hunting.

The access to wildlife by local communities as well as non-residents (outsiders) for commercial purposes is not well regulated, mainly due to the fact that government capacities to cover the areas concerned are very low.

Unless local socio-economic factors are considered, positive traditional systems considered during policy making and field interventions. and local communities' authority to control the access to their territories restored in some format, the long-term sustainable use of wildlife will remain questionable.

### **3.4 Values of wildlife**

Wildlife in Central Africa is highly valued simultaneously for its spiritual values (see section 3.2.4) and as an essential component of the local landscape whose behaviour can indicate seasonal changes ; or for the economic or social services they can provide.

#### **3.4.1 Economic value**

In Central African countries, rural communities' economy is almost entirely based on natural biological resources, and bush-meat marketing is an important source of income.

**Comment box 15 : Economic values of wildlife in Central Africa :**

*The results of the studies carried out in the region clearly showed the economic importance of bush-meat to the local communities. For active hunters in Conkouati area, in southern Congo-Brazzaville, only 20% of killed animals are used for family consumption. The remaining is sold to supply urban areas mainly the City of Pointe-Noire (Loemba & M'bemba, 1996). The annual income of a family was estimated to be 1'250'00 FCFA (800'000 from fisheries, 250'000 FCFA from hunting, 200'000 FCFA from agriculture). Around 20'000 animals and 25'000 kg can be extracted respectively from the forest and lakes/rivers for sale to the City of Pointe-Noire (Paris, 1997).*

*In Dja, Cameroon, bush-meat provides substantial revenues. After one week of hunting in forest during the rainy season the hunter can cash about 50'000 FCFA. Generally, hunters prefer to sell bush-meat rather than to use it for home consumption (UICN; MINEF-Cameroon, 1993).*

*In Bangui (Central African Republic), the study on bush-meat consumption indicated an extrapolated value of some US\$ 3 million worth of buffalo consumed or sold each year (DOUNGUBE, 1993, quoted by Makombe, 1993)*

Generally, hunting is attractive to many people in the rural areas, especially due to the fact that it requires low initial investment and can generate monetary income very quickly. The commercialisation of the bush meat involves different categories of communities. Men are highly involved in hunting and while women dominate for the sale of bush meat in the open markets.

**Comment box 16:**

*In Dja (Eastern Cameroon) and South-western Cameroon (Limbe) women and children are highly involved in the sale of cooked meat. In South-East Cameroon, 'Pepe soup' many people appreciate 'Pepe soup' (bush meat). This is sold at many places by women.*

*In Libreville 'Pepe soup' (bush meat) sellers, generally women, are an important component of the market. Much of the bush-meat is supplied by hunters who are generally men. (author's pers. Observation, September, 1997).*

Cash income derived from the sale of bush meat is of great value to rural people as it allows them to cover their primary needs. Hunting is therefore considered by local communities as a rapid and secure source of revenue. However, as much of the trade is underground, it is difficult to assess the full extent of this business. Much of the meat is sold directly to restaurants, therefore doesn't pass through open markets.

**Comment box : 17**

*As reported by most of interviewees during field visits, bush-meat is easy to transport, compared to the bulky agricultural products, especially on rough roads. As stated by villagers in Mundemba (around Korup National Park, Cameroon) with a small quantity of bush-meat one can get more money compared to the same quantity of agricultural products.*

*In Conkouati, Congo and Dja (Lomié), Cameroon, hunters confirmed that, despite difficulties they experience during hunting, there is no other activity which can generate high income as hunting do. They reported that with hunting, they can continuously generate money for their survival ( Ngoma, pers. comm.1997).*

The following table illustrates the comparison of the economic value of hunting to that of that of the other activities in Eastern Cameroon.

**Table 3 : Comparison of average annual revenue of principal economical activities at Ndjaloëkoé Village, Boumba - Ngoko Division, Eastern Cameroon**

<b>Economical Activities</b>	<b>Average Annual Revenue (FCFA)</b>	<b>Percentage (%)</b>
Hunting	307'100	50.21
Live-stocking	102'950	16.21
Arki <sup>7</sup>	96'000	15.70
Agriculture	72'000	11.85
Gathering	25'000	4.10
Fishing	8'000	1.31
<b>Total</b>	<b>611'550</b>	<b>100</b>

*Source : N'kantio, 1992*

Due to the fact that wildlife is considered by rural communities as main source of revenue, the loss of access to wildlife resources may result in a complete collapse of rural economy. Unless economically sound and socially attractive alternatives are introduced to local communities, and associated markets developed. The challenge remains on how to develop markets in the areas with difficulties of access mainly due to inadequate road network.

### 3.4.2 Nutritional value

In addition to the values discussed in the previous parts of this report, wildlife products play a significant role in the nutrition of the communities in rural as well as urban areas. As livestock is not significantly practised in forest zones, bush-meat is the main source of animal protein to people.

<sup>7</sup> Arki is a local brew prepared by women using maize and cassava

**Comment box 18 :**

*In Central African Republic, subsistence hunting is a major source of nourishment, representing an estimated 30-40% of the meat consumed in the country each year (Doungoube, 1993, quoted by Makombe, 1993).*

*During the socio-economic study in Conkouati area in Congo, 70% of women interviewed in Ntandou-Ngoma village (close to Conkouati lagoon) reported to eat fish almost every day. In Nté-Tié village (located in the fauna reserve), bush meat was reported to be the principal source of protein. (Loemba & M'bemba 1996).*

*Total of 44% of women respondents in the Korup National Park Support Zone cooked bushmeat throughout the year (Ape alliance, 1998)*

As reported by many people in the region, bush meat is favoured over domestic meat mainly due to their good taste. Bush-meat is found on the menu of many restaurants in the region. On the market, their price is low compared to the price of meat of domesticated animal. Studies revealed nutritional value of most bush meat is higher compared to that of meat of domesticated animals ( see appendix VI).

### 3.4.3 Social and cultural values

In Central African, wildlife plays a vital role in subsistence and socio-cultural welfare of rural communities. Their products play an important role in the ritual ceremonies, traditional medicines, etc.. Some animals are hunted for their parts needed for specific uses. For instance skin of the leopard is very expensive as it is used as traditional dress of the chiefs. Other parts of wildlife are also used for various uses like fetishes for self-protection against spirits or other bad events, etc (see appendix VII). Restricting rural communities from the access to wildlife may affect the traditional livelihood of communities.

## 3.5 Institutional context

### 3.5.1 Status of wildlife Management

Although legal status of wildlife management may differ from one country to another, it is common that their implementation measures have been largely based on the views of former colonisers<sup>8</sup> or interests of the individuals rather than on aspirations and needs of local communities. It may be noted also that some countries are highly concerned with integral protection of wildlife while others use them to generate income. For instance in, Cameroon facilities have been set up in some areas to develop ecological tourism and sport hunting compared to the Gabon where hunting is closed within the whole country. Differences in the policies for wildlife management becomes problematic in case of trans-boundary resources as animals may move from one country to another.

***In all countries, wildlife is considered as public property, and hunting in protected areas is formally regulated by provision of licenses. However, often people enter such areas for hunting, particularly due to the inefficiency of governmental services to control wildlife resources [see comment boxes 4; 10; 12; 13; 14; 23; 25].***

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<sup>8</sup>Cameroon (by German and later by England and France; CAR and Congo-Brazzaville by France, DRC by Belgium; Equatorial Guinea by Spain; Sao Tome & Principe by Portugal.

### 3.5.2 Role players in Community Wildlife Management

In Central Africa, parties mainly involved community wildlife management are the following:

- Local Communities:  
Communities in Central Africa are made up of different groups competing for the control of the access to resources. They also have a wealth of indigenous knowledge believed to have contributed to the sustainability of natural resources. They play a significant role in the management of wildlife resources, especially through their traditional practices. Unfortunately, in most cases this role is mostly overlooked by external actors involved in the management of wildlife who decide without consulting local people. In some areas due to the '*command and control*' approach introduced by colonial powers and which could not recognise the local-driven organisation for wildlife management. In protest to this, local communities in most parts of Central African countries are using the situation of democratisation to organise themselves to claim the restoration of their lineage authority on land and to legitimise their rights towards resources such as wildlife (III.15; III.5; etc.).
- Governmental Institutions (national, sub-national and local levels): Due to the fact that Governmental Institutions are under-resourced to mobilise local communities for community-led wildlife management. Such activities are delegated to the 'externally-funded projects which are attempting to introduce participatory approaches for wildlife management. Governmental institutions remain partners.
- International NGOs: In Central Africa, International NGOs, such as WWF and IUCN play an important role in influencing government to improve their conservation policy and legislation. They also fund and/or implement conservation-related field projects (see appendices II and III) and contributed to the development of the institutional capacities.
- Local NGOs: Local NGOs collaborate with governmental institutions and projects to mobilise local communities towards conservation of wildlife (e.g. ANZAS and ANN in Congo, Faune et Vie and SIDEM in R.D.C, GRAMUE and AFAR in Cameroon, etc). In certain circumstances, local NGOs played the role of intermediate between projects administration and local communities, and the in projects. This is facilitated by local NGOs acquaintance with local conditions.

**Comment box 19:**

*The Konkouati wildlife reserve was created since 1980 to protect wildlife on an area of 300'000 ha. In 1989 this area was reduced to 144'294 ha on the benefit of logging activities. However, legal text creating the reserve in 1980 defines an area of 300'000 ha could not be modified. Due to the remoteness of the area, Governmental services to control the access to this area was quasi absent. Local communities were not informed about the existence of this reserve and continued to deliberately use it for various activities including commercial and subsistence hunting and gathering. In 1994, the Konkouati Project was launched in the area with objective to develop management arrangements for the conservation of the natural resources of this reserve. This project was seen by local communities as their barrier to resources and openly became hostile to it. To reconcile this situation, the Project Administration began to develop dialogue mechanisms for establishing good communication with local communities.*

*Innumerable meetings took place with various potential partners, whose views and aspirations were taken into consideration. Selected community members were sent abroad (precisely in Zimbabwe) to visit other community-managed conservation initiatives. Resident were encouraged to set up 'user group reflection committees' which succeeded in conveying their views even to the Ministry level. This approach resulted in a striking change the attitude of local communities towards the project, which initially was considered as a barrier for access to the reserve for natural resources (including wildlife) exploitation.*

*During the process of dialogue, a politically oriented local NGO -ANZAS was fully involved and played an important role for the acceptance of the project. This was also involved in the development of local plans. A committee for the management of natural resources (known as COGEREN) is being formed to incorporate representatives from the 'village user groups', the government administration, local government representatives, ANZAS, and other local associations. (Chatelain 1996; and Ngoma, pers. comm.).*

- **Projects** (Government/External-funded). Many projects have been launched in the region to protect wildlife. Initially most of them were characterised by 'top-down' approach. It is after general failures, that some are thought to introduce 'participatory' or 'community-led' approaches for wildlife management. As it could be noted, in most cases these approaches are still far from success probably due to the insufficient experience and strategies to mobilise the populations towards new systems of wildlife management. Further to this, lack of mutual trust between practitioners and local communities are observed.
- **Private Initiatives:** In practice, private initiatives for formal CWM are limited in Central Africa. Individuals don't manifest high interest in breeding wildlife probably due to the fact they wildlife are still found in their natural environment.
- **International co-operation agencies:** Donors are interested to support the initiatives of conservation of wildlife and their habitats [see appendices II and III]. However, as it could be noted, they have different perceptions towards the context of CWM. Some donors consider the involvement of local communities in the management of wildlife a pre-requisite for the project while others focus integral protection of wildlife. This is problematic for the cases of projects co-funded by donors with different perceptions [Appendix iii: III.4].

**Comment box 20:**

*The Korup National Park passed through different steps before it benefits external financial support to become Korup Project for "Development of National Park and its Support Zone" in 1988. This project covers area of roughly 3500 km<sup>2</sup> in all - almost three times larger than the National Park itself. It aims to ensure that local communities dynamics and the forms of exploitation of forest resources become compatible with the conservation of the Park, and the livelihood of resident populations, taking into account the need to involve communities in the complementary rural development activities. The project is co-funded by ODA, WCS, GTZ, EU, KFW, WWF-UK, and GC. The mid-term evaluation in 1996 revealed that the project was lacking a strategic leadership and guidance due to difficulties in co-ordination of approaches and inputs provided by different donors, partners and stakeholders of the Project and different sub-programmes. The project could deliver any tangible results and Rural Development could not facilitate confidence building and credibility. In the support zone, technical interventions have failed to implant any new agricultural practices capable of contributing to improved livelihoods and decreasing generally the pressure on natural resources (Korup, 1996).*

- **Logging companies:** These are distributed throughout out Central African forests and are pointed out to have significantly disturbed the habitats of wildlife and contributed to the excessive poaching resulting from the opening up of the new roads and creation of new settlements of their workers. However, after pressure by conservation NGOs and local communities, some logging companies manifested their interest to co-operate for the conservation of wildlife.

**Comment box 21:**

*In SouthEast Cameroon, 75% of poachers were found to be ex-loggers. It was also reported that 85% of the bush-meat taken by poachers is taken out on logging trucks to supply urban markets.*

*In Congo, SNBS was reported to have permitted an official Sunday hunt in the Kabo (Congo) area using trucks. SIBC and SFID trucks have been seen collecting up to 200 kg of bush-meat of various species at one go. (Ape Alliance 1998).*

### **3.6 Key factors for excessive hunting of wildlife**

The main factors recorded to influence the excessive use of wildlife in Central African region are commercial hunting, lack of respect of laws and regulation, inefficient mechanisms of control, logging activities, large scale farming, economic crisis and poverty as well as the lack of alternatives for income generation.

#### **3.6.1 Increasing demand of bush-meat**

In Central African countries, the pressure on wildlife is reported to continuously increasing mainly due to the high demand of bush-meat by urban people and people from large settlements created as a result of logging activities or large scale agriculture. As reported by practitioners, these activities in the countries like Cameroon and Congo-Brazzaville increased the number of people relying on bush-meat or fish as source of protein, and increased the purchasing power for the acquisition of the guns and bush-

meat. It may be concluded therefore that community protective measures towards resources gradually break along the increase of market demand

**Comment box 22:**

*In the Korup support zone, wildlife species such as Red river hog, Mongoose, Forest crocodile, Greater cane rat, Monitor lizard, Yellow-back duiker, Forest genet, etc. are nowadays hunted by resident and non-resident for commercial purposes despite community taboos against their hunting and consumption (Vabi & Allo Allo, 1998 in Vabi and Schoorl, 1998).*

*The Vili and the Loumbou tribes in Southeastern Congo traditionally don't eat or kill gorillas and chimpanzees. As reported by some members of this ethnic group, their attitudes towards those animals are changing mainly due to the influence of outsiders coming to their area for several reasons including commercial hunting and logging activities. Indigenous people, especially younger generations, already started to eat and use certain parts of gorillas for medico-magic activities (Ngoma 1997, pers. comm.)*

### 3.6.2 Lack of respect to 'modern' regulation

Due to the low capacity of government services to control the use of wildlife resources, and the contradiction between modern law and local communities perceptions, the control of hunting became quasi impossible. Temporal settlements/camps of hunters and fishermen are widely distributed throughout different parts of the forests along the roads (most of them opened for logging activities), around fishing camps, along navigable rivers, where deliberate hunting is practised throughout the year, mainly for commercial purposes.

**Comment box 23:**

*In Congo, hunting is carried out and bush meat openly sold at the market found in the markets through out the year despite the existence of the law defining the period during which firearm hunting is prohibited. In northern Congo-Brazzaville, although elephant hunting is prohibited, its meat is frequently available in markets (Adouki 1996, quoted by Evens & Roggiro, 1996).*

According to the many practitioners in the region, excessive commercial hunting is backed by complicity of a complex network involving hunters, middle-men (bayam-sellam), transporters, traders, administration, influential persons, etc. This is deduced following failure to punish offenders, excessive supply of hunting licences, low inefficiency of institutional structures, and the reluctance by the government to delegate authorities of control to local communities for their benefit. Unless all key stakeholders (e.g. hunters, middlemen and government administration) are actively involved in the control of access to local wildlife resources, it may be difficult for wildlife conservation projects themselves to find a panacea to the excessive hunting for market hunting.

### 3.6.3 Logging activities and large scale agriculture

As reported in the previous parts of this report (see section 3.5.2), logging and large scale agriculture contributed to increase the number of poachers, mainly due to the establishment of the large settlements of population imported as labour. On the other

hand, at many places these activities resulted in the degradation of the animal habitats leading to subsequent scarcity or disappearance of some animal species. In most cases, non-killed animals were forced to migrate to other areas where they became exposed to poachers or cause serious damages to villagers investments or death, thus antagonising conservation efforts.

**Comment box 24:**

*“... The people of Baro will always remember 11 October 1996. It was a sad day as elephants killed their Chief Councillor, Mr John Bessong at a point three kilometres from the village, on his way back from fishing in the Bake River.... Many people said that the destruction of crops by elephants has been very high this year compared to the past. Some people argue that because of the creation of Korup National Park and the implementation of the laws governing hunting, elephants have increased in population. Others think that the timber exploitation in the Nguti and Obang area has deprived the animals of their food and forced them to look for food in the farmlands...”(Sombo Newsflash No.21, 1996, Korup Project).*

*...the elephant, which damaged their crops, are doing so because they don't have a choice. They came to their village because their habitat was destroyed by the logging companies in Mayombe Forest (around 100 km from the village) and poachers from the area were hunting them. They come therefore to their village seeking a refuge... Ngoma Antoine alias Yankee (71 old), Village leader, Mpela village, Conkouati, Congo (pers. comm.).*

### 3.6.4 Economic crisis and lack of attractive alternatives

In most countries of the region, economic recession decreased employment opportunities in urban areas and resulted in urban exodus especially by young and retired people, This situation increased the number of population in rural areas, where they are obliged to practice hunting and fishing for their survival. Itchy to acquire a cash income, these people are actively involved in hunting mainly because this activity generates cash income quickly. Hunting and fishing are main activities practised by students during holidays. They permit them to generate money to cover their primary needs including payment of school fees.

On the other hand, the collapse of the market for income generating crops such as cocoa and coffee since 1980s was reported to have increased the number of hunters in rural areas in the region (ECOFAC 1996; pers. comm.).

**Comment box 25:**

*“... natural forest is like our bank. When I was student, during the holidays, I used to hunt in order to money for school fees... I was able to kill up to 15 animals per day. Now that I have got a job, I don't go any more to the forest for hunting” (Otto, pers. comm., 1997)*

## 4. KEY ISSUES AFFECTING CWM IN CENTRAL AFRICA

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During this study the following key factors were identified to hinder local communities participation in wildlife management initiatives: inadequate wildlife legislation, approaches by external actors, clash of interests between stakeholders, characteristics of donors, lack of support to local organisation initiatives, institutional capacity, political and institutional instability, characteristics of communities, economic situation, local communities motivation, environmental conditions.

### 4.1 Inadequate legislation

As discussed in the previous parts of this report, modern policy and regulations regarding wildlife management to some extents overlooked social and cultural values of wildlife to local communities, and could not clearly define the role local communities in the management of wildlife resources. Such a situation places practitioners on the horns of the dilemma, and resulted in most cases in different interpretations of the concept of CWM by different actors. This becomes worse where different actors operating in the same areas because this situation confuses local communities making them to lose confidence towards these actors. To some external actors, CWM does not necessarily imply the use of wildlife resources by local communities. Communities are involved in providing information, or used as project employees, overlooking therefore the direct benefits local communities get from wildlife.

### 4.2 Approaches by external actors

It was noted during this study that the implementation of most projects is characterised by insufficient biophysical and socio-economic information, and inefficiency in conflict resolution. This situation perpetuates conflicts between local communities and projects administration. Often local communities consider projects as their barrier to resources on which they depend for their survival especially wildlife.

Other factors affecting the implementation of wildlife related projects in Central Africa include:

- **Non-consideration of indigenous knowledge**

**Comment box 26:**

*In Konkouati for instance, Forest Department Agents refused to sit with hunters -as group users of Konkouati Fauna Reserve-, because by legislation, de facto they were considered as illegal users -poachers (Nguinguiri 1996).*

- **Low level of flexibility**

As it was noted during this review, most actors involved in planning and implementation of CWM tend to generalise approaches and strategies rather than considering case by case and recognising diversity.

- **Insufficient information exchange between stakeholders**

A couple of meetings and seminars related to the CWM issues have been organised at different levels within the region. However, their outcome is not widely shared among different stakeholders.

- **Low level of transparency**

In some cases, local communities are not clearly explained about the objectives of the projects introduced to them nor given opportunity to take part in the implementation of projects, generating suspicion at different levels and lack of motivation by local communities to accept innovations introduced to them as alternative to use of wildlife.

- **Failure to integrate Conservation-Development**

It is generally acknowledged that collective approaches for natural resources management requires integration of conservation-development objectives, the legal right for local communities to ensure the economic potential and the active involvement of local communities in environmental protection and management. However, it was noted during this study, that most innovations introduced to local community as alternative to the use of wildlife could not match with to local conditions or simply their introduction was done without knowing whether they can provide tangible economic, environmental, social and cultural benefits to the local community.

**Comment box 27:**

*The Korup project's initiative to introduce improved cropping systems and livestock raising failed because it could not take into account the superior weight-to-value ratio of bush-meat over crops for communities who have to walk long distance to the nearest road. As a result, illegal hunting continues. (Mundemba villagers, 1997, pers. comm)*

*Villagers in Conkouati area are not motivated to raise livestock as alternative activity to hunting because not only it is not in their habits, but also due to their nomadic character. Vegetables are not also produced due to the market uncertainty (Ngoma, 1997, pers. comm.).*

*At the beginning the population supported the Mount Alen project (ECOFAC, Equatorial Guinea). However, since they found that the project could not provide them with financial benefits they were expecting, their interest towards this project degraded (ECOFAC, 1996).*

*Dja Projected was launched at Lomié in 1995 with objective to encourage the conservation of Dja Wildlife Reserve by supporting practices for conservation and sustainable use of forest resources at its periphery, particularly in the area of Lomié. The area being for long period abandoned, local communities expect that the introduced project will solved their problems related to the lack of infrastructures (roads, health centres, etc.). However the project could not meet this expectation because they don't make part of its objective (Mouncharou, 1997, pers. comm.)*

### 4.3 Clash of interests between stakeholders

It was recorded during this study that the way most practitioners or agencies involved in CWM emphasise values are different compared to local communities perceptions mainly because their interests differ also. (see III.1; III. 4; III.15; III.17; III.18; etc.). Unless efficient co-ordination of the activities is coupled with sufficient negotiations, opportunities of local community to develop their capacities and to participate in management of wildlife will remain inhibited.

### 4.4 Characteristics of donors

As reported by most practitioners, complex bureaucracy adopted by some funding agencies, especially during the period of project implementation, places practitioners in a situation of uncertainty for planning and commitment (see appendix III: III.3; III.5; III.6; III.11; III.12; III.13; III.14; III.15). This result in failure to mobilise local communities for the benefit of their participation in project activities mainly because these communities no longer trust them.

### 4.5 Lack of support to local organisation initiatives

Well-organised local institutions offer the best and cost-effective option for wildlife management when it is based on appropriate incentives and innovative regulations governing resource access and management of benefits (Makombe, 1994). Unfortunately, wildlife legislation in Central Africa don't formally recognise local communities' initiatives aimed to control access to wildlife. However, some conservation projects already started to provide support to Local Organisation such as Local Vigilance Committees to control access to resources in their customary territories. In this context, projects try to liase Local Organisation to the governmental institutions for their legitimacy.

**Comment box 28:**

*Batoke Villagers in Southwest Province, Cameroon recognise the boundaries of their customary forest. They organise themselves to control the entrance to control the access of outsiders for hunting and other activities including research. In case of research, they provide Guide to ensure that they activity that will be carried out is one agreed upon (Batoke villagers, 1997, pers. comm, 1997). Due to the fact that a such Organisation is not formally recognised by the law related to wildlife management, Mount Cameroon Project Administration after considering that this contribute to the sustainability of natural resources, is assisting Batoke Villagers legitimise their initiative. (Pouakouyou, 1997, pers. comm.).*

On the other hand a such kind of organisations are set up with main objective to claim their lineage authority on land resources, and legalise their rights of ownership for resources they were deprived or simply or simply to catch advantages from the projects.

**Comment box 29:**

*'...our association "PAGAIE" was created with main objective to defend our rights for fishing. Our administrative committee would be used as a bridge between fishermen and Cokouati Project... We would like if the project could buy a freezer to our organisation. This would be useful to us because we should be able to conserve our fish before they could be sold to the transporters from Pointe-Noire (Tchama, president of PAGAIE, pers.comm. 1997).*

#### **4.6 Institutional weaknesses**

It is believed that villagers receiving frequent visits by extension agents are likely to adopt new innovations compared to those not visited. As noted during this study, local communities are rarely visited by extension agents and the reasons vary from one project to another. Some reasons are:

- insufficient number of staff,
- insufficient means of transport to reach villages,
- low motivation by extension agents,
- insufficient capacities to co-ordinate activities,
- lack of strategies to mobilise frustrated people, etc.

Mostly under such a situation, extension agents prefer to keep distance from local communities and continue other activities, which could justify their presence.

#### **4.7 Political and institutional instability**

For most cases, political and institutional instability, wars and corruption prevent the development of long-term perspectives. At the village level, it is unlikely that people could concentrate on wildlife conservation whilst their own life is exposed in danger. It may be noted this situation results from external forces (powers conflicting for territory control) that could not be controlled locally. On the other hand the frequent changes of personnel which characterise most countries in the region could not allow the staff to develop their experience and create an institutional lapses in wildlife management experience.

**Comment box 30:**

*In Congo-Brazzaville and Congo-Kinshasa most projects including these involved in wildlife management suspended their activities due to war, and lost therefore touch with the population. In Conkouati area, Congo-Brazzaville, COGEREN could not be inaugurated due to the situation of civil war (direct observation, 1997).*

Frequent changes of personnel characterising most governmental institutions could not also allow the sustainable development of the institutional capacities and create institutional lapses in wildlife management experience.

## 4.8 Characteristics of communities

- **Social organisation**

It was recorded during this study that social groupings appear as ‘groups of users’ who tend to organise themselves for the defence of their common interests, or acquisition of new resources introduced to their areas.

- **Population density and distribution**

Central African countries are characterised by low population density (see table 1) and insufficient road infrastructure. As a result extension agents could not reach villager effectively [ III.1, III.14, III.15, etc]. This is experienced by most projects in the region such as Conkouati, Dja, Lac Télé, etc.

- **Traditions and habits**

The main activity of Central African forest communities (people) are hunting and fishing. Farming is practised at very low scale for subsistence. Livestock raising is limited to few people and is used almost exclusively for special events such as parties, ritual ceremonies or patrimonial exchanges. Therefore, attempts by most projects in the region to develop livestock as alternative to the use of wildlife could not succeed (III.1; III.15; III.18; etc.).

- **Level of education**

CWM projects in Central Africa are located in remote areas where social infrastructure such as communication and schooling facilities are insufficient or absent, and the level of education of people staying there is generally low. Higher trained individuals prefer to stay in urban areas mainly as a result to fear witchcraft and jealousy by neighbours. Therefore, projects introduced there rely on outsider staff to implement their programmes. Generally, these are not welcome by local communities, mainly due to the fact that they are perceived as competitors and this result in conflicts between project staff and local communities and in negative impact on the project efficiency. (See appendix III: III.11; III.15; III.16; etc;)

**Comment box 31:**

*When the programme of ECOFAC was starting in the area in 1992, the local economy was depending on subsistence activities such as shifting cultivation, hunting, gathering and fishing. Since 1980's cash crops such as coffee and cocoa, were no longer produced due to the lack of market. In fact the ECOFAC programme discovered an economically disfavoured area, where the removal of natural resources was being done on daily basis to meet the primary needs of the poor population facing the difficult living situation. The introduction of the ECOFAC project was highly considered by population, as source of employment while the context of the project concerned the development of small local enterprises rather than the creation of large number of wage-earning personnel. As a result, the demand of job from the project by local population was beyond of its capacity. Due to the low level of education of local villagers, highly qualified personnel were recruited outside the area, mainly from Brazzaville. This resulted in conflictual problems with part of local populations, contesting the presence of non-residents staff recruited by the project (ECOFAC, 1996)*

Unless human resources and infrastructures are locally developed, and local organisations empowered, attempts to rely on Community-based wildlife management would not succeed.

- **Mobility of communities**

In most parts of the region, villages like to migrate mainly due seasonal activities (e.g. shift from agricultural activities to fishing) and beliefs in witchcraft.

**Comment box 32:**

*In Conkouati area, in Congo-Brazzaville, after the death of the Village leaders of Nzambi and Ntandu Ngoma villages in 1996, people believed that they had died by witchcraft. Neighbouring village leader of Ngumbi proposed his people to resettle, fearing that they could be affected. Apart from one family who was convinced by Conkouati Principal Technical Adviser, the village members abandoned their properties for a new settlement distant from where they were staying (Paris, 1997, pers.comm. and field observation).*

The fact that local communities are not stable makes it difficult to introduce long-term or permanent investments like livestock keeping or perennial crops as an alternative to the use of wildlife as people fear to loose out.

## **4.9 Economic situation**

In Central Africa, the prevailing economic crisis coupled with the liberalisation of the economic activities resulted in acute decrease of employment opportunities and worsened living conditions of urban populations as well as rural communities. Together with limited economic alternatives, rural villagers found themselves obliged to rely on hunting for their subsistence. As it was observed during field visits, all men, women and children are involved in bush-meat commercialisation (see section 3.4.1). Therefore, attempts towards exclusion of rural communities from the use of wildlife meet strong opposition by such communities.

## **4.10 Local communities motivation**

For different reasons, local communities are not motivated to participate to the sustainable management of wildlife mainly due to the fact:

- The projects could not compensate the costs resulting from the establishment of the protected areas (III.18);
- The rights of use by local communities are not clearly recognised. With establishment of Protected areas in most cases local communities were deprived right of access to such areas, and villages have been resettled (III.4; III3). Tangible legal benefits from such areas to local communities are therefore very low if any. Generally, revenues generated from protected areas go to the public treasury or their allocation is done without consultation of local communities.
- Alternatives introduced to local communities are not attractive to them, mainly due to the uncertainty of their market.

- The legislation related to wildlife management doesn't clearly give right of ownership to local communities nor formally recognise Local Organisation for wildlife management for their own benefits.

#### **4.11 Environmental conditions**

Animals considered by communities to be source of nuisance (e.g. elephants, buffaloes, cut grasses, etc.) de facto are not attractive to them.

**Comment box 33:**

*...the number of buffaloes and elephants is rapidly increasing in our village. They came here to hide from hunters and from the noise of logging machinery. Further to this, their habitat has been distracted and therefore cannot get enough food to support themselves. They came to our village to enjoy our crops and demolish our houses... Conkouati Project must take them away from our village to the park otherwise we will organise ourselves to exterminate them...(Mpela Villagers, Conkouati, Congo, pers. comm.).*

*The Development of Wildlife Breeding Project in Gabon funded by EU and implemented by 'Vétérinaires Sans Frontières' was initiated at Libreville since 1994 as an alternative source of protein which may contribute to reduce poaching in the periphery of protected areas such as Gamba and La Lopé. Research was done on Cat grass (*Thryonomys swinderianus*); African Porcupine (*Atherurus africanus*), Palm Rat (*Crycetomus gambianus*) and the results were positive However the attempts to transfer this technology to rural communities failed mainly because rural areas people could not accept to breed the animals they consider as predators. "we cannot feed our enemies" they argue. This technology is adopted by urban people who could easily get their market (Vétérinaires Sans Frontières 1997, pers. comm.)*

## 5. ACHIEVEMENTS AND IMPACTS OF CWM

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### 5.1 Towards active participation

Despite high commitment of most CWM programmes and projects in Central African countries, the level of local communities involvement in formal management of wildlife is generally low. This may be resulting from the fact that modern concept of community management which is new to these communities or simply the approach to introduce this initiative is not appropriate to them (see section 3.3.1 to 3.3.3 )

### 5.2 Local communities' initiatives

Local Organisations for wildlife management in the region mainly target removals and control of resources; and are made up to claiming back their rights towards the use wildlife resources for their survival.

#### **Comment box 34:**

*In Mpella and Sialivakou Villages, in Congo-Brazzaville a camp of non-resident hunters is under threat of destruction by local villagers. They hunters being requested to resettle close to the mentioned villages in order to facilitate the control of their hunting activities. They are accused to make excessive hunting for commercial purposes (pers. comm. 1997).*

*In Tandou-Ngoma Village, due to decrease of fish in Conkouati lagoon, the village leader organised a meeting with fishermen in order to examine how to solve such problems. The meeting concluded that the decrease of fish production is due to the introduction of efficient new technologies, which motivated the fishermen to catch more fish. As a panacea, it was decided to ban such techniques in order to ensure the sustainable production of fishes in Conkouati lagoon (Chatelain, 1996, and villagers. Comm. 1997*

*In Etome village, Mount Cameroon, villagers control outsiders access to their traditional forest/forest for any activity. Payment in cash, for the contribution to the village development must be done by researchers and tourists before they are allowed to enter into the forest. A bottle of whisky must also be provided for traditional ritual ceremonies (villagers of Etome, pers. comm., 1997). Such initiative is getting support from Mount Cameroon Project (Mount Cameroon Staff and Etome villagers, pers. comm. 1997).*

However, attempts by villagers to control non-residents from hunting often does not work because these hunters are protected by the influential people within the areas or living in urban areas. In addition to this, a such organisation is not legally recognised.

### 5.3 Use of Indigenous knowledge

In some places, consideration of the indigenous knowledge proved their efficiency in evaluating dynamics of wildlife. As recorded by practitioners in the region, local communities express indicators of wildlife dynamics in a subjective way such as " plenty, many, few, rare, no one"; time needed to capture or kill animal; the distance from

household to the area of high productivity; frequency to meet animals (by species), the level of extent to which wildlife caused damage to crops; etc. During preliminary surveys, such information in some places helped researchers to locate wildlife (by species).

**Comment box 35:**

*In Conkouati (Congo-Brazzaville), hunters' information has been used by Paris (1996) to locate by species the animal found in the area. He was also able to estimate the status of wildlife population dynamics - 'increasing, stable, decreasing, disappeared'-. and the approximate distribution map of 47 animal species in the area have been elaborated with participation of hunters. With participation of local hunters, Doumenge (1992) identified the Neotragus batesi (Antelope de Bates) and the Cercopithecus neglectus ("Cercopitheque de Brazza") which were not believed to be available in the areas they have been found Southern Congo.*

*In publications, scientists confirmed that the Grey Parrot give two eggs; However, recently, a team of researchers was showed by Parrot professional hunters that this bird can produce up to four (4) eggs (Luketa 1997, pers. comm.)*

## 6. WEAKNESS, STRENGTHS AND OPPORTUNITIES IN WILDLIFE MANAGEMENT

During this review a number of weaknesses, strengths and opportunities in wildlife management have been recorded. These are illustrated in the following table:

**Table 4: WEAKNESS, STRENGTHS AND OPPORTUNITIES IN WILDLIFE MANAGEMENT**

<b>Strengths</b>	<b>Weaknesses</b>	<b>Opportunities</b>
<ul style="list-style-type: none"> <li>• Customary autonomy by communities for the management of their traditional lands.</li> <li>• Respect of indigenous knowledge and practices for the management of wildlife;</li> <li>• Cultural diversity which provide a basis for the tolerance and respect towards indigenous values and uses of wildlife;</li> <li>• Availability of traditional value to wildlife;</li> <li>• Traditional regulation for the use of natural resources is still applied in some areas; etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Insufficient understanding of dynamics of natural resources and of the allowable rate of removals for sustainable exploitation of wildlife.</li> <li>• Insufficient information about the extent and the nature of the use of wildlife resources.</li> <li>• Insufficient information about extent to which the restriction of access to wildlife resources may affect the livelihood of local communities and local economy.</li> <li>• Insufficient scientific expertise in CWM. There is no efficiently developed approach and mechanisms for Environmental Impact Assessment (EIA), and Cost-Benefit Analysis (CBA), which might help to define the potential impacts of innovation before its or after its introduction.</li> <li>• Low participation of local communities in wildlife research ;</li> <li>• Insufficient knowledge by external actors about the social organisation and its impact on the use of natural resources before the introduction of CWM initiative ;</li> <li>• Non respect of local communities customary rights towards the use of wildlife;</li> <li>• Insufficient sensitisation of communities towards the new concept of wildlife management;</li> <li>• Lack of global view of problems of conservation of biodiversity (in most cases, conservation don't consider the ecosystem as unit)</li> <li>• Institutional complexity for wildlife management ;</li> <li>• Most of WM initiatives are implemented without management plan ;</li> <li>• Insufficient dissemination of texts related to the conservation of wildlife</li> </ul>	<ul style="list-style-type: none"> <li>• High diversity of resources (fauna and flora) and high degree of endemism;</li> <li>• Low density of population in relation to the available natural resources;</li> <li>• Existence of protected areas, with very low level (if any) of disturbance;</li> <li>• Will of the governments to co-operate for sustainable use of forest ecosystem resources;</li> <li>• Respect to the traditional land use systems by communities;</li> <li>• Cohesive Social Structures ;</li> <li>• Will of funding agencies to contribute to the CWM initiatives ;</li> <li>• Appropriate natural environmental conditions</li> </ul>

## 7. REGION-SPECIFIC PERSPECTIVES

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Generally speaking, CWM as perceived by Conservation agencies and projects, focuses the conservation<sup>9</sup>/preservation of wildlife while traditionally local communities aims to use wildlife for nutritional, economical, and cultural purposes.

Governments with the assistance of external donors are trying to develop a legal framework to support the use of participatory approaches for the use and conservation of wildlife. However, divergent perceptions of the concepts of CWM by different stakeholders still exists. For instance, hunting for subsistence is not clearly defined and therefore differently translated by different implementing agencies (see section 8.5).

It was recorded during this review that CWM and use of wildlife are questions of burning importance in Central Africa. Forests conservation policy makers and practitioners are seeking ways and means to involve local communities in the development of collaborative programmes for conservation or sustainable use of natural resources, including wildlife. Integrated Conservation and Development Programmes are being thought about in order develop sound alternatives to the excessive use of wildlife. However, their implementation faces distinct challenges. Therefore there would be a need to train sufficient personnel who would implement such programmes.

Regional debates and reflections are underway at different levels (regional, national, and local levels) in order to examine how local communities could be efficiently involved in the legal management of wildlife. In such context, seminars have been organised respectively through regional organisations such as CEFDHAC<sup>10</sup> or *Brazzaville Process*, GSUDAC/SUI; Conservation agencies, Organisations and Projects (ECOFAC, FORARFI, IUCN-Central Africa Programme); and research programmes and institutions (FORAFRI, CARPE, APFT, etc.). They aim to examine the possibilities of involving local communities in the management of wildlife.

Seminars have been also organised in the same context by Ministries in charge of wildlife management, sometimes with the support of funding agencies. Recommendations to improve or to review legislation for the benefits of the involvement of local communities in the management of wildlife have been drawn out and are expected to be implemented. On the other hand, countries in the region are seeking possibilities for regional co-operation for the management of trans-boundary resources including wildlife, and to determine common interests over such resources.

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<sup>9</sup> Natural resources conservation/preservation, is defined as careful use of resources to ensure that the existing resources are not depleted beyond their ability to recover (Jackson, et al.1992 quoted by Ligunya 1994).

<sup>10</sup> CEFDHAC (*Brazzaville Process*) is a regional initiative aimed to address environmental opportunities and concerns within the tropical rain-forest of Central Africa (Burundi, Cameroon, CAR, Congo-Brazzaville, DRC, Gabon, Rwanda, Saõ Tomé & Principe)

## 8. REGION-SPECIFIC VIEWS OR CONCEPTS OF KEY TERMS

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### 8.1 Conservation

In the perception of local communities only food can be conserved for future consumption.

**Comment box 36:**

*“...we were surprised to hear that living animals could be conserved. For us only food can be conserved against deterioration. For instance fish or meat is smoked to prevent them from rotting...” (Tchama, Leadert of PAGAIE, pers.comm. 1997).*

### 8.2 Wildlife

In many parts of Central Africa, ‘wild animals’ and ‘meat’ are synonymous. For many Bantu<sup>11</sup> dialects, the word ‘nyama’ is used to mean both wild animals and meat. For Baka (Pygmies) in Dja area (Cameroon), the word ‘ntir’ is also used to mean both wild animal and meat. This linguistic interconnectedness may illustrates the extent to which local communities perceive primary food in wildlife.

### 8.3 Community

The dimensions of community are related to the availability and the of the resources. Where resources are plenty, natives welcome outsiders to settle in their territory and become members of their community against the exchanged of a symbolic gift or simply the manifestation of respect to the host community. The welcome outsiders have the same rights towards natural resources as the indigenous. Under such circumstances, ‘community’ is defined as population of a village sharing the same life conditions, resources and interests.

Contrary, when the resources are insufficient, the boundaries of the community tend to shrink. Indigenous claim their customary rights for access to the resources as means to exclude outsiders. ‘Community’ here represents the people belonging in the same clan or ethnic group or traditional users of resources.

In other cases a community can become structured into a ‘group of users’ according to the activities or interests by different members of this community. Here ‘community’ becomes therefore a group of individuals sharing the same life conditions and interests.

In the Cameroonian law regarding forest and wildlife, this country tried be flexible in defining community. This was defined as a village or group of villages and or/a group of people within a village or group of villages, working on behalf of the village or group of villages. Unfortunately this definition did solve the problems of tenure and ownership

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<sup>11</sup> Bantu are the dominating ethnic group in the Central Africa

especially in the places where resources are scarce. Indigenous continue to claim their customary rights of ownership.

#### **8.4 Community Participation in Wildlife Management**

As recorded during this review, where interests of stakeholders involved in the management of resources differ, community management becomes a field of involves conflicts. In most parts of the region, practitioners involved in CWM initiatives (projects and NGOs) have the different perception of the concept of 'local communities participation'. Some consider community participation in wildlife management as provision of information by local people during different studies (biophysical and socio-economic studies), elaboration of management plans or evaluations. Others perceive participation as local people participating in project activities as paid employees/labourers.

Participation of local communities in decision making is not generally emphasised. Few actors consider 'Community participation' in wildlife management as involving people to become legal custodians and users of wildlife with legal right of direct benefit from wildlife resources.

#### **8.5 Poaching and subsistence hunting**

Different interpretation around the concepts of '*poaching and subsistence hunting*'. For some practitioners, poaching is referred to as its definition by law i.e. hunting without legal authorisation /licence while others refer to it as the quantity of wildlife removed. Subsistence hunting for most of practitioners and in the most regulations means hunting for home consumption while local communities extend subsistence hunting to sale bush-meat to get money for their basic needs such as manufactured goods, school fees, payments for health facilities, etc.

#### **8.6 Right of use**

In Cameroon customary right means the right which is recognised as being that of the local population to harvest all forest, wildlife and fisheries products freely for their personal use, except the protected species (Law N°94/01 of 20 January 1994, section 8). Contrary to this, in most cases villagers having customary rights to forest resources feel themselves free to carry out any activity in a such. They allow strangers (outsiders) to enter the territory provided they ask permission and pay gifts to the village members and to their ancestors, and give to the notables the share from what they have collected from such territories (territory)

## 9. PROVISIONAL POLICY LESSONS, SUGGESTED AMENDMENTS TO POLICIES

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- The new system of wildlife management weakened the traditional management systems and deteriorated the traditional administrative authority and organisation to control access to wildlife resources. In most Central African countries, still, colonial legacy has a strong influence on the manner wildlife resources are managed. It may be found that legislation governing the management of the wildlife is generally biased on governmental and conservationists interests rather than local communities priorities. They neglected the customary rights of local communities on their ancestral territories, and they have tendency to exclude them from the use of wildlife key role of these resources in livelihood the local communities (culture, nutrition, medicine, social organisation, ritual ceremonies, etc.).
- Since wildlife is state owned wildlife is treated as an open access resource, and individuals have an incentive to as much animals to maximise income before other people could do the same. As a result, local communities no longer feel themselves responsible for the conservation of wildlife. This led to the degradation of the symbolic value of wildlife in the eyes of local communities and to the impoverishment of the biodiversity.
- Tendency to expand wildlife reserves and National Parks is observed in Central African countries for most cases, policies governing their management stress on law enforcement and non-consumptive utilisation such as ecotourism without taking into account the key socio-economic role of wildlife products to the communities living in vicinity of these areas. This resulted in negative attitudes of local communities towards conservation programmes, and perpetuated antagonism between these communities and conservation practitioners.
- Legislations governing the management of wildlife don't clearly define the role of local communities in the management of these resources. They overlook the role of local communities in the management of wildlife and don't clearly consider the social and cultural values of wildlife to communities. They don't also provide opportunities for an open political environment and a targeted financial support, which could contribute for the motivation of local communities towards wildlife community-led initiatives.
- The concept of conservation/development is complex. Insufficient understanding of the relation '*man-resources*' coupled with inefficient institutional arrangements and insufficient co-ordination of activities may contribute to the failure of community participation in wildlife management. Better understanding of the social, economic, environmental and technical situation is therefore a prerequisite for the development of appropriate legislation and projects.

- Central African communities have a wealth of the traditionally based conservation practices (see section 3.2) believed to have contributed to the sustainability of natural resources. Unfortunately these could not be significantly considered in the legislation. This may have contributed to the divergence of perception, by conservationists and local communities, towards conservation issues, which could be manifested by the non-respect of legislation, by local communities.
- Donors and international organisations have a significant influence in the review of wildlife legislation. However, some orient this influence primarily towards their own conservation interests rather than government and/or local communities' priorities.
- Conservation projects in Central Africa are attempting to tackle wildlife management problems within an extremely challenging complex social, economic, institutional and political circumstances mainly due to the fact that resources (wildlife) to be conserved are those on which rural communities are depending for their survival. On the other hand, for some projects, the lack of secure funding make it difficult to undertake realistic planning at field level and place practitioners on the horns of the dilemma. Unless the efficient co-ordination of the activities is coupled with sufficient negotiation with local communities, the efforts to mobilise these communities for their in put in project activities would be futile.

The development of community resource management is innovative and long-term process. Therefore, implementation agencies and donors should recognise the need of secure and flexible long term funding which could allow long term planning. Donors must therefore commit themselves to longer term financing of conservation/development projects.

## **10. THE FUTURE OF WCM IN CENTRAL AFRICA UNDER DIFFERENT POLICY AND OTHER SCENARIOS**

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Due to the complexity in the management of wildlife resources in Central Africa, there are no fix short-term scenarios to address the problems related to the CWM initiatives in this region. To tackle problems related to CWM the combination of different approaches at different levels and within different sectors would be the appropriate strategy. This will include the following:

- The replacement of the context of short-term specific projects by that of medium-term to long-term integrated projects, not focusing wildlife per se.
- Good knowledge of communities social organisation, community infrastructure, history of resource use (time and space), patterns of resource use (resource mapping), economic dynamics etc.) might be a paramount in building rapport. This would require socio-economic and ecological studies that could help to select innovations by local communities.
- The introduction of alternative economically-sound possibilities for income generation, the improvements of living conditions, the respect of customary management systems and social organisation may contribute to increase participation in CWM.
- Hunting especially by local communities should not be seen as incompatible with the objectives of conservation. Contrary, this activity should be efficiently organised to make it profitable to local communities and to contribute to the development of rural economy.
- Development of efficient mechanisms to exchange information and experience related to the wildlife management would allow different actors to learn from each others and avoid duplication of costly trials and research activities ;
- Compilation and implementation of the recommendations developed during the seminars and workshops related to the management of wildlife organised in the region ;
- Adoption of jointly designed agreements between community representatives and government services involved in wildlife management to address the problems of conflict between local communities and external actors ;
- Where Wildlife management authority is delegated to local communities, close and joint monitoring of the effect of their practices on the sustainability of the biodiversity is advisable to prevent uncontrolled degradation or to take regulation measures whenever necessary.

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# *APPENDICES*

## Appendix I

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## Appendix II

### Typology of participation

Typology	Characteristics
Passive participation (PP)	People participate by being told what is going to happen or has already happened. It is a unilateral announcement by an administration or project management without any listening to people's response. The information being shared belongs only to external professionals.
Participation in information giving (PIG)	People participate by giving answers to questions posed by extractive researchers and project managers using questionnaire surveys or similar approaches. People don't have the opportunity to influence proceedings, as the findings of the research or project design are neither shared nor checked for accuracy.
Participation by consultation (PC)	People participate by being consulted, and external agents listen to views. These external agents define both problems and solutions, and may modify these in the light of people's responses. Such a consultative process does not concede any share in decision-making and professionals are under no obligation to take on board people's views
Participation for material incentives (PMI)	People participate by providing resources, such as labour, in return for food, cash or other material incentives. "In situ" research falls in this category, as rural people provide fields but are not involved in the experimentation or process of learning.
Functional participation (FP)	People participate by forming groups to meet pre-determined objectives related to the project, which can involve the development or the promotion of externally initiated social organisation. Such involvement does not tend to be at early stages of project cycles of planning, rather after major decisions have been made. These institutions tend to be dependent on external structures, but may become independent in time.
Interactive participation (IP)	People participate in joint analysis, which leads to action plans and the formation of new local groups or strengthening of existing ones. It tends to involve interdisciplinary methods that seek multiple perspectives and make use of structured learning processes. These groups take control over local decisions, so that people have a stake in maintaining structures or practices.
Self-mobilisation/active participation (SM/AP)	People participate by taking initiatives independent of external institutions to change systems. Such self-initiated mobilisation and collective action may or may not challenge existing distribution of wealth and power.

Source: Pimbert and Pretty 1994, quoted in IIED (1994)

## Appendix III

### DEFINITION OF THE IUCN PROTECTED AREA MANAGEMENT CATEGORIES

#### **CATEGORY Ia.**

##### **Strict Nature Reserve/ protected area managed mainly for science**

Area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.

#### **CATEGORY Ib.**

##### **Wilderness Area: protected area managed mainly for wilderness protection**

Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.

#### **CATEGORY II:**

##### **National Park: Protected area managed mainly for ecosystem protection and recreation**

Natural area of land and/or sea, designated to a) protect the ecological integrity of one or more ecosystems for present and future generations, b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation of spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

#### **CATEGORY III.**

##### **Natural Monument: Protected area managed mainly for conservation through management conservation**

Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of species.

#### **CATEGORY V.**

##### **Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation**

Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

#### **CATEGORY VI.**

##### **Managed resources Protected Area: protected area managed mainly for the sustainable use of natural ecosystems**

Area containing predominantly unmodified natural systems, managed to ensure long-term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.

*Source: IUCN, 1998*

## Appendix IV

### Comparison of \* mineral salts content in the meat of some livestock and wild animals

Source and type of meat	Humidity Gm	Protein gm	Fat gm	Ash gm	Calcium Gm	Phosphorous gm	Iron Gm
<b>Livestock meat</b>							
Beef	73.8	19.6	12.0	1.0	3.9	57	5.1
Sheep	78.5	17.2	2.9	1.0	9.0	80	3.1
<b>Bush-meat</b>							
Bush-buck ( <i>Tragelaphus scriptus</i> )	74.4	21.6	2.9	1.1	75	207	<b>5.0</b>
Kob ( <i>Adenota kob</i> )	73.3	24.1	1.7	0.9	78	126	<b>2.9</b>
Waterbuck ( <i>Kobus defassa</i> )	74.1	21.6	3.4	0.9	74	163	<b>3.1</b>
Royal antelope ( <i>Neotragus pygmaeus</i> )	74.5	23.4	0.9	1.2	49	156	<b>3.2</b>
Grey duiker ( <i>Sylicarpa grimmia</i> )	74.6	20.8	3.4	1.2	22	116	<b>3.1</b>
Hartebeest ( <i>Alcelaphus buselaphus</i> )	71.9	23.3	3.8	1.0	62	132	<b>2.8</b>
Warthog ( <i>Phacocherus aethiopicus</i> )	76.9	20.7	2.1	0.9	92	52	<b>3.1</b>
Bush pig ( <i>Potamochoerus porcus</i> )	71.3	25.5	2.2	1.1	30	156	<b>2.2</b>
Tantulus Monkey ( <i>Cercopithecus aethiops</i> )	80.3	17.6	1.3	1.1	140	68	<b>5.0</b>
Savannah Elephant ( <i>Loxodonta africana</i> )	50.8	30.9	17.8	0.5	80	26	<b>3.4</b>
Cane-rat ( <i>Thryonomys swindrianus</i> )	72.3	22.7	4.2	0.9	83	111	<b>1.9</b>
Hare ( <i>Lepus capensis</i> )	74.1	20.9	4.4	0.9	106	193	<b>3.3</b>

Source: Asibey and Eyeson, 1975, quoted in Akum, 1997

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\* Mineral salt content of the above table is derived from edible piece of meat..

**Appendix V**  
**Use of wildlife products (others than meat) according to the hunters of Conkouati area**  
**(Southern-Congo).**

Scientific name	English name	Parts used	Cost (CFCFA)	Use
Potamochoerus porcus	Bush Pig	tusks	-	Fetiches
Syncerus caffer nanus	Buffalo	skin	3'500	Decoration, shoes
		horns	2'000	Decoration
Cephalophus monticola	Blue Duiker	skin	1'000	Best for drums
		horns	-	Fetishes
Cephalophus nigrifrons	Black-fronted Duiker	skin	750	Drums
		horns	300	Fetishes
Cephalophus sylvicultor	Yellow-backed Duiker	skin	3'000	Drums, hinges, carpets
		horns	3'500	Fetishes
Tragalaphus scriptus	Bushbuck	skin	3'500	Drums, strings
		horns	1'500	Fetishes
Hyemoschus aquaticus	Water Chevretain aquatique	teeth	-	Fetishes
Tragalaphus spehei	Sitatunga	skin	3'000	Drums, hinges, carpets.
		Horns	1'000	Trumpets
Kobus ellipsiprymnus defassa	Waterbuck	Skin	-	Carpets, hinges
Manis gigantea	Giant Pangolin	Scales	-	Fetishes
Manis tricuspis	Tree Pangolin	Scales	-	Fetishes
Anomalurops beecrofti	Anomalures spp	Teeth, nails	-	Fetishes
		Hairs	-	Medicine
Atherurus africanus	African Porcpine	Needles	-	Comb
		nail, penis	-	Fetishes
Panthera pardus	Panther	Skin	150'000	Traditional dressing of chef, export
		Teeth, crows	-	Fetishes
		Liver, tongue	-	Poison
		Blood	-	Fetishes
Proferus aurata	Silver cat	Skin, crows, teeth	-	Fetishes
Lutra maculicollis	Spotted-necked Otter	Skin	2'500	Fetishes
Mellivira capensis	Ratel (Honey Badger)	Skin, crows	-	Fetishes
Vivera civetta	African Civet	Skin	3'000	Fetishes
Genette servalina	Small-spotted Genet	Skin	3'000	"
Nandinia binotata	Two-spotted Palm Civet	Skin, Teeth	1'200	"
Poiana richardsoni	African Linsang	Skin	-	"
Perodicticus potto	Bosman's Potto	Legs bone	-	"
Gorilla gorilla gorilla	Gorilla	Skull	-	"
		Forefinder	-	"

*Source: Paris (1996): Connaissances locales sur les mammiferes sauvages dasn la zone de Conkouati.*

