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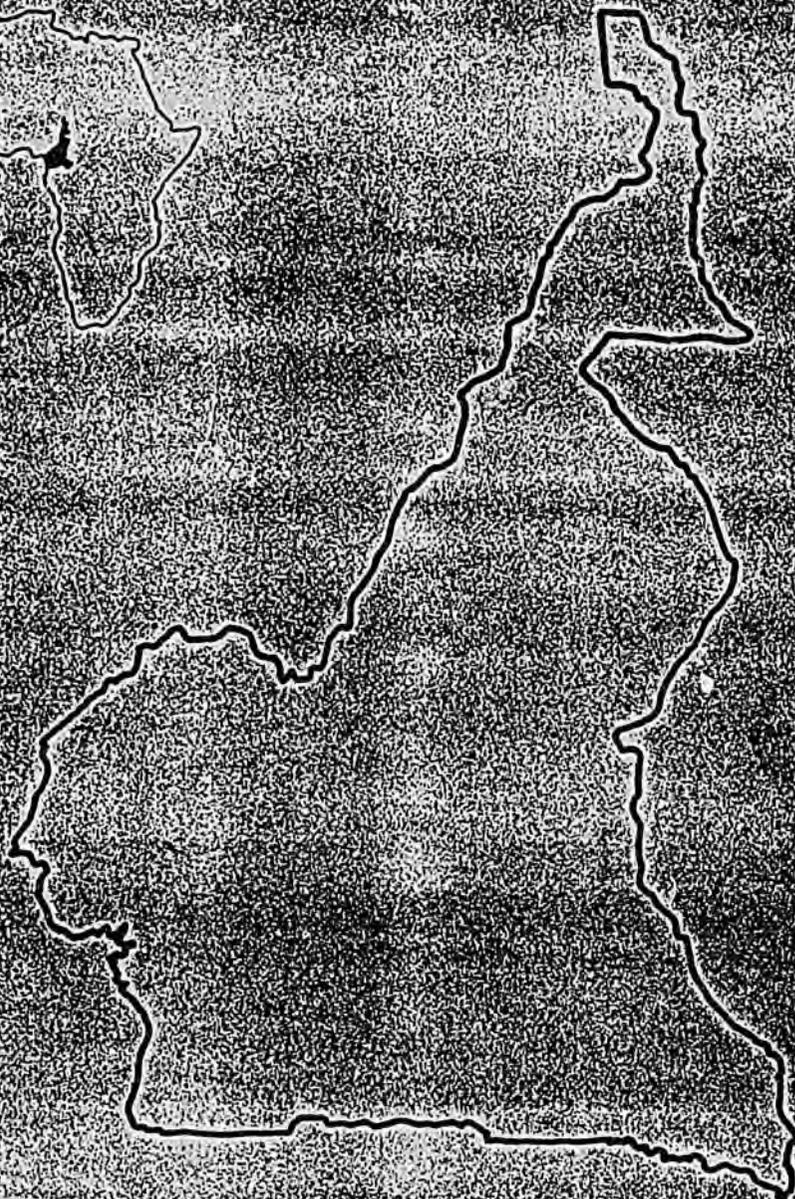
ELEPHANT CONSERVATION

PLAN

PN-ABS-961

ISN 90885

CAMEROON



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October 1991

Ministry of Tourism
Department of Wildlife & National Parks
Yaounde, Cameroon

ELEPHANT CONSERVATION

PLAN

for

CAMEROON

October 1991

Ministère du Tourisme,
Direction de la Faune et des
Parcs Nationaux
Yaoundé, Cameroon

ENDORSEMENT BY THE MINISTER OF TOURISM

The conservation and sustainable development of natural resources is amongst the top priorities of the Cameroon Government. Friendly Countries and International organisations are helping Cameroon towards attaining the objectives embodied in her wildlife policy.

It is certain that elephant conservation has become a sensitive issue and is rapidly spreading through the African Continent. The Cameroon Government is concerned about the fate of the elephant population in her national territory. This is why Government encourages programmes geared towards the improvement of the Country's protected areas as well as the conservation of endangered plant and animal species.

Considering therefore, the importance that Government attaches to environmental problems and particularly wildlife management, I approve the accompanying National Plan for Elephant Conservation for the Republic of Cameroon and hereby solicit the continued assistance from friendly Countries and Organisations in order to ensure its progressive and entire realisation, as well as the fulfilment of all the objectives envisaged therein.

YAOUNDE, 12th November 1991

MINISTER OF TOURISM,

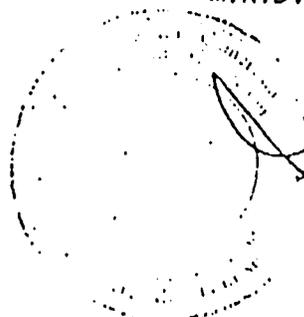
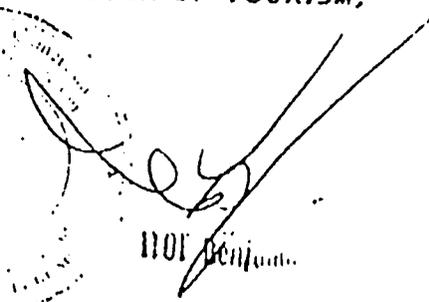


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BACKGROUND TO THE PRODUCTION OF ELEPHANT CONSERVATION PLANS

The 1980's were a devastating time for the African elephant over most of the continent. One principal problem was that wildlife management, particularly through government agencies, was woefully underfunded.

The AECCG was created in partial response to this problem: to provide a means for improving the flow of funds into elephant conservation. The AECCG produced, in 1989, an African Elephant Action Plan, which established a broad view of continental priorities. The original Plan was reviewed informally by African States meeting in Gaborone, Botswana in July 1989, and at Lausanne, Switzerland in October 1989, and it became clear that their priority was to translate the continental generalities of the Action Plan into specific plans for each of their countries.

Because of this, the AECCG and its members have assisted nearly 30 African nations to create elephant conservation plans, with an emphasis on projects that can attract foreign assistance. These projects are intended to complement each country's existing programme of conservation activities. In this regard, it should be noted that the principal supporters of elephant conservation in Africa, are the African governments themselves.

The Elephant Conservation Plans are not exclusively concerned with benefits to elephants, but aim also to promote wider conservation goals in areas where elephants are but one of the species in need of active support.

The plans follow a common format, so that the structure of this plan is generally similar to that of other countries. The plans are being produced so that they may be circulated to potential donor organisations in advance of the meeting being hosted at UNEP headquarters, Nairobi, between 28th - 31st January 1992, at which elephant range states will present their needs to the donor community.

In addition to producing country plans, the AECCG has established a computerised database of elephant-related projects. Information on projects throughout Africa is compiled from all possible sources. Using the database, the AECCG periodically produces a summary of project information. Its principal purpose is to help define the needs of elephant conservation that can be met by donor assistance. Donor agencies wanting to fund elephant conservation projects can use the database in conjunction with Elephant Conservation Plans to determine for any one country, region or type of conservation activity, what projects are being planned or carried out, and which projects are currently in need of funding. The fourth edition of the database summary will be distributed to international donors and government wildlife departments towards the end of October 1991, prior to the Range States' and Donors' Meeting.

The needs of each country and each region have in turn been summarised and analysed in a document called "The Elephant Conservation Review", which replaces its predecessor the African Elephant Action Plan. The analyses in this document are based upon project information appearing in the database as well as other elephant conservation information found in the Elephant Conservation Plans. This document will act as an overall aid to determining where needs are greatest for each type of activity. It too will be distributed just prior to the Range States' and Donors' Meeting.

For any further information about the plan, the projects within it, or the process of which it is a part, please contact either:

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The costs of compiling and writing this plan were met by the project development budget of WWF-Cameroon.

This plan was produced with assistance from the African Elephant Conservation Coordinating Group (AECCG) with financial support from the US Agency for International Development (USAID), the European Commission (EC), the World Wildlife Fund (WWF), and the US Fish & Wildlife Service (USF&WS).

While this plan was produced with the assistance of the AECCG, the views expressed in the plan reflect the conservation beliefs of the government and technical staff within Cameroon, and are not necessarily the views of individual AECCG members.

AECCG members include: the African Wildlife Foundation (AWF), the EC (DG XI), the World Conservation Union (IUCN), TRAFFIC International, USF&WS, Wildlife Conservation International (WCI), the World Wide Fund for Nature (WWF) and the World Conservation Monitoring Centre (WCMC). The CITES Secretariat is an observer.

The production process of the plan was coordinated by Stephen Cobb with the assistance of the AECCG editorial team: Ilyssa Manspeizer, Helen de Jode, Megan Parry, Sarah Lyne, and Clare Shorter.

ELEPHANT CONSERVATION PLAN FOR CAMEROON: SUMMARY

The elephants

There is few accurate data concerning the status, the distribution and the number of elephants in Cameroon. According to estimates, the total number of elephants living in the country would be of 23,542 individuals. Some of these elephants live in the Waza-Logone floodplain and in the Sudanese region. However, the majority (71%) is located in the East of the country, outside the protected area network. For many centuries, elephants were living in harmony with their environment. With the beginning of the colonial period, they became to be threatened by intense poaching. Development, extensive agriculture, population increase and poaching are the main causes threatening the survival of the remaining populations

The problems

Poaching and ivory trade activities (although illegal) are still practised in Cameroon. The lack of infrastructure, equipment, staff and general knowledge on elephants, make difficult any management for national parks and wildlife reserves. Furthermore, it is essential that the protected area network be extended, particularly to the East, where most of the elephant population live without being protected. Cross-border poaching is still flourishing because of the lack of regional collaboration.

The projects

The elephant conservation plan for cameroon introduces 16 projects, of which 4 are already partially financed. The other projects require total funding. The table below gives a summary of these projects:

Main activity	Number of projects	Funding status US\$	
		Funds collected	Funds raised
Survey/Monitoring	5	0	393,303; 557,920
Ivory Trade	1	0	120,897
International Affairs	1	0	87,285
Research	2	0	136,519; 175,000
Rural Development	1		2,147,287*
Institutional Support	3	0	865,893; 219,665; 2,219,925
Security	1	0	557,865
Public Awareness	1	129,322	216,164
Park Management	2		3,107,712*; 222,640*
TOTALS	17	129,322	11,028,075

* It is not known how much funding has been secured for these projects
This plan is available in English and French

Elephant Conservation Plan

for

BEST AVAILABLE DOCUMENT

Cameroon

PART A:

INTRODUCTION

&

BACKGROUND

Ministère du Tourisme,
Direction de la Faune et des
Parcs Nationaux
Yaoundé, Cameroon

1 INTRODUCTION AND OVERVIEW

1.1 Introduction

The African elephant is one of the most familiar mammals on earth and needs little further introduction. However, in spite of this public familiarity, there remains much that is unknown about these animals. Even at the basic level of taxonomy there are problems. Until relatively recently it was thought that the savanna (or "bush") elephants, *Loxodonta africana africana* and forest elephants, *Loxodonta africana cyclotis* were allopatric. It is now known that this is an over-simplification with the situation in the forest being particularly confused. Furthermore, it has been suggested that there also exists a pygmy elephant, *Loxodonta africana pumilio* and indeed there is some evidence for this. This plan makes no taxonomic claims. It will talk only about "forest elephants" and about "savanna elephants" referring only to the habitats in which the animals occur.

1.2 Overview

Forest and savanna elephants used to roam widely through Cameroon's varied ecosystems. While there had been trade in ivory since early historic days, the rate of elephant killing was fairly low until the advent of the colonial era. A major aim of German colonisation was trade and ivory was a significant item of this trade. At the advent of the colonial era, the elephant population was much higher than at present and the human population was much lower. The human population was distributed in villages which were connected by footpaths. These footpaths and rivers were the principal means of communication; there were no roads or railways.

Elephants are large animals with large appetites. They are also very social and the fodder and water requirements of large herds can be tremendous. The effects of a herd moving and feeding through human plantations can be devastating. Elephants can move large distances daily in search of food, and often also indulge in large seasonal movements which appear to be dictated by water and/or food requirements. These annual movements used to take place at regular intervals and followed traditional paths. These were often very well-marked, particularly in the forest zone. All this presumably took place throughout pre-history without too much problem; marauding elephants would occasionally be killed by tribal hunters but with primitive hunting equipment, which must have had virtually no effect on their total numbers. With the increase in human population density, however, and with the massive increase in development infrastructures such as roads, railways, plantations, towns, etc and the advent of modern firearms, the elephant population has become increasingly fragmented, and the routes of its traditional migrations become increasingly difficult to follow; conflicts with the farming population have increased dramatically.

The vast majority of Cameroon's elephants live in the dense forest zone (over 70% of them in the Eastern province) and most of them live outside the country's protected area system (National Parks and Wildlife Reserves). There are populations, particularly of the savanna elephants, living inside the protected area system, most notably the Waza–Logone floodplain.

It is essential for the long-term survival of elephants in Cameroon, and in order for the country to be able to capitalize on this important renewable resource, that the national protected area system be extended into the dense forest zone. The infrastructure of protection (in terms of staffing and equipment, etc) in the dense forest zone of the Eastern Province is rudimentary and needs increasing and improving.

It is also necessary:

- to improve the capacity of the existing national parks and wildlife reserves be improved in order that the fauna therein be properly protected against commercial poaching, which poses an increasing problem.
- to collect basic information on the actual current population, distribution and trends of elephants in Cameroon. These studies should be conducted in both the savanna and dense forest zones. It should then be possible to give an accurate account of the size and distribution of the national herd. This information is an essential pre-requisite to the development of a national elephant management plan.
- to allow the staff in charge of the elephant and wildlife protection to ensure its own protection as well as the animals within the Waza National Park. At present national economy derives some benefit from sport hunting of elephants, but this is far outweighed by the illegal income obtained by ivory poachers, which for the most part is lost to the national treasury. The demand for ivory continues, and guards protecting the national park of Waza and its elephant population have been killed in the course of duty. It is important that they be able to protect both themselves and the fauna of the park.
- to study the dimensions of the ivory trade in order to be able to control it.
- to carry out a research programme in order to understand the phenomenon of migrations which are more and more provoked, the ecology and behaviour of elephants in both forest and savanna habitats to provide the information necessary for management of the national herd.
- to increase the capacity of government to manage its protected areas and its renewable resources be improved. It is important that a national policy on elephants be developed, that legislation be appropriate, and that the management plans be fully implemented. This implies both institutional reforms (or realignments) and assistance to improve government's capacity to manage its renewable resources.

- to integrate the protected area system into the local and regional socio-economic structure so that the local populations derive benefits from the protected areas. Game management areas (such as the zones cynégétiques) could be set up around new protected areas in the dense forest zone where controlled sport hunting of elephants could take place. If local communities benefited financially from this sport hunting, a possible mechanism for ameliorating the human/elephant conflicts could be developed. It is essential that management policies and control methods for elephant populations living outside protected areas be developed.
- finally, to develop a regional cooperation to ensure the control of cross-border poaching and trade in elephants and elephant products and also that the laws and regulations of the various regional countries be harmonized to the maximum extent possible.

The total cost of implementation of the measures proposed in this plan amount to just less than \$US12 million; this amounts to a figure of approximately \$500 for every elephant in Cameroon.

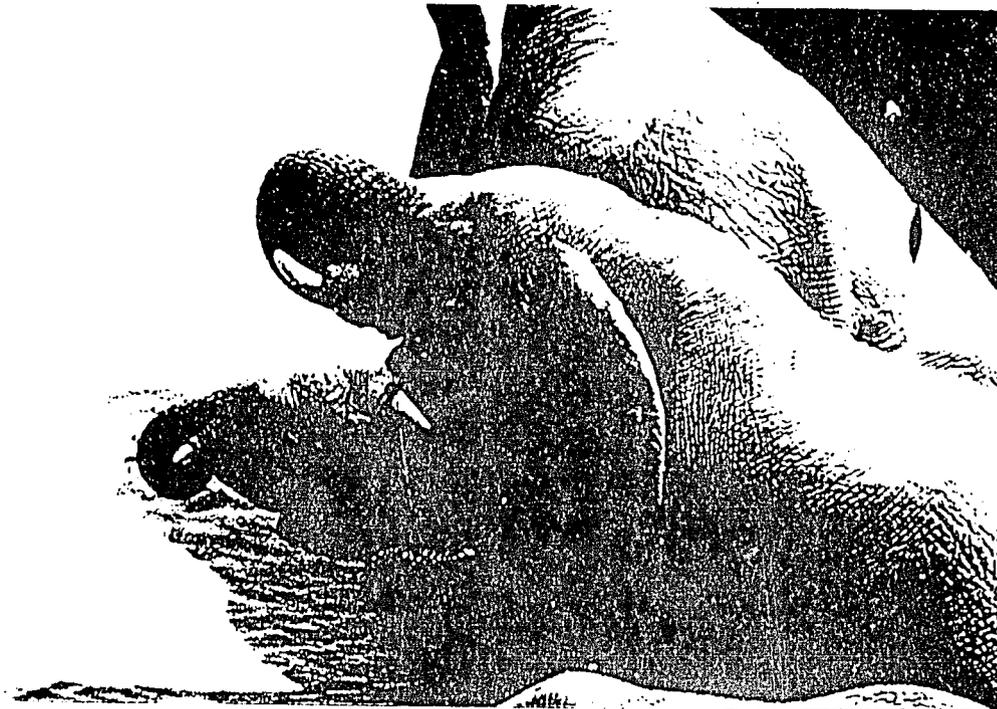


Plate 1 Savanna elephants drinking at waterhole, Waza N. P. (Photo: Steve Gartlan)
Éléphants de saune s'abreuvant dans le P.N. de Waza



Plate 2 Forest elephant, sensing danger, Korup N. P. (Photo: Atanga Ekobo)
Éléphants de forêt pressentant le danger, P.N. de Korup.

2 THE STATUS OF ELEPHANTS IN CAMEROON

2.1 Ecological and physical background

The African elephant is the largest terrestrial mammal and their distinctive characteristics are too well known to need further description. They are intensely social animals living in sometimes large herds although group size in the dense forest is often much smaller. The groups are structured in matriarchal lines which often join together. Bulls live in small groups and small herds. Elephants spend much of the day feeding and they travel great distances while searching for their preferred food. They browse on leaves of trees and less frequently graze on grass. Long-distance migrations are common; these are often now restricted by human settlement and are a common cause of conflict with humans.

In the savanna, elephants are mainly active during the morning, afternoon, evening and at night. During midday heat they rest in the shade. They like to bathe and wallow and are good swimmers. They are partial to over-ripe and fermented fruits which can lead to apparent drunkenness; in the forest this has been observed with fruits of the bush mango, *Irvingia gabonensis* and with *Balanites wilsoniana*. They are serious crop-raiders and are very destructive and very wasteful. They are much feared by farmers for this reason.

Historically, elephants have occurred in most of Cameroon's habitats; although their range is currently much reduced. Their current distribution is basically determined by human population density. Where human population density is high, elephant population density is low; and the reverse is usually true.

Cameroon is located in West-Central Africa. It is roughly triangular in shape, with a base of about 700 kilometres and a height of 1,200 kilometres. It comprises dense, evergreen equatorial moist forest in the south and sahelian vegetation around Lake Chad in the north, with many intermediate ecosystems each of which is modified by regional and local factors such as topography, climate, hydrology and by edaphic or anthropogenic factors. It has both lowland coastal plains and extensive uplands which extend from Mount Cameroon (4,095m) on the Atlantic coast, to the Mandara Mountains in the north of the country.

Cameroon lies between longitudes 8° and 16° east of the Greenwich meridian and between latitudes 2° and 13° north of the equator. It covers an area of 475,000 square kilometres and has an unevenly distributed human population of approximately 11.6 million, with an average density of 24.4 inhabitants per square kilometre.

Three major terrestrial biogeographical regions can be distinguished in Cameroon as well as a coastal marine region. The coastal marine region is not used by elephants. The other three regions are important for elephants. These regions are:

- 1 The Sudanian region, which covers 198,000 square kilometres, comprises two major domains, the sahelian (36,000 sq km) and the sudanian (approx 162,000 sq km).

The first one includes the Waza–Logone floodplain which contains one of the largest elephant populations of the soudano–sahelian region (1,100 elephants). The expansion of agricultural farmlands and wood cutting activities in this floodplain lead to human–elephant conflicts and to changes in migration patterns.

The second was includes the Faro, Benoué and Boubanjidah National Parks and is also very important for savanna elephants.

- 2 The Afro–Montane Region can be subdivided into two the sub–alpine and afro–montane domains. It covers only about 725 square kilometres.

- i) The afro–subalpine domain is not well–developed in Cameroon. It has no significance for elephants and will not be considered further here.
- ii) The montane domain. The montane forests are disappearing rapidly and are one of the most endangered ecosystems of the country.

- 3 The Guineo–Congolian Region includes the fringing savannas and dense humid forests of various types including submontane forest. It can be divided into two major domains, submontane and medium and low altitude forest. It is a formation that is used by elephants, particularly in the south. The medium and low altitude forest domain shelters important elephant populations.

This covers about 188,000 square kilometres or 40% of the national land.

- a) evergreen cameroon–congolese zone of medium altitude forest: this covers about 118,000 square kilometres or 25% of the national land. The faunal and floral diversity of this zone tends to be less than that of the Atlantic coastal forests. This is one of the strongholds of the remaining forest elephant population in Cameroon.
 - b) evergreen atlantic or nigerio–cameroon–gabon zone of low and medium altitude forest. The floral and faunal diversity of this zone is very high. This zone is highly endangered from logging and from human population pressures. The elephant population is endangered directly by poaching and indirectly through habitat fragmentation. Korup National Park and the wildlife reserves of Douala–Edea and Campo lie in this zone.
- 4 The coastal marine region; this is of no significance for elephants and will not be considered further.

2.2 Recent history of savanna and forest elephants.

There is evidence that major changes to elephant distribution and population density began to occur during the colonial epoch and particularly during the last few decades of the nineteenth century. Information from colonial sources indicates a much wider elephant distribution than is currently the case. For example, the forests around Kumba (South-West Province), now farm bush from which elephants have long-since been eliminated, were well-known as good elephant territory. Barombi Lake is marked on colonial maps as "Elefanten See" but it is many decades since any elephants have roamed this forest.

One of the main impulses behind German colonisation was trade, and one of the most important items of this trade was ivory. Even in the last century German governors were trying to control this commerce by imposing a minimum export tusk size of 5 Kg, but found that it could not be enforced because under-sized tusks were smuggled out either to Nigeria or south to French Equatorial Africa. The ivory trade was one of the most important of the colonial economy and figures showed increases year after year, with a collapse occurring just before the end of the German colonial era; ivory was a far more important trade item than tropical timber until just before the First World War. Modern pressure on the Cameroon elephant population is therefore over a century old.

The relationship between villagers and elephants is complex. Elephants are crop raiders and are feared and detested as such, but they are seen as dangerous animals, and hunting them is a specialised activity; ordinary hunters will not do it. Furthermore, elephants are widely involved in folk-lore. It is universally believed in village societies that people can and do transform themselves into elephants. Thus crop raiding is not a simple matter of a hungry elephant and a field of corn, it is a matter of which person wished the farmer enough ill to transform himself into an elephant and destroy his crops.

As long as the human population remained in isolated villages, elephants survived in the forests, but with increasing human density and particularly development, as measured by roads etc, there began to be major changes. Elephants moved away from former ranges and high concentrations began to be observed in remaining isolated forests and protected areas such as national parks and forest reserves. These high concentrations can cause ecological damage; management problems become intense. Traditional migration routes become unusable because of development, and the social and ecological patterns of the animals are disrupted. Land-use conflicts with farmers develop.

2.3 Elephant populations and distribution.

There are few accurate counts of elephants in Cameroon. The most accurate are for the Waza-Logone floodplain (including the parks of Kalamaloué and Waza) and Korup and for the south-east of the country. The following estimates are basically educated guesses. An analysis is carried out by province, known populations in protected areas are subtracted from the remaining total for the province which is calculated at a level of 0.01 elephants per square kilometre. Other estimates are low density = 0.1 per sq km, medium 0.2 per sq km and high 0.4 per sq km.

Table 1 Estimates of Elephant Populations by Province

1 EXTREME NORTH

Name of area	(size of area and factor)	Estimated popn.
Waza-Logone Floodplain (including Kalamaloué and Waza National Parks)	(10,000 Km ²)	1,100
	TOTAL =	1,100

2 NORTH

Name of area	(size of area and factor)	Estimated popn.
Faro N.P.	(3,300 Km ² - count)	= 60
Bénoué N.P.	(1,800 Km ² x 0.3)	= 540
Boubañjidah N.P.	(2,200 Km ² x 0.3)	= 660
3/5 Rest of Province	(35,986 Km ² x 0.01)	= 360
	TOTAL =	1,620

3 ADAMAWA

Name of area	(size of area and factor)	Estimated popn.
1/3 Rest of Province	(62,048 Km ² x 0.01)	266
	TOTAL =	266

4 CENTRE

Name of area	(size of area and factor)	Estimated popn.
Mbam and Djerem*	(4,210 x 0.1)	= 420
Akonolinga P. Forest	(400 Km ² x 0.1)	= 40
Kiki P. Forest	(420 Km ² x 0.1)	= 42
1/2 Rest of Province	(23,075 Km ² x .01)	= 231
	TOTAL =	733

5 EAST

Name of area	(size of area and factor)		Estimated popn.
Lake Lobéké	(2,414 Km ² - count)	=	6,000
Boumba Bék	(2,330 Km ² - count 1.3)	=	3,029
Doume P. Forest	(350 Km ² x 0.2)	=	70
Deng-Deng P. Forest	(3,000 Km ² x 0.01)	=	30
Obeguira P. Forest	(730 Km ² x 0.2)	=	146
Djouyaya P. Forest	(768 Km ² x 0.2)	=	154
Atick P. Forest	(710 Km ² x 0.2)	=	142
Gado P. Forest	(329 Km ² x 0.2)	=	66
Badgere P. Forest	(219 Km ² x 0.2)	=	44
Mpoup P. Forest	(751 Km ² x 0.2)	=	150
Abong/Lomié P. Forest	(4,005 Km ² x 0.2)	=	801
Doumba-Belo P. Forest	(545 Km ² x 0.2)	=	109
Dja Wildlife Res.	(5,260 Km ² x 1.0)	=	5,260
Rest of Province	(87,409 Km ² x 0.01)	=	874
	TOTAL	=	16,875

6 SOUTH

Name of area	(size of area and factor)		Estimated popn.
Sangmelima P. Forest	(650 Km ² x 0.1)	=	65
Nlobo P. Forest	(2,030 Km ² x 0.01)	=	20
Soo-Lala P. Forest	(397 Km ² x 0.01)	=	4
Campo Wildlife Res	(300 Km ² x 0.1)	=	30
Kienke P. Forest	(750 Km ² x 0.1)	=	75
Ma'an P. Forest	(990 Km ² x 0.2)	=	198
Rest of Province	(42,182 Km ² x 0.01)	=	422
	TOTAL	=	814

7 LITTORAL

Name of area	(size of area and factor)		Estimated popn.
Edca-Ngambé P. F.	(600 Km ² x 0.01)	=	6
Boncpoupa P. Forest	(200 Km ² x 0.1)	=	20
Mangombé P. Forest	(200 Km ² x 0.1)	=	20
Letia P. Forest	(450 Km ² x 0.1)	=	45
Douala-Edca W. Res	(1,600 Km ² x 0.1)	=	160
	TOTAL	=	251

8 SOUTH-WEST

Name of area	(size of area and factor)		Estimated popn.
Bambuko P. Forest	(266 Km ² x 0.2)	=	53
Bakossi P. Forest	(55 Km ² x 0.1)	=	6
Mokoko P. Forest	(90 Km ² x 0.1)	=	9
S. Bakundu P. Forest	(194 Km ² x 0.1)	=	19
Ejagham P. Forest	(748 Km ² x 0.3)	=	224
Takamanda P. Forest	(676 Km ² x 0.4)	=	270
Banyang Mbo P. Forest	(426 Km ² x 0.3)	=	128
Mawne River P. Forest	(539 Km ² x 0.3)	=	162
Nta-Ali P. Forest	(315 Km ² x 0.3)	=	95
Korup National Park	(1,260 Km ² x 0.3)	=	378
Rest of Province	(20,102 Km ² x 0.01)	=	201
	TOTAL	=	1,545

9 NORTH WEST

Name of area	(size of area and factor)		Estimated popn.
Mbembe-Ako P. Forest	(282 Km ² x 0.1)	=	28
Fungom P. Forest	(807 Km ² x 0.1)	=	81
	TOTAL	=	103

10 WEST

Name of area	(size of area and factor)		Estimated popn.
Santchou W. Reserve	(70 Km ² x 1.3)	=	91
Rest of Province	(13,833 x 0.01)	=	138
	TOTAL	=	229
	GRAND TOTAL	=	23,542

Mean national density = 0.05 elephants per square kilometre.

Savanna total = 2,986 : Forest total = 20,556.

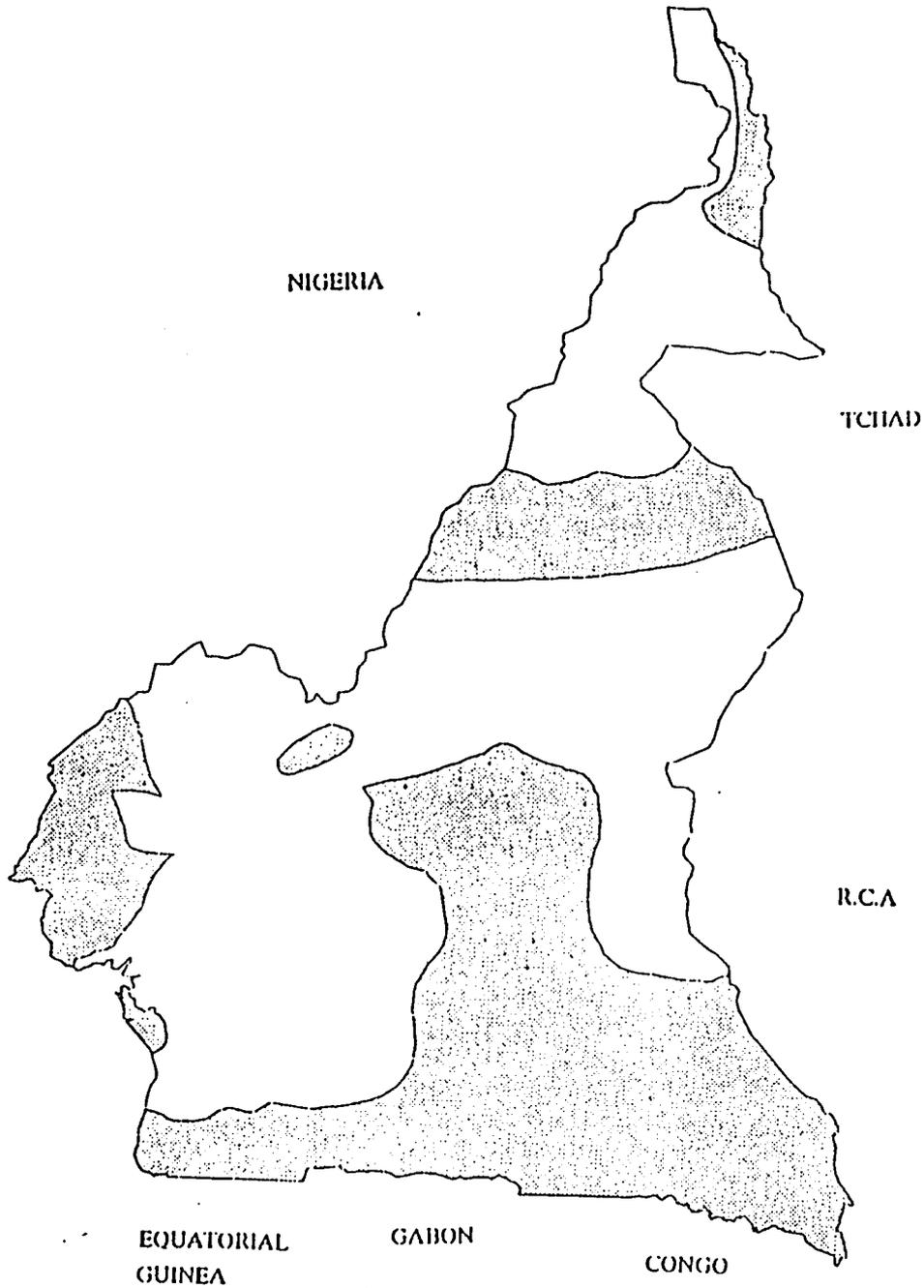
* Mbam and Djerem is in the process of being gazetted as a National Park. It extends into the Eastern Province.

A major area for elephants in Cameroon is the Waza–Logone floodplain with a population of some 1,100 animals. In the dry season elephants stay in Waza and Kalamaloué because of water availability and move out during the rains when there is also less perennial grass available inside the park. A subpopulation of elephants migrates between Waza and Kalamaloué National Park. In the dry season they are in Kalamaloué and in the wet season they move back towards Waza. The prolonged stay of an increasing number of elephants might ultimately have deleterious effects on the ecology of this park.

There is another major population of elephants located in the band of Sudanian vegetation which lies north of the Adamawa plateau and south of the Sahelian domain. The three national parks of Faro, Benoué and Boubanjidah lie in this zone. The elephant population of Faro is relatively small and apparently is a relatively recent immigrant, having entered the area within the last four decades. Population densities are highest further east. Seasonal movements again appear to be correlated with water and food availability.

There are few elephants in the Adamawa and Centre provinces. By far the largest population is located in the East province (which in fact contains 71% of the national elephant herd) and which therefore must be considered a priority region in terms of national elephant conservation priorities. This area includes the highest recorded forest elephant density yet recorded in Africa, 2.6 animals per square kilometre (Stromeyer & Atanga, 1991). The Provinces of Centre, Littoral, North–West and West have few remaining elephants and their populations are fragmented, their traditional migration routes obstructed and they are heavily poached. There are still populations in the South Province, although these are being affected by the encroachment of development and forestry activities and in the South–West, notably the Korup and Takamanda areas.

Figure 1 **Distribution of Elephants in Cameroon**



IUCN African Elephant Programme in collaboration with GHDP, ICF, AFRSG and FLSA

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Africa Project, Inc. in 2004

3 INSTITUTIONAL FRAMEWORK

3.1 Policy and legislation

Environmental concerns are a relatively recent development in Cameroon and there exists no central environmental policy; various aspects of environmental concerns are fragmented, as previously noted, between several Ministries. This does not lead to an effective administration. Government has a stated commitment to protected area management, but in recent years there has been a marked decrease in operating budgets and a virtual cessation of investment budgets. (This is not specific to the National Parks administration, but is a general phenomenon and is the effect of a general economic crisis). Elephant conservation is of importance to Government because of the possibility of generating increased revenue from wildlife viewing (elephants being an important and very visible part of the fauna of the savanna national parks) and from sport hunting, potentially a very lucrative industry.

Hunting in Cameroon is regulated by the Government's Wildlife and Hunting Regulations which are set down in Law No. 81-13 of 27 November, 1981 and its implementing Decree 83-170 of 12th April, 1983. This law regulates forestry, wildlife and fisheries. (This legislation is currently being subject to a revision which will have far-reaching consequences on the management of wildlife and other natural resources). Traditional hunting is distinguished in the legislation from big-game hunting. Traditional hunting does not include hunting with firearms and trapping must be carried out with traps made of natural materials (i.e. no wire snares). The vast majority of hunting is therefore by definition illegal; this does not provide a basis for effective law enforcement. Traditional hunting is not linked with the subsistence needs of families but it is illegal to sell the proceeds which are intended for personal consumption. Traditional hunting is banned in protected areas. Most hunting of elephants is illegal in Cameroon. Non-timber forest-products (including wildlife) are the property of the State, but their use and consumption can be permitted by the competent authorities. In effect, there is virtually no control of hunting and trapping especially in the dense forest zone.

Law 81-13 of 27 November, 1981 allows for the classification of wildlife into three classes A, B, and C. (These are consistent with the 1968 Convention of Algiers to which Cameroon is a signatory). Classification is by Ministerial Arrêté No. 2513/A/DGTOUR/DFPN of 28th June, 1983. Hunting quotas were changed by Ministerial Arrêté 04645/A/SETOUR/DFAP/SC of 5 November, 1988. These categories are as follows:

Category A: The animals in this category are integrally protected and cannot be hunted (although special permits may be obtained for management, scientific and even commercial purposes). Elephants with tusks of under 5kg in weight are in Class A and are integrally protected.

Category B: The animals in this category are partially protected. Elephants with tusks of over 5 kilograms in weight are in Class B and may be hunted.

Category C: The animals in this category are not protected.

The annual hunting season is from the 15th December each year to 31 May of the succeeding year.

Elephant hunting requires that the hunter be the holder of a "Permis de Grande Chasse" These permits are personal and non-transferable. "Permis de Grande Chasse" are obtained from the Minister of Tourism or from the Governors of Provinces (for non-residents). The tariffs are set by the Finance Law for the current year. Currently they are 100,000 for a non-resident; there is a daily charge for hunting in the managed hunting zones (currently 25,000 CFA per day for non-residents) and a killing tax of 250,000 CFA for each animal killed. Most elephant hunting takes place in specific hunting zones – which are located around and between the national Parks of Faro, Benoué and Boubanjidah. They are 27 in number and they are leased to licensed guides who supervise the hunting in the zone. There are also two elephant sport-hunting operations functioning in the south-east forests; these operations are not in zones de chasse, but range through the national forest of the south-east.

Each big-game hunting permit sets a quota of three big-game animals plus five category C animals of which three should be birds. Each hunting zone also has a "plan de tir" which sets quotas for the zone each year; quotas are changed in response to observed changes in animal populations.

Elephants which cause crop damage may be killed. This may be done in two ways. Either a designated game guard is sent to kill the marauding elephant, or a duly licensed big-game hunter is invited to kill the animal as part of his quota; in this case the killing tax is waived. Elephants can be killed in self defence or in the defence of property but this act has to be justified to the authorities within 48 hours and the tusks have to be given to the appropriate authorities.

There is no policy for controlling or evaluating crop damage by elephants and compensating farmers for their loss. When elephants are a serious threat to a village, the chief contacts the Senior Divisional Officer (Prefect) who informs the District Officer (Sub-Prefect). The Sub-Prefect gets in touch with the Provincial Delegate for Tourism (P.D.T.). If it is really urgent the P.D.T. would send a team to the field to shoot an elephant and chase the rest of the group away. Very often, however, the group simply moves to the next village and causes more crop damage. In 1990 elephants were shot in the Waza region for crop damage control. The meat is the only compensation to villagers; and that is of value only to non-muslims.

It is Cameroon government policy that elephants are a renewable natural resource which can and should be exploited for tourism in the national parks and for hunting in other areas. It is government's intention to increase the income to government from the exploitation of elephants living outside the protected area system. Cameroon values the hunting business for the income that it can and will generate which will help in the management of the national elephant herd. The Government's policy towards elephants as regards international treaties such as CITES can be expected to reflect these views.

Cameroon is a signatory of CITES, and thus bound by CITES Appendix 1 listing of the African elephant in October, 1989. This effectively bans international trade in elephants and elephant products, although trophy hunting and export of the trophies (properly documented) is permitted.

Although the current legislation and the wildlife regulations set down appropriate sanctions for law-breaking, very few law-breakers are actually apprehended. Those that are, are able to do so, negotiate fines with the authorities, with the effect that poaching remains profitable. If law-breakers are brought to court, often the sentences or fines which are imposed are very light. It seems that much of the legislature needs education about the appropriate enforcement of wildlife laws.

3.2 Structure and organisation of protected areas and species management.

Five land-use categories are of significance for elephant conservation. These are:

- a) National Parks
- b) Wildlife Reserves
- c) Production Forests
- d) Protection Forests
- e) Hunting Zones.

National Parks and Wildlife reserves are under the administrative authority of the Ministry of Tourism. Each area is theoretically provided with a management plan although few actually have them. The parks and reserves have a Conservator who is the responsible managing officer and a staff and infrastructure. Most areas are under-staffed and budgets are inadequate and equipment, buildings and infrastructure are often dilapidated or totally lacking. National Parks tend to have bigger budgets, and have a tourist orientation; wildlife reserves are under-funded and under staffed and tend to have no tourist infrastructure. There is a total of only 450 game guards to cover the whole country (over 1,000 Km² per guard). Because of the lack of means allocated by the State for wildlife conservation, the emphasis has been put on promoting the development of national park tourism and sport hunting in the central part of the country; and most guards are employed there. The forest zone is grossly under-protected. All Cameroon's national parks have an elephant population except Mozogo-Gokoro.

Production and Protection forests are under the administrative jurisdiction of the Ministry of Agriculture (Forestry Directorate). Prior to the 1981 legislation the legal category was "Forest Reserve"; this law established the two new categories, and set the criteria for establishing them. It is a legal requirement that each production or protection forest should have a management plan before being reclassified. This is one reason that progress has been exceptionally slow. While there are government intentions regarding the division into production and protection forests, these have not generally been legalised. Protection forests would have a clear value for elephants, but it is intended (though not legally required) that they will be few in number and small in area. Production forests will be exploited. Even though this will reduce their value for conservation, it by no means eliminates it. In the Bonpoupa Production Forest, close to Douala and logged several times since the 1930's, there is still an elephant population that occasionally passes through.



Plate 3 Traditional Hunters, North-West Province (Photo: Steve Gartlan)
Chasseurs traditionnel dans la province du nord-ouest.



Plate 4 Game-Guard patrol by water, Korup N. P. (Photo: Steve Gartlan)
Patrouille de gardes près d'un point d'eau.

Hunting zones are buffer zones around national parks intended to mark a transition between the protected area and areas outside the park where hunting and agriculture is practised. Hunting is regulated in them. They occur only around the parks of Faro, Benoué and Boubanjidah and there are currently 27 of them which are leased to professional hunters to conduct sport-hunting.

Species-management is not well-developed in Cameroon. Currently it is by Ministerial Arrêté which regulates which animals may be killed, and their numbers. The current law and Arrêté are in the process of being revised. In the case of elephant overcrowding and consequent environmental degradation, legal big-game hunters have been invited to kill animals within national parks for control purposes.

3.3 Management of protected areas and species.

3.3.1 General

Both National Parks and Wildlife Reserves are administered in a basically similar fashion. They are provided with a Conservator and a staff of guards, an operating budget and an infrastructure. All the National Parks have a Conservator, and all have a complement of guards. The complement of guards is much lower in the dense, humid forest zone than it is in the savanna. The tiny park of Mozogo Gokoro (1,400 hectares) has nine guards, while Korup, 90 times larger, has five. The largest complements of staff are in the parks of Benoué (49) and Boubanjidah (38). Waza has a staff of 36. Added to this, the problems of visibility in the rainforest would indicate the need for a higher number of staff rather than a lower complement.

While all the National Parks have conservators, only Kimbi, Douala-Edea, Campo, Dja and Sanichou of the Wildlife Reserves have them. The number of guards is also much less; the total number of guards for the Wildlife Reserves is 41, which is less than the total for the Benoué National Park. Part of the problem is that the National Parks have been developed as tourist sites, with trails, and equipped camping sites. There are very few of these in the Wildlife Reserves; only Kimbi (in the savanna zone) has such facilities.

There are infrastructure problems which have resulted in the Conservators, particularly of the Wildlife Reserves, living at some distance from the site they administer. The Conservator of Dja, for instance, lives some 70 kilometres from the reserve he is supposed to protect. Low operating budgets and a lack of equipment means that virtually no control of the Wildlife Reserves is carried out in them.

The classification of Forest Reserve was abolished by Law 81-13 of 27th November and was replaced by Production and Protection Forests. Each former forest reserve should be transformed into either a production or a protection forest. Little of this work has been completed, basically because legally the classification into these new categories requires a management plan. There exist, however, explicit plans of government in what is their intention as regards these former reserves; the bulk of them will be reclassified as production forests, with relatively few, and of relatively small size, being retained as protection forests.

It is important to include the forest reserves in this account, especially in the dense forest zone, as they can, in principle, provide elephant habitat. Some of them, such as Takamanda, also have significant elephant populations. Even if logging takes place in a production forest, the habitat changes that take place can even encourage elephants as long as they are not hunted, and as long as forest invasion by farmers does not bring them into land-use conflicts.

In Table 2 below, only areas of 20,000 hectares or larger are included. This excludes 91 reserves with a mean area of 3,800 hectares. However, small islands of only a few hectares in extent are of little significance as far as elephants are concerned. No protection forest reaches the 20,000 hectare criterion; the largest proposed is Mount Oku reserve (11,000 hectares)

**Table 2 Actual and Proposed Production Forests of the Dense Forest Zone
(Of 20,000 hectares in area or larger)**

Province	Name	Area (Ha)	Observations (Date of creation)
Centre	Akonolinga P. Forest	39,728	
	Kiki P. Forest	42,000	355: 8/10/36
East	Obéguira P. Forest	73,000	
	Djouyaya P. Forest	76,806	
	Atick P. Forest	71,000	
	Gado P. Forest	32,900	
	Badgéré P. Forest	21,900	
	Mpouop P. Forest	75,170	
	Abong Mbang Lomié		
	Garri Gombo P. Forests	400,520	
	Yokadouma		
	Doumba Belo P. Forest	54,540	
Doumé P. Forest	35,000	202:22/ 7/81	
Deng-Deng P. Forest	300,000	182: 8/10/71	
South	Sangmélima P. Forest	65,000	
	Nlobo P. Forest	203,000	
	Soo-Lala P. Forest	39,725	
	Kienke (sud) P. Forest	25,000	393: 8/11/47
	Kienke (nord) P. Forest	50,000	393: 8/11/47
	Ma'an P. Forest	99,000	447:10/10/80
Littoral	Edéa-Ngambé P. Forest	60,000	
	Bonepoupa P. Forest	20,000	264:10/ 5/48
	Mangombé P. Forest	20,000	466: 8/11/47
	Letia P. Forest	45,000	

Province	Name	Area (Ha)	Observations (Date of creation)
North-West	Mbembe-Ako P. Forest	28,296	62:1934
	Fungom P. Forest	80,758	42:1935
South-West	Bambuko P. Forest	26,677	2:16/ 2/39
	Ejagham P. Forest	74,851	12:23/ 3/34
	Takamanda P. Forest	67,599	53:23/ 8/34
	Banyang Mbo P. Forest	42,606	35: 1/ 1/56
	Mawne R. P. Forest	53,872	38: 1/ 1/56
	Nta-Ali P. Forest	31,500	

The standard of management of most state lands needs to be improved. Management plans need to be drawn up and implemented, their boundaries need to be demarcated to discourage encroachment. Many of the state lands particularly in the provinces of West and North-West no longer exist, (perhaps more than half of those of the West province). Reclassification should make a realistic assessment of the current status of land and should recommend declassification of badly degraded, occupied or non-existent state forests.

A realistic review of the extent and status of the state domain, its proper management and protection, the initiation of zoning control of forestry exploitation and the siting of protected areas, and the initiation of protection and management of protected areas currently without it would transform the prospects for the protected area system of the country.

Responsibility for wildlife is fragmented in Cameroon; different activities are the responsibility of different ministerial departments which rarely coordinate these activities. At least four Ministries are involved and their respective roles are outlined below.

3.3.2 Ministry of Tourism

The Department of Wildlife and Protected Areas, headed by a Director has the following as its objectives:

- 1 Establish Government policies on wildlife conservation,
- 2 Develop and apply laws relative to wildlife, hunting and touristic sites,
- 3 Protect and manage national parks, wildlife reserves, hunting zones and zoological gardens,
- 4 Classify, develop and conserve protected areas and touristic sites,
- 5 Educate the people on the importance of wildlife,
- 6 Utilise the results of research in the mission of conservation and management of wildlife,
- 7 Coordination and liaison of national and international institutions interested in wildlife conservation.

The Department is divided into three services with the following responsibilities:

- 1 Service responsible for protected areas (DFAP):
 - i) Creation and management of national parks, game reserves, zoos and other protected areas,
 - ii) To carry out conservation education,
 - iii) To coordinate and liaise national and international activities on wildlife conservation.
- 2 Service responsible for hunting (SC):
 - i) Develops and applies government policies dealing with hunting.
 - ii) Creates and manages hunting zones and game ranches,
 - iii) Issues licences and hunting permits
 - iv) Controls hunting activities and all institutions involved in hunting.
- 3 Service responsible for touristic sites:
 - i) Inventories, classifies and manages touristic sites,
 - ii) Develops and applies laws dealing with touristic sites.

3.3.3 Ministry of Higher Education, Computer Sciences and Scientific Research.

The Institute of Animal Research (IRZ) and the University Centre, Dschang (Department of Forestry; Centre for Environmental Studies) are also involved in wildlife research, management and conservation.

- 1 The Wildlife Programme of IRZ
 - 1 Conducts inventory of the fauna of Cameroon with the aim of establishing their status, population trends and identifying suitable sites for their protection.
 - 2 Conducts ecological monitoring of the environment, wildlife and animal/habitat relationships.
 - 3 Draws up management plans for protected areas under the jurisdiction of the Ministry of Tourism,
 - 4 Seeks external funding for wildlife-oriented research in Cameroon.

- 2 Centre for Environmental Studies, Department of Forestry, Dschang University.
Conducts training and carries out monitoring and research into environmental matters.

3.3.4 The Ministry of Agriculture

The Forestry Department of this Ministry is responsible for:

- 1 Establishing Government policies on forestry matters,
- 2 Developing and applying laws relative to forestry activities,
- 3 Forest exploitation and regeneration,
- 4 Implements research results in forest management.

There are also sub-Directorates concerned with environmental matters in the Ministry of Planning and Regional Development, Ministry of Mines and Power and the Ministry of External Relations.

This is a cumbersome and unwieldy structure which does not help in the development of rational policies and procedures.

3.4 Elephant research in Cameroon

Elephant research in Cameroon is carried out under the jurisdiction of the Ministry of Higher Education, Computer Sciences and Scientific Research. Current funds for elephant research largely come from international NGOs and bilateral aid agencies. To date no national survey has been carried out, there is only fragmentary information on selected populations. Different programmes are looking at different aspects of elephant ecology and behaviour. There is a real need for a national survey.

There are four principal elephant research programmes in Cameroon. These are:

3.4.1 Korup National Park

This programme is being carried out by Wildlife Conservation International (a division of the New York Zoological Society) with funding from the United States Agency for International Development (USAID). The project is current and the leader is Mr. James A. Powell. The project aims at studying the ecology and behaviour of forest elephant population of the Korup National Park. Line transect methods (using the technique of Barnes) are being used to estimate population density and distribution. Migration patterns are also being studied and attempts at radio-telemetry are being made. The elephant population of Korup is being threatened by poaching for ivory, at least in part for the South Korean market.

3.4.2 Santchou Wildlife Reserve.

This programme has been completed. It was funded by a grant from Wildlife Conservation International to Mr Martin Tchamba. Most of the field work was carried out by students. The study concerned general ecology, diet, feeding, behaviour and migration patterns. This population is under intense pressure. The original area of the reserve 70,000 hectares has been reduced by at least half, with 450 houses within the boundaries.

3.4.3 South-East Forests.

The initial phases of this programme, which aims to provide data for the creation of a protected area principally for elephants in the south-east of Cameroon is a joint project of Wildlife Conservation International and World Wildlife Fund. Three initial surveys have been carried out by Stremeyer and Atanga using the Barnes method. These studies showed that in the Lake Lobéké region, adjacent to the Central African Republic, elephant population densities of 2.6 animals per kilometre square were recorded. This is by far the highest forest elephant density yet recorded in Africa. Densities of other mammals were also recorded, and exceptionally high gorilla densities were also found. Densities were also calculated for the forest of Boumba Bck. These surveys will continue.

3.4.4 Waza-Logone Floodplain.

This study is being led by Mr Martin Tchamba of the University Centre, Dschang, Department of Forestry, Institute of Environmental Studies. The focus of the study is ecology and migration with radio-telemetry being contemplated to accurately map seasonal movements. This study is in progress and a request for funds for a further phase have been submitted to USAID.

3.5 International assistance and cooperation.

The plight of elephants has recently received much international attention which has resulted in some funding for research and for protection. Cameroon is no exception, but most of the external funding that has come in so far has been for research rather than for protection. It is important that this imbalance is corrected.

3.5.1 International aid for elephant protection.

Financing (\$15,000 from the Pecten Oil Company of Houston, Texas and \$75,000 from the Fish and Wildlife Service of the United States Government) has been allocated to assist in the protection of the Waza National Park which is being increasingly subject to poaching pressure from Nigeria for ivory. Between May 1990 and August 1991, two poachers were killed by park guards and two imprisoned; three game guards have been killed and seventeen elephant bodies have been found with their faces hacked off. The U.S. aid will purchase two four-wheel drive vehicles, radio communication equipment, motorcycles, and field equipment. Further emergency funding is being sought to protect the national park.

3.5.2 International aid for elephant research.

International aid for assistance with elephant research has focused on the Waza-Logone savanna population and the Korup and Lake Lobéké forest populations. These are currently all ongoing. Cooperating organisations include Wildlife Conservation International (WCI) of New York World Wildlife Fund, University of Leiden (Netherlands), European Economic Community (EEC) and the United States Agency for International Development (USAID).

3.5.3 International organisations and treaties.

Elephant conservation and management in Cameroon receives technical and financial assistance from several international organisations including CITES, whose Africa Office is based in U.N.E.P., Nairobi and whose secretariat is in Lausanne, Switzerland. TRAFFIC, and especially the Japan office assists in monitoring illegal exports to the far east and technical assistance is also offered by the main office in Cambridge, UK. Technical assistance is also received from the African Elephant and Rhino Specialist Group of IUCN. WWF has a national programme, with a newly established office in Douala.

Several bilateral and multilateral agencies in Cameroon are developing environmental action plans which could have potential significance for elephant conservation. These include the World Bank who have a programme in the context of TFAP and the Structural Adjustment Programme aimed at the reorganisation and rationalisation of the forestry sector of the economy including assistance to the protected area system.

The Bank's Global Environmental Facility might also offer assistance for biodiversity conservation.

The United States Agency for International Development (USAID) is also developing an environmental action plan which might well increase funding for the conservation of elephants and their habitats.

The European Economic Community is developing a programme for development and conservation of the Dja Wildlife reserve which will have major implications for elephant conservation in Cameroon.

Other bilateral agencies such as the British Overseas Development Administration, the German Gesellschaft für Technische Zusammenarbeit, the Canadian International Development Agency for and the Dutch Government have all expressed interest in the conservation of elephants or of their forested habitats, but have no specific plans as yet.

Cameroon is a signatory to the Bonn Convention on Migratory Species. Cameroon became a party to the Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) on 7 December, 1982 and the Dja Reserve was designated as a World Heritage Site under this convention in 1987. Three sites have been designated as biosphere reserves under the UNESCO Man and Biosphere (MAB) Programme. Cameroon is a signatory to the 1968 (Algiers) African Convention of Nature and Natural Resources.

3.6 National conservation priorities and attitudes

Cameroon has no National Conservation Strategy and there is no national plan for environmental protection or even a national land-use plan. Several bilateral and multilateral aid agencies including the World Bank, USAID and the Canadian International Development Agency have encouraged such national planning and/or are in the process of drawing up national environmental action plans.

In general, different ecological zones tend to have different environmental problems (desertification and fuelwood shortages in the sahel; soil erosion and loss of forest cover in montane forest zones) although there are some country-wide problems resulting from increasing human population pressure, etc. Where environmental problems become acute, threatening the livelihoods and well-being of people, there tends to be a receptiveness to conservation messages. Where there is still abundant forest, it is, conversely, difficult to preach the conservation message.

Throughout the country, elephants are threatened by "development" by roads, increasing use of habitats for agriculture, plantations etc. These developments threaten the traditional migration patterns and routes of elephants. Furthermore, increased agriculture, with the production of areas of herbaceous vegetation which is very attractive to elephants, brings them into increasing conflicts with human farmers. In the north, farmers constantly face the threat of elephant damage to millet and sorghum fields. In the south, large areas of subsistence crops such as plantain, can be wiped out overnight. Elephants are seen as serious crop pests, and they are feared and detested. The rural view of them is basically antagonistic to their conservation; the urban view is indifference. Politically, conservation and environmental protection is not yet a high domestic priority; and elephants rank very low on the scale of priorities.

3.7 Regional collaboration

There are several regional organisations which provide the potential framework for regional collaboration in elephant conservation, but there has been relatively little action on this front.

3.7.1 Regional political groupings

The Organisation for the Conservation of African Wildlife (OCAW) whose French title is the Organisation pour la Conservation de la Faune Sauvage d'Afrique (O.C.F.S.A.) is a regional inter-governmental association of 5 African states (Central African Republic, Congo, Gabon, Cameroon and Sudan) headquartered in Khartoum. This organisation has proposed that the wildlife policy regulations of state members be harmonized and a study has been carried out to that effect (1988). However, there has been no action as yet on the implementation of this report.

The Central African Customs and Economic Union (UDEAC) (Union Douanière et Economique d'Afrique Centrale) is a customs union of 6 Central African states (Cameroon, Equatorial Guinea, Chad, Central African Republic, Congo and Gabon). These countries use a common currency, the CFA franc, which is freely convertible between the various countries. The union has a common set of customs tariffs and agreements. The union could potentially provide a framework for collaboration in regulating the trade in ivory and other elephant products, but this has not been implemented.

The Lake Chad Basin Commission comprises members from Nigeria, Cameroon, Chad and the Republic of Niger all of whom have territory in Lake Chad. The commission meets once or twice a year to discuss matters of mutual interest. These often include natural resources such as forests and water, but have traditionally not included wildlife. This commission would seem to provide a good potential basis for collaboration between the countries of the soudano-sahel region in controlling cross-border poaching of elephant.

The Organisation of African Unity (OAU) also provides a potential framework for collaboration between member states in conservation matters. However, apart from the 1968 Convention of Algiers (most of whose provisions have not been implemented) the OAU has not generally been concerned with wildlife matters.

It is important firstly that regulations, rules and policy of the Central African region be harmonized and that there is established a inter-country collaboration both to control poaching and perhaps in the establishment of cross-border protected areas. Funding for regional programmes and collaboration such as this is often relatively easy to obtain from bilateral and multilateral aid agencies.

4 THE CONSERVATION FRAMEWORK

4.1 The protected area system and available resources.

4.1.1 National Parks.

There are seven national parks in Cameroon. Information about them is given in Table 3. One further national park, Mbam and Djerem is in the process of gazettelement; this proposed park lies in the provinces of Adamawa and Centre, and covers an area of 353,180 hectares.

Table 3 The National Parks of Cameroon

Name	Area (Ha)	Date of Creation N.P.	Vegetation type	Elephant popn.	Staff (B)	Annual Budget (\$US) (#)	4x4 (@)
Kalama-loué	4,500	1972	Sudanian-sahel shrub savanna	300*	10	4,300	0
Waza	170,000	1968	Sudanian-sahel thorny savanna flooded grass	800*	28	40,000	1
Mozogo-Gokoro	1,400	1968	Sudanian-sahel shrub savanna	0	-	-	-
Bouba-njidah	214,000	1968	Sudanian-wooded savanna	660	20	3,000	0
Bénooué	180,000	1968	Sudanian-wooded savanna	540	25	10,000	1
Faro	330,000	1980	Sudanian-wooded savanna	60	20	5,500	0
Korup	126,000	1986	Dense, humid evergreen forest	378	5	22,500	3

* The elephant population of the Waza-Logone floodplain is approximately 1,100 animals. The parks of Waza and Kalamaloué are located in the plain and the population moves between them. The figures for the parks are therefore arbitrary.

(B) Staff figure is Conservator + park guards.

(#) Budget does not include staff wages; staff are paid directly by Ministry of Finance.

(@) 4 x 4 = number of 4-wheel drive vehicles available for patrols.

With the exception of Korup, the only national park in the dense, humid evergreen forest, all the other national parks are in the savanna zone. The total area covered by the savanna national parks is 899,900 hectares, or 4.5% of the area of savanna in the country. While four of the savanna parks are extensive in area, two, Mozoko Gokoro and Kalamaloué are very small. Mozoko Gokoro does not have an elephant population.

The national parks of Kalamaloué, Waza and Mozoko-Gokoro all lie in the sahel domain of the sudanian region and the typical vegetation is thorny wooded savannas and the grasslands of the floodplain of the Logone-Chari and of Lake Chad. Only one of the parks, Waza, contains examples of the floodplain habitat, and this is threatened by successional changes brought about by alterations of the flood regime caused by the damming of the Logone River at Maga for a commercial rice-growing project. The three parks together protect 1,759 square kilometres or 5% of the 36,000 square kilometres of the sahel domain in Cameroon.

The only national park in the guineo-congolian region of the country (which covers 267,000 square kilometres or 56% of the country's land area) is Korup, with an area of 126,000 hectares or 0.5% of the region. Korup lies in the nigerio-cameroon-gabon sub-sector of the sector of dense, humid, evergreen forest. The association is Biafran Atlantic forest, which contains some of the highest biological diversity and is, at the same time, one of the most endangered of the ecosystems of the country; the elephant population of these forests is particularly endangered through habitat fragmentation and by poaching.

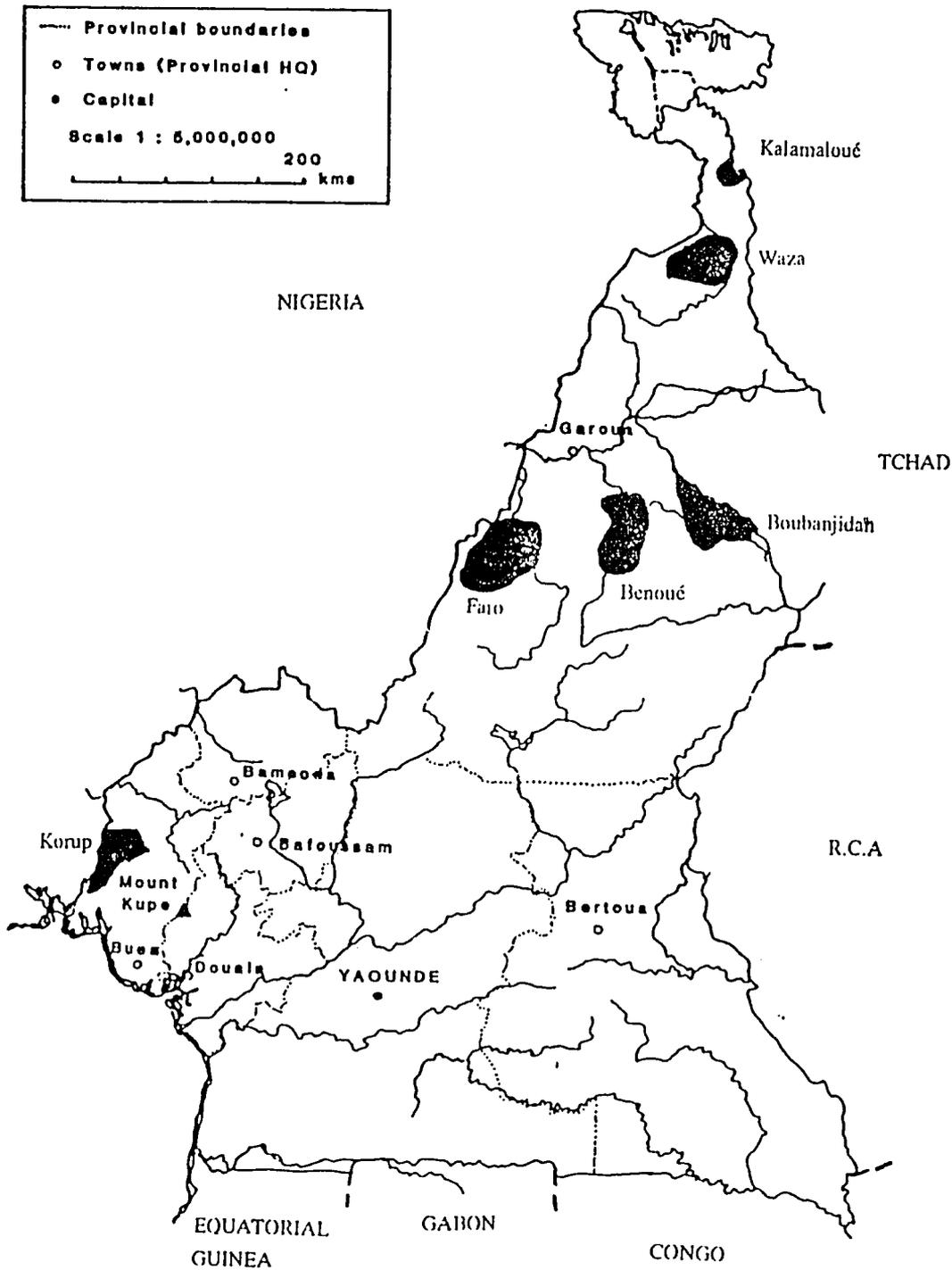
4.1.2 The Wildlife Reserves

There are ten wildlife reserves¹ in existence and two in course of creation. The ten are shown in Table 4 below. The two in the process of creation are those of Bafia and Lake Lobéké. The former is 42,000 hectares and the latter 92,000 hectares. In contrast to the national parks, the wildlife reserves tend to be concentrated in the guineo-congolian region of the country.

These wildlife reserves cover 736,995 hectares; if Kimbi River and Kalfou are excluded, they cover 2.7% of the guineo-congolian region. The average size of the wildlife reserves is 104,713 hectares, although some are small (Mbi Crater, Lake Ossa, Kimbi River, Kalfou). Furthermore, some of these reserves have been destroyed (Nanga Eboko, Sanaga River, Kalfou) and others are being degraded (Santchou). One is in the process of partial declassification (Douala-Edea) and one is being treated as a logging concession (Campo). The Dja Wildlife Reserve is a World Heritage Site and a Biosphere Reserve. It has also been chosen as a demonstration site for a project on the conservation and rational utilisation of Central African forests developed by the International Union for the Conservation of Nature (IUCN) with funding from the European Economic Community (EEC). If this project comes to fruition, the boundaries of the current reserve would be redefined, the area would be reclassified as a National Park, and infrastructure and management would be considerably strengthened.

¹ The word wildlife reserve is here preferred over the more conventional English "game reserve" because of possible confusion over hunting rights in such areas; there are none.

Figure 2 National Parks of Cameroon



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Table 4 The Wildlife Reserves of Cameroon

Name	Area (Ha)	Date of Creation	Vegetation type	Elephant popn.	Staff (B)	Annual Budget (\$US) (#)	4x4 (@)
Dja	526,000	1950	Dense, humid Congo forest	5,260	3	3,000	0
Nanga-Eboko	16,000	(?destroyed)	-	0	-	-	-
Douala-Edea	160,000	1932; in process of partial declassification	Dense, humid littoral forest	160	4	6,000	1
Lake Ossa	4,000	1986	Lake and littoral forest	0	-	-	-
Sanaga	?	(destroyed)	-	0	-	-	-
Santchou	7,000	1984 (45% destroyed)	Sub- and montane forest	91	10	6,000	1
Kimbi R.	5,625	1964	Sudanian savanna Loudetia plains	0	-	-	-
Mbi Crater	370	1964	Submontane forest	0	-	-	-
Campo	270,000	1932	Littoral forest Logging	30	4	5,500	0
Kalfou	4,000	1932 (destroyed)	Soudano-sahel savanna	0	-	-	-

B = Staff figure = Conservator + guards.

= Does not include staff salaries; staff are paid directly by Ministry of Finance

@ = Number of 4-wheel drive vehicles available for patrol.

The only wildlife reserve in the sudanian region is Kimbi River; this is a small area of 5,625 hectares. Kalfou (4,000 ha) is located in the soudano-sahel savanna.

There are two wildlife reserves which include samples of submontane and montane forest, the Mbi Crater and the Santchou Wildlife Reserve. The Mbi Crater is only 370 hectares in extent and the area of Santchou officially gazetted was 7,000 hectares, but at least 45% of this has been destroyed to date and human pressures on the reserve are intense. Santchou has an elephant population.

There are three wildlife reserves (with Korup National Park) protecting the evergreen atlantic or nigerio-cameroon-gabon subsector of dense, humid, evergreen forest, an area of 70,000 square kilometres. The three reserves are those of Douala-Edea, Lake Ossa and Campo. Together they protect 4,340 square kilometres. The Douala-Edea Wildlife Reserve covers 160,000 hectares, and is divided into two unequal areas by the Sanaga River. The Lake Ossa Reserve protects a small area of Atlantic Littoral evergreen forest containing a shallow lake; it has no elephant population. The third wildlife reserve protecting this biologically important forest is the Campo Wildlife Reserve which covers 270,000 hectares. This reserve was established in 1932. However, in 1966 a 25-year agreement was signed between a forestry exploitation company and the Cameroon Government. This agreement conceded 158,217 hectares of the Wildlife Reserve as a logging concession. A second agreement was signed in 1968 and as a result the concession area was extended to 249,000 hectares. This represents the majority of the Reserve which has lost most of its biological value in consequence.

The Dja Wildlife Reserve covers 526,000 hectares of evergreen Cameroon-Congolese forest of this association. This forest association is virtually the last stronghold of forest elephants in Cameroon.

It is clear from Tables 3 and 4 that resources available for management of the protected area system are insufficient for effective protection. Budgets and staffs are small, and infrastructures have deteriorated or do not exist because of the lack of investment budgets. It is clear that the wildlife reserves are at a serious disadvantage compared to the national parks – the Dja Reserve with an area of 526,000 hectares and a staff of three being a case in point. Unfortunately, the National Park of Korup follows the staff pattern of Wildlife Reserves rather than that of national parks, with a very small staff. It is important that the protection infrastructure in the dense forest zone be significantly increased. Some protection of the national parks of Faro, Benoué and Boubanjidah is achieved through the fact that they are surrounded by leased sport hunting zones and the licensees have a vested interest in the protection of their zone.

4.1.3 Production and Protection Forests

Production and Protection Forests are administered by the Forestry Department of the Ministry of Agriculture. Most former forest reserves have not yet been reclassified into the current legal categories. However, it is government intention that protection forests (which are areas where removal of forests would have deleterious ecological consequences) are intended to be few in number and relatively small. They will therefore have rather little significance for elephant conservation.

There exist some 124 forest reserves which government intends to classify as production forests; i.e. state forests which will be exploited and which will be regenerated. Most of these reserves are below 20,000 hectares in area and again have little significance for long-term elephant conservation because they will become isolated forest islands. There are 33 proposed production forests with an area of over 20,000 hectares. Most of these are in the East and South Provinces, and some of them include important elephant populations (Takamanda, Nta Ali, Lomié, Yokadouma). Although the intended use of these forests is for timber production, a policy towards the protection and management of the elephant populations they contain, needs to be developed. The forest reserves tend not to have permanent staff, but are administered from divisional Forest Offices.

4.2 The trade in ivory

Ivory has been traded from sub-Saharan Africa with Europe for centuries along trade routes from the north across the Sahara desert. Ivory, together with spices and gold was a staple of this ancient trade. However this northern trade route declined in importance with the development of the trans-Atlantic slave trade from the coastal ports of West Africa. With the abolition of the slave trade, principal exports from Cameroon were palm oil, palm kernels, rubber, ivory, timber and cocoa. The German colonisation of Cameroon was basically for trade purposes, and ivory was an important export item. The impact on the elephant population therefore began seriously in German times; it is not something which has developed during the last decades. Ivory represented some 12.5% of Cameroon's exports between 1892 and 1900. This figure dropped to an average of 10% between 1901 and 1910, collapsing to 2.7% of exports in the years 1910-1912, presumably partly because of reduction in the availability of the item. It should be noted that timber did not overtake ivory in export importance until 1912. The current dollar value of the ivory trade in German times would amount to millions of dollars per year.

Most of the ivory exported from Cameroon is obtained illegally. This poaching is carried out both by nationals and by foreigners and is assisted by the permeability of the national frontiers and the insufficient number of control personnel.

Members of the forces of law and order and of the army are sometimes the accomplices of ivory poachers. The rivers Ngoko and Sangha in south-east Cameroon are important illegal export routes (186 tusks seized in 1987).

There is a considerable current trade in ivory both for domestic and for foreign markets which continues to flourish in spite of the support by Cameroon of the CITES Appendix 1 listing of the African elephant which came into force in January, 1990. Domestic laws regulating trade in carvings and worked ivory have not been modified since then the only regulations are those that apply to trade in general. Trade regulation is under the jurisdiction of the Ministry of Industrial Development and Commerce. However, in 1984, an attempt was made to register and assess the stocks of raw ivory and to ascertain source and destination; this task was never carried out.

There have been no in-depth investigations of the dynamics of the ivory trade in Cameroon since the study by Allaway and Battakok (1989). A study of the effectiveness of the ban was carried out for WWF by Tchamba, Atanga & Gartlan (1991) and the results were ambiguous. There were indications of effectiveness, a decline in hunting and a slump in ivory prices in the south-east of the country, but poaching of elephants had intensified in areas adjacent to Nigeria such as the national parks of Waza and Korup. It seems possible that the ban in trade and consequent depression of ivory prices may have released a renewed demand for ivory on the Nigerian domestic market. Data obtained in mid-1991 also indicated that ivory was still being smuggled out of Douala port in sometimes substantial quantities (shipments of up to 1.6 tonnes), destined for Japan and South Korea. The proven involvement of South Korean nationals in these shipments, as well as a documented involvement of South Koreans employed on a road building project adjacent to the Korup National Park in contracting local hunters to kill elephants for their ivory and the increase in elephant poaching in and near Korup is a highly disturbing development.

The CITES convention authorizes sport hunting of elephants. However, the number of licensed hunters in Cameroon has declined in recent years partly as a result of economic conditions and also as a result of classification of the elephant on Appendix 1. The number of raw ivory tusks registered by hunters during the last eight years are as follows:

1984	200 tusks
1985	211 tusks
1986	226 tusks
1987	242 tusks
1988	204 tusks
1989	141 tusks
1990	86 tusks
1991	70 tusks

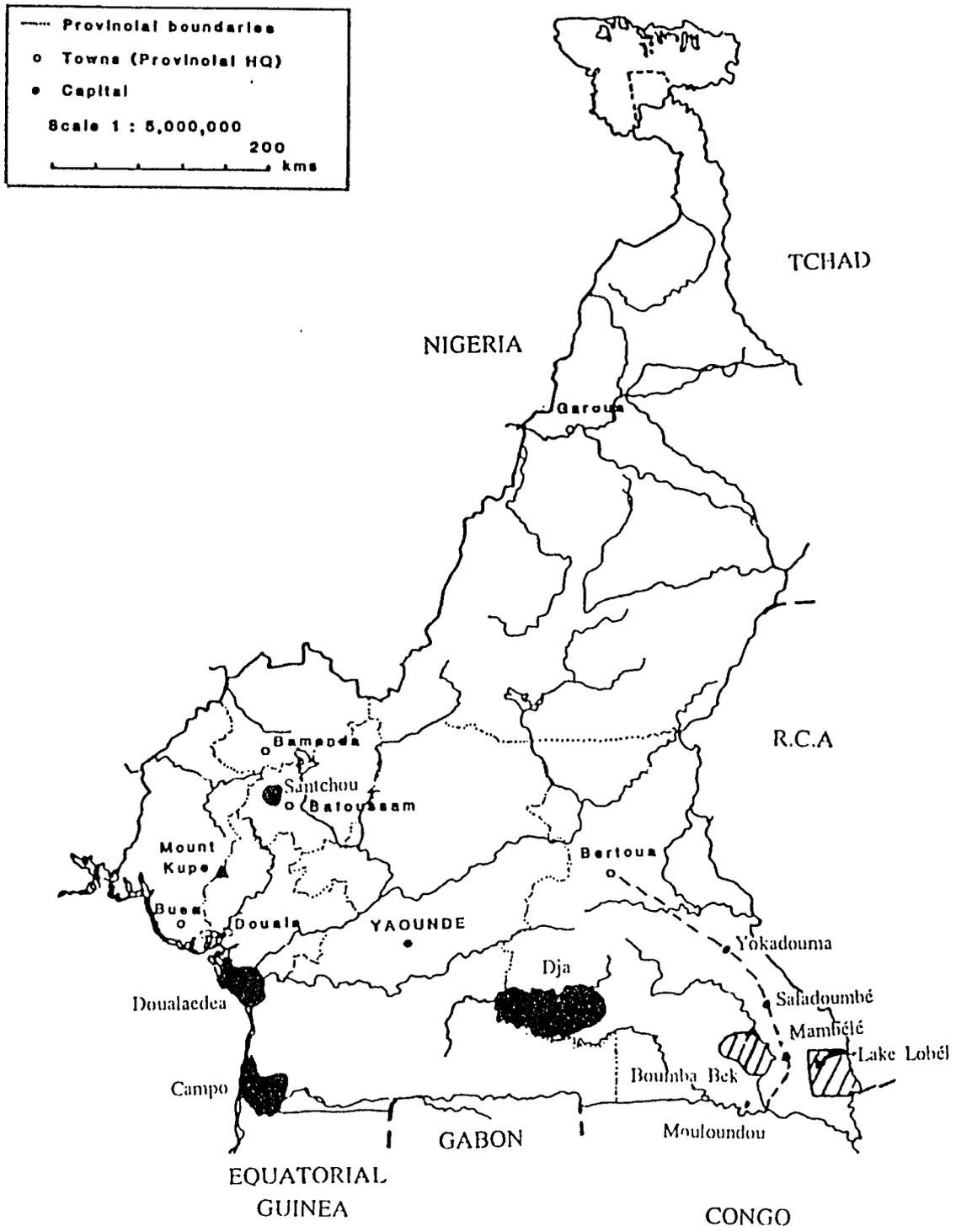
The average weight of these tusks is approximately 8.7 kg.

There have been effects of the ban on the street trading of ivory. It is rare now to see whole, uncarved tusks for sale. Carvers are tending to produce smaller and smaller items which are easily concealed in pockets and purses. Some are diversifying and carving wooden artifacts. There has been a lowering of the prices of carved objects to as low as one third of the price of 1989; however the general economic situation has also deteriorated markedly over this period. There is increased unemployment among ivory carvers. It is expected that the current revision of the wildlife laws will permit better control of ivory worked in local workshops. It is also noteworthy that no information is available to tourists in either hotels or at airports about the legal implications of the export of ivory. It is important that brochures and posters are prepared with appropriate information and made available to tourists and other visitors.

4.3 Elephant management issues and policy

The elephant population is being reduced by increasing human development and its consequences as well as by illegal hunting. There is still a substantial population most of which lives in legally unprotected forest areas. Government intentions concerning elephant conservation will have an emphasis on those in protected areas, and will include the development of new protected areas in the humid forest zone. Elephants living outside the protected area system will be exploited to increase income to government through sport hunting. It is essential that this increased exploitation is strictly and scientifically managed.

Figure 3 Wildlife Reserves of Cameroon



▨ Refers to projects 441 and 442 in Part B.

Elephant management problems concerning elephants living in protected areas are the result of the fact that elephants tend to avoid areas where they are hunted and move to areas where they are protected. They also tend to concentrate in areas where there are suitable resources for them. This often leads to over-population in the protected areas. It is clear that policies towards over-population of protected areas (including culling) will have to be considered when ecological damage is caused by this overpopulation.

The elephants are not confined to the protected areas and move out when ecological conditions dictate and follow traditional migration patterns; farmers in the vicinity of protected areas thus face a constant threat of crop damage from these sometimes large herds. It is important that these incursions are minimised by agricultural planning and optimum placement of crop fields, by electric fencing in areas where this may be appropriate, by increased allocation of staff to guard duties. It is important also that policies of game management are developed in the buffer zones and that the local people derive economic benefit from this and participate in the planning and management of the zones. It is clear that an element of conservation education is also required.

In the absence of an informed public, anti-poaching activities tend to be repressive and depend on the erection of control barriers. This is known to be ineffective, but there are no alternatives in the current economic climate. Understaffing and lack of equipment and material do not permit control trips to detect poachers in the field, or under the even more difficult conditions in dense, humid forests.

The task of the game guards is made more difficult by a lack of collaboration of the forces of law and order (police, gendarmerie) and the army. The desire to eat "bush meat" by all social classes and the proliferation of modern firearms and of domestically manufactured guns are a major problem which needs control. The elephant has an established market value both for meat and tusks and because of this they are killed on virtually any pretext. Because there is no provision for cash compensation in the case of damaged crops, and the fact that the only compensation which can be hoped for is the meat (the tusks go to the administration) encourages the desire for killing them.

Cross-border poaching with neighbouring of elephant is a major problem which must be addressed by agreements states. Regional organisations should also become involved in the monitoring and control of trade.

An efficient elephant management implies that:

- the elephant populations within protected areas are properly protected and that sufficient space outside the protected areas for their annual migrations and seasonal movements is allocated them;
- if necessary they could be hunted during these forays;
- crop damage could be compensated with cash;
- protected areas in the dense forest zone be established for elephants and that these are properly protected;

- outside the protected areas a management programme and policy for elephants should be developed (including those populations in forest reserves).
- the dimensions of the ivory trade be understood and that efforts to control the trade be effectively introduced.

4.4 Cameroon's environmental NGOs

There are two kinds of environmental NGO in Cameroon, international and indigenous agencies. In addition, there are rural associations and village organisations. Indigenous NGO's have not been encouraged until recently in Cameroon but have grown greatly in number recently with the process of democratization.

4.4.1 International NGOs

There are some 12 international NGOS in Cameroon directly or indirectly concerned with the management of natural resources. These include CARE, WWF, CRS, ABF, INADES, CDD, UEBC, SCF, HELVETAS, HPI, ICBP, and WCI. These organisations work on many facets of natural resource management; agroforestry, erosion control, soil conservation, livestock management, desertification, firewood development, parks development and biodiversity conservation. The majority are concerned with human development, and the need for this to be ecologically soundly based, but are not directly involved with wildlife conservation. The exceptions to this are WWF, WCI and ICBP who are involved with the preservation and conservation of endangered species as well as sustainable development.

4.4.2 Indigenous NGOs.

There are some 25 indigenous NGOs in Cameroon today working on different aspects of natural resource management. Part of this growth may be attributed to the gradual decline in government influence with the decline in the financial fortunes of the parastatal development agencies. The current economic crisis has also led to the weakening of the ability of government institutions to deliver at grass roots level. The indigenous NGOs are concerned with sustainable development, and none is concerned with the preservation of species. The conservation of elephants is of no concern to them.

4.5 Attitudes towards development of an economic value for wildlife

Government is determined to capitalize on the economic value of the elephant population and its policies can be expected to reflect this. In the savanna regions of the country there are large herds of easily seen game which can provide the basis for a wildlife based industry. Waza National park is the best developed in the country in terms of the number and variety of game and the ease with which it may be seen. About 6,000 tourists visit Waza each year and provide direct revenues of about 130 million francs CFA (\$460,000). The region has great tourist potential which is hampered by the high cost of the CFA franc and the short tourist season (5 – 6 months), the lack of infrastructure within the parks and the lack of public awareness and advertising. It is clear that there is a great opportunity for development of a tourist industry. It is clear also that there will have to be capital investment to try to close the gap between the laws, regulations and their implementation.

4.6 Degree of private sector involvement

There is little private sector involvement in the protection of elephants but more in their exploitation for tourism and for sport hunting. There are 27 hunting zones, covering an area of 16,461 Km² around the national parks of Faro, Benoué and Boubanjidah. These are leased out at a cost of 30 CFA francs per hectare per year plus a fee of 650,000 CFA francs for a hunting operator's licence. This is an important and potentially lucrative industry but although there are certainly profits for the safari operator, the contribution to the country's economy is negligible. On average, a hunting quota of 60 elephants for the 27 hunting zones would bring in an income of about 22 million francs CFA (\$73,500) through hunting licence fees and killing taxes. Including the fees for the rent of the hunting zone, average annual revenue from sport hunting of elephants (not including guide fees, firearms tax and a trophy export permit of 4,000 CFA francs per kg) amounts to about 32,000,000 CFA francs (\$106,000). This could be greatly increased if the trade were properly managed. It is clear that tourism could be much further developed in Cameroon. It is also clear that great potential exists for the development of a well-organised sport-hunting industry in both the savannas and in the dense forest zone.

As previously mentioned the Waza National Park is the most important tourism attraction in Cameroon and provide the Government with direct revenues of about 130 million CFA. However, much more than this goes each year into the pockets of tour and safari operators. The management and exploitation of the wildlife resource needs to be much improved.

Government is committed to the idea of increased private sector involvement in the economy of Cameroon and also to some extent in the increased involvement of local people in the management of their own resource base.

Elephant Conservation Plan

for

Cameroon

BEST AVAILABLE DOCUMENT

PART B:

PROJECT OUTLINES

Ministere du Tourisme,
Direction de la Faune et des
Parcs Nationaux
Yaounde, Cameroon

1 INTRODUCTION

1.1 How to Use the Project Outlines

All projects are presented in the same two page format on the following pages.

Projects are colour coded according to their funding needs:

Projects **in need of total funding** are printed on **green** pages.

Projects **in need of partial funding** are printed on **blue** pages.

Projects **not in need of any funding** are printed on **yellow** pages.

1.2 How to Pursue the Funding of a Project

Further details of these projects will be available upon request. If a donor would like to fund one of the following projects, there are three possible actions.

First, if the project lists a "Govt/local agency executing project" or a "Project Executant", contact the appropriate person using the address given.

Second, if the above is not listed, contact the government official listed on page v of this document.

Third, if further information is still required, contact the AECCG at the address listed on page v of this document.

2 PROJECT OUTLINES

2.1 Current or proposed projects seeking funding (see green pages)

Project Number	AECCG Database Number	Title	Project Activity	Budget (US\$)
1	206	Survey of the Elephant Population in the Savanna Region	Survey/ Monitoring	393,303
2	431	Survey of the Elephant Population of the Forest Zone of Cameroon	Survey/ Monitoring	557,920
3	434	A Study of the Ivory Trade in Cameroon	Ivory Trade	120,897
4	444	Implementation of the OCFSA Plan on Harmonisation of Wildlife Legislation of Member States	International Affairs	87,285
5	436	Monitoring of Elephants in the Lake Lobéké Region	Monitoring	233,392
6	437	Elephant Migration Patterns in Northern Cameroon	Monitoring	250,787
7	438	Assessment of the Status of Mount Cameroon Elephants	Research	136,519
8	439	Strengthening the Capacity of the Ministry of Tourism for Protected Area Management	Institutional Support	865,893
9	440	Improvement of the Capacity of IRZ to Conduct Field Research	Institutional Support	219,665
10	442	Building and Improvement of Infrastructure in South-East Cameroon	Security	557,865
11	443	Improvement of the Management Infrastructure of National Parks and Wildlife Reserves	Institutional Support	2,216,925
12	446	Role of Elephants in tropical Moist Forest Ecology as Seed Dispersers	Research	175,000

Project Number	AECCG Database Number	Title	Project Activity	Budget (US\$)
13	435	Monitoring of Elephant Populations in the Region of Korup NP	Monitoring	233,392

2.2 Projects seeking partial funding (see blue pages)

Project Number	AECCG Database Number	Title	Project Activity	Budget (US\$)
14	205	Design and Development of an Environmental Education Programme	Public Awareness	345,496
15	432	Provision of Information Centres in Four National Parks	Park Management	222,640
16	433	Rural Development in the Peripheral Zone of the Korup Project	Rural Development	2,147,287
17	441	Development of Protected Areas in South-East Cameroon	Park Management	3,107,712

Project Title: SURVEY OF THE ELEPHANT POPULATION IN THE SAVANNA REGION

Database Project No. 206

Date last updated: 11/07/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CONCEPT

Fund Raising Status: NIL

Project Objective: This study will carry out systematic surveys to determine elephant numbers and distribution throughout the savanna. A final report will summarise the trends and implications of the data.

Project Activities: 1. Survey/Monitoring 2. Research 3.

Funding Start Date: 01/01/1992 End Date: 06/30/1995 Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 393,303 Original Currency: USS Exchange Rate Used: 0.0000

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 144000		Infrastructure:	\$ 0		
Monitoring & Research:	\$ 104000		Local Development:	\$ 0		
Staff Costs:	\$ 12400		Recurrent Costs:	\$ 13640		
Training:	\$ 0		Miscellaneous:	\$ 0		
Education:	\$ 0		Project Management:	\$ 46281		
Equipment:	\$ 24500		Contingency Provision:	\$ 35482		

Fund Raising Information :-

Total funds raised: \$ 0 Funds raised for current year: \$ 0
Total funds needed: \$ 390303 Funds needed for current year: \$

Origin of funds - Organisation: Amount: \$
Organisation: Amount: \$
Organisation: Amount: \$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project: Address:

Project Administrator: WWF-I (Concept No. 75) Address: Ave du Mont Blanc / CH-1196 Gland / Switzerland

Project Executant: to be determined Address:

Project Originator: WWF (Cameroon Country Office) Address: PMB 1 / New Bell / Douala / Cameroon

Collaborating Bodies:

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Background: Except for studies in the Benoué National Park, no surveys of elephant populations in savanna have been conducted since 1978. Waterhole counts were conducted in Waza National Park in 1990 but these give indications only of elephants remaining in Waza during the dry season: a large number of elephants migrates to other parks or outside the protected areas.

Estimates of elephant populations are urgently needed since officials suggest that there is a surplus of elephants in some protected areas which should be dealt with by a culling programme. The information is also necessary for the management of the protected areas and in order to draw up a strategy for the control and management of elephants living outside the protected areas.

Objectives: The objectives of the study are to carry out systematic surveys to determine elephant numbers and distribution throughout the savanna. Information would be plotted on maps and a final report would summarise the data and trends and implications as well as a set of recommendations.

Activities: Two methods would be used in this analysis; aerial counting following the methods described by Norton Griffith (1978) and the modified line-transect method (Barnes & Jensen, 1987) and would proceed systematically on a province by province basis. There would be a single field team led by a senior researcher and an assistant together with sufficient field labour. One of the forest teams would carry out the savanna survey when the forest survey had been completed. The total savanna area is theoretically some 198,000 km² but much of this has been degraded or deforested. The following provinces would be surveyed by the team; Adamawa, North, Extreme North. It is estimated that the programme would take 16 months to complete with two months for the production of a report. Information would be plotted on 25 km² squares on maps and the data would also be processed using the computer programmes of Barnes to calculate population densities for line-transects and the methods described by Norton-Griffiths for the aerial censuses.

Outputs: The outputs would include maps of the distribution of elephants in the savanna zone of Cameroon together with estimates of their numbers. Information on other mammals would also be collected at the same time, if appropriate, following the field techniques described by Stromeyer & Atanga (1991) and by Norton-Griffiths (1978). A report on the status of savanna elephants would be provided which would include recommendations for protection and rational use of the population.

Project Title: SURVEY OF THE ELEPHANT POPULATION OF THE FOREST ZONE OF CAMEROON

Database Project No. 431

Date last updated: 11/07/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CONCEPT

Fund Raising Status: NIL

Project Objective: Systematic surveys will be carried out to determine elephant numbers and distribution throughout the dense forest zone. A final report will summarise the data and trends.

Project Activities: 1. Survey/ Monitoring 2. Research 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 557,920

Original Currency: USS

Exchange Rate Used: 0.0000

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		

Technical Assistance:	\$ 320000	Infrastructure:	\$ 0
Monitoring & Research:	\$ 0	Local Development:	\$ 0
Staff Costs:	\$ 50400	Recurrent Costs:	\$ 21640
Training:	\$ 0	Miscellaneous:	\$ 0
Education:	\$ 0	Project Management:	\$ 66156
Equipment:	\$ 49000	Contingency Provision:	\$ 50720

Fund Raising Information :-

Total funds raised:	\$ 0	Funds raised for current year:	\$ 0
Total funds needed:	\$ 557920	Funds needed for current year:	\$

Origin of funds - Organisation:	Amount:	\$
Organisation:	Amount:	\$
Organisation:	Amount:	\$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:	Address:
Project Administrator: WWF-I	Address:Ave du Mont Blanc/ CH-1196/ Gland/ Switz
Project Executant: to be identified	Address:
Project Originator: WWF-Cameroon	Address:PMB 1/ New-Bell/ Douala
Collaborating Bodies:	

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Background: Except for studies in the south-eastern forests of Cameroon in the Lake Lobéké and Boumba Bek regions (Stromayer & Atanga, 1991) and some in the region of the Korup National Park (Powell, unpublished) in the South-West Province, no systematic surveys of the forest elephant population of Cameroon have been carried out. Information on elephant numbers and their distribution is urgently needed in order to establish protected areas in the East Province, where some 70% of the national elephant herd lives, and also to permit development of a sustainable management plan for elephants which will ultimately be living outside the protected area system.

Objectives: The objectives of the study are to carry out systematic surveys to determine elephant numbers and distribution throughout the dense forest zone. Information would be plotted on maps and a final report would summarise the data and trends and implications as well as a set of recommendations.

Activities: The method to be used would be a modified line-transect method (Barnes & Jensen, 1987) and would proceed systematically on a province by province basis. There would be two field teams each led by a senior researcher and an assistant together with sufficient field labour. The total amount of area theoretically under forest is some 263,000 km² but much of this has been degraded or deforested. The following provinces would be surveyed by this team; East, South, Centre, Littoral, West, North-West, South-West. One team would complete work in the Eastern Province and survey South and Centre; this would take 18 months of field work with an additional two months for report writing. The second team would census Littoral, West, North-West and South-West; this would also take 18 months with two months for report production. Information would be plotted on 25 km² squares on maps and the data would also be processed using the computer programmes of Barnes to calculate population densities.

Outputs: The outputs would include maps of the distribution of elephants in the forest zone of Cameroon together with estimates of their numbers. Information on other mammals would also be collected at the same time, following the field techniques described by Stromeyer & Atanga (1991). A report on the status of forest elephants would be provided which would include recommendations for protection and rational use of the population.

Project Title: A STUDY OF THE IVORY TRADE IN CAMEROON

Database Project No. 434

Date last updated: 11/08/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CONCEPT

Fund Raising Status: NIL

Project Objective: All aspects of the ivory trade will be monitored from obtaining the raw material, to the processing and carving of it, and the final export market.

Project Activities: 1. Ivory Trade 2. Research 3. Security

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 120,897

Original Currency: USS

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 82000		Infrastructure:	\$ 0		
Monitoring & Research:	\$ 0		Local Development:	\$ 0		
Staff Costs:	\$ 4000		Recurrent Costs:	\$ 3070		
Training:	\$ 0		Miscellaneous:	\$ 1500		
Education:	\$ 5000		Project Management:	\$ 14336		
Equipment:	\$ 0		Contingency Provision:	\$ 10991		

Fund Raising Information :-

Total funds raised: \$ 0

Funds raised for current year: \$ 0

Total funds needed: \$ 1208970

Funds needed for current year: \$

Origin of funds - Organisation: Amount: \$
Organisation: Amount: \$
Organisation: Amount: \$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:

Address:

Project Administrator: WWF-I

Address: Ave du Mont Blanc/ CH-1196/ Gland/ Switzerland

Project Executant:

Address:

Project Originator: WWF-Cameroon

Address: PMB 1 / New Bell Douala

Collaborating Bodies:

434

Background: Ivory has been traded from Cameroon since time immemorial. Modern pressures began at the end of the last century with the German colonial era during which ivory was an important export. The fragmentation of the elephant population, the introduction of modern firearms, and a high demand for ivory increased the world-wide trade alarmingly. This led to a classification of the African elephant on Appendix 1 of the CITES convention and a consequent ban on the international trade in ivory. The effects of this ban are ambiguous in Cameroon. Ivory is still traded, although less openly and some prices have fallen. There has been increased poaching from Nigeria and there is also a South-Korean involvement in current ivory poaching in Cameroon. It is important to know the dimensions and characteristics of the trade.

Objectives: The objectives of the study would be to monitor all aspects of the ivory trade from obtaining of the raw material, to the processing and carving of it and the final export market. The purpose would be to obtain sufficient information in order to be able to control the trade.

Activities: A consultant would be employed for a ten month period. This would represent nine months of field work and one month of report writing. The consultant would visit sites of the major elephant populations in an attempt to estimate hunting rates, would visit the authorities and traders in the major towns, and also the Conservators of protected areas in order to establish trends in elephant poaching.

Outputs: There would be a final report on the ivory trade in Cameroon which would estimate its dimensions, sources of supply, main export markets, price trends, effects on carvers, recommendations for control, etc.

Project Title: IMPLEMENTATION OF THE OCPSA PLAN ON HARMONISATION
OF WILDLIFE LEGISLATION OF MEMBER STATES

Database Project No. 444

Date last updated: 11/11/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CONCEPT

Fund Raising Status: NIL

Project Objective: To improve the protection of elephants and other mammals by harmonising the hunting legislation between neighbouring countries and attempting to develop regional collaboration in law enforcement.

Project Activities: 1. International Affairs 2. Security 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 87,255

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 65000		Infrastructure:	\$ 0		
Monitoring & Research:	\$ 0		Local Development:	\$ 0		
Staff Costs:	\$ 0		Recurrent Costs:	\$ 0		
Training:	\$ 0		Miscellaneous:	\$ 4000		
Education:	\$ 0		Project Management:	\$ 10350		
Equipment:	\$ 0		Contingency Provision:	\$ 7935		

Fund Raising Information :-

Total funds raised: \$ 0

Funds raised for current year: \$ 0

Total funds needed: \$ 87255

Funds needed for current year: \$

Origin of funds - Organisation:

Amount: \$

Organisation:

Amount: \$

Organisation:

Amount: \$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:

Address:

Project Administrator: WWF-I

Address: Ave du Mont Blanc/ CH-1196/ Gland

Project Executant:

Address:

Project Originator: WWF-Cameroon

Address: PMB 1/ New Bell/ Douala/ Cameroon

Collaborating Bodies:

444

Background: One of the problems of elephant protection is cross border poaching. This has been encouraged by a lack of cooperation in law enforcement between neighbouring countries and by conflicting laws and hunting regulations in the various countries. The Organisation for the Conservation of African Wildlife (OCFSA) commissioned a study examining the possibility of legal harmonization. The possibility of regional collaboration in law enforcement also needs to be addressed.

Objectives: The objectives are to improve the protection of elephants and other mammals by harmonising the hunting legislation between neighbouring countries and attempting to develop regional collaboration in law enforcement.

Activities: An Inter-Ministerial meeting of the member states of OCFSA would be convened in Yaoundé to study the possibility of implementation of the OCFSA report on harmonisation. A consultant would also be employed to study the possibilities of regional law-enforcement collaboration and to make recommendations. This component would take three months to complete.

Project Title: MONITORING OF ELEPHANTS IN THE LAKE LOKEBE REGION

Database Project No. 436

Date last updated: 11/05/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CONCEPT

Fund Raising Status: NIL

Project Objective: To determine elephant status and distribution within and outside the proposed protected area, and to assess local seasonal movements and their ecological causes.

Project Activities: 1. Monitoring 2. Park Management 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 233,392

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 41250		Infrastructure:	\$ 0		
Monitoring & Research:	\$ 54750		Local Development:	\$ 0		
Staff Costs:	\$ 27000		Recurrent Costs:	\$ 17500		
Training:	\$ 8500		Miscellaneous:	\$ 6000		
Education:	\$ 0		Project Management:	\$ 27675		
Equipment:	\$ 29500		Contingency Provision:	\$ 21218		

Fund Raising Information :-

Total funds raised: \$

Total funds needed: \$ 233392

Funds raised for current year: \$

Funds needed for current year: \$

Origin of funds - Organisation: Amount: \$
Organisation: Amount: \$
Organisation: Amount: \$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:

Address:

Project Administrator: WWF-I

Address: Ave du Mont Blanc/ CH-1196/ Gland/ Switz

Project Executant: IRZ

Address:

Project Originator: WWF-Cameroon

Address: PMB 1/ New Bell/ Douala

Collaborating Bodies:

436

Background: Studies recently carried out in the Lake Lobéké region (Stromeyer & Atanga, 1991) have indicated that this area shelters the highest density of forest elephants yet described in Africa at 2.6 per square kilometer. Lake Lobéké has long been proposed as a protected area by the Ministry of Tourism and this information creates a further powerful argument in favour of this area. However, before gazettelement, it would be desirable to know the exact dimensions of the elephant population and their seasonal movements.

Objectives: The objectives of the study would be to determine elephant status and distribution within and outside the proposed protected area and to assess local seasonal movements and their ecological causes. This information would assist in the creation of the Lake Lobéké protected area and in its management.

Activities: This project would be carried out simultaneously with Project 435 and would also take 30 months to complete. Field studies of the ecology and feeding behaviour of elephants would be carried out in order to understand the causes of seasonal movements. Dietary habits would be observed directly and inferred from analysis of faeces contents. Seasonal movements would be monitored by radiotracking of animals.

Outputs: The principal output would be a final report which would document the population size and distribution of elephants at Lake Lobéké together with their ecology and seasonal migrations. This information would be used in the planning and management of the Lake Lobéké protected area.

Project Title: ELEPHANT MIGRATION PATTERNS IN NORTHERN CAMEROON

Database Project No. 437

Date last updated: 11/08/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: PROPOSAL

Fund Raising Status: NIL

Project Objective: To determine the factors influencing elephant movements, to determine migration routes and home ranges and to examine the magnitude of the conflict between elephant and man.

Project Activities: 1. Monitoring 2. Research 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 250,787

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 41250		Infrastructure:	\$ 0		
Monitoring & Research:	\$ 68500		Local Development:	\$ 0		
Staff Costs:	\$ 27000		Recurrent Costs:	\$ 17500		
Training:	\$ 8500		Miscellaneous:	\$ 6000		
Education:	\$ 0		Project Management:	\$ 29738		
Equipment:	\$ 29500		Contingency Provision:	\$ 22799		

Fund Raising Information :-

Total funds raised: \$ 0

Funds raised for current year: \$ 0

Total funds needed: \$ 250787

Funds needed for current year: \$

Origin of funds - Organisation: Amount: \$
Organisation: Amount: \$
Organisation: Amount: \$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:

Address:

Project Administrator: WWF-I

Address: Ave du Mont Blanc/ CH-1196/ Gland/ Switz

Project Executant: Tchamba & Powell

Address:

Project Originator: WWF-Cameroon

Address: PMB 1/ New Bell/ Douala

Collaborating Bodies:

437

Background: Although elephants have been migrating and raiding crops for years, extensive studies of such problems are not readily available. In Northern Cameroon, the expansion of agricultural land and wood cutting activities and the change of the hydrological cycle of the Logone River by the construction of a dyke have resulted in an apparent maldistribution of people with respect to elephant herds and caused changes of migration patterns. Farmers continually face the threat of extensive elephant damage and elephants are killed.

Officials suggest that culling operations should be undertaken. Planning elephant culls requires identification of migratory and sedentary sub-populations and determination of home range of migratory individuals

Objectives: To determine the factors influencing elephant movements and how they can be influenced, to determine migration routes and home ranges. To examine the magnitude of the conflict between elephants and man and how it has developed over time and to determine possible solutions to the conflict.

Activities: Assessment of crop damage to farms. Radiotracking of elephants. Follow-up of elephant herds. Vegetation studies. The project would take two and a half years to complete and would start as soon as possible.

Outputs: Contribution to regional land-use planning. Opportunity to reduce the controversy about protection while sustaining human needs. Reduction of elephant damage and consequently amelioration of farmers revenues and attitude towards wildlife.

Project Title: ASSESSMENT OF THE STATUS OF MOUNT CAMEROON ELEPHANTS

Database Project No. 438

Date last updated: 11/08/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: PROPOSAL

Fund Raising Status: NIL

Project Objective: To conduct a survey of the elephant population of Mount Cameroon to determine its status and distribution, as well as its behavioural patterns and capacity to adapt to change.

Project Activities: 1. Research 2. Monitoring 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 136,519

Original Currency: USS

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 24000		Infrastructure:	\$ 0		
Monitoring & Research:	\$ 10000		Local Development:	\$ 0		
Staff Costs:	\$ 30100		Recurrent Costs:	\$ 6320		
Training:	\$ 0		Miscellaneous:	\$ 2500		
Education:	\$ 0		Project Management:	\$ 16188		
Equipment:	\$ 35000		Contingency Provision:	\$ 12411		

Fund Raising Information :-

Total funds raised: \$ 0

Funds raised for current year: \$ 0

Total funds needed: \$ 136519

Funds needed for current year: \$

Origin of funds - Organisation: Amount: \$
Organisation: Amount: \$
Organisation: Amount: \$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:

Address:

Project Administrator: WWF-I

Address: Ave du Mont Blanc/ CH-1196/ Gland/ Switz

Project Executant: Dr C Wanzie

Address: IRZ

Project Originator: WWF-Cameroon

Address: PMB 1/ New Bell/ Douala

Collaborating Bodies:

438

Background: The elephants of Mount Cameroon are unusual in occupying a high mountainous biotope; their presence has been recorded at 1,300m above sea level (Bowden, 1986). Recent lava flows and forest fires have caused massive vegetation destruction on the mountain and the elephants have been heavily poached. It is important that an assessment of their current status and distribution is made.

Objectives: To conduct a survey of the elephant population of Mount Cameroon to determine its status and distribution. To determine if there has been a modification of species habitat. To investigate the behavioural patterns of the population with habitat modifications and its capacity to adapt to the changes. To propose management techniques.

Activities: Most of the work will be on foot and it will be limited to the dry and early wet season. Individual recognition of animals will be attempted in order to permit enumerating and monitoring the elephants and their social and population dynamics. Urgent measures will be taken to stop poaching

Outputs: A report on the status and distribution of elephants on Mount Cameroon will be produced. It will include management recommendations and strategies to combat poaching.

Project Title: STRENGTHENING THE CAPACITY OF THE MINISTRY OF TOURISM
FOR PROTECTED AREA MANAGEMENT

Database Project No. 439

Date last updated: 11/05/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CONCEPT

Fund Raising Status: NIL

Project Objective: To provide the Ministry of Tourism with a basic infrastructure to enable them to supervise and manage the protected area system, together with facilities for increasing the allocation of trained manpower.

Project Activities: 1. Institutional support 2. Park Management 3. Security

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 865,893

Original Currency: Exchange Rate Used:

Budget Breakdown according to AECGG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 0		Infrastructure:	\$ 51000		
Monitoring & Research:	\$ 0		Local Development:	\$ 0		
Staff Costs:	\$ 0		Recurrent Costs:	\$ 13500		
Training:	\$ 300000		Miscellaneous:	\$ 0		
Education:	\$ 0		Project Management:	\$ 102675		
Equipment:	\$ 320000		Contingency Provision:	\$ 78718		

Fund Raising Information :-

Total funds raised:	\$ 0	Funds raised for current year:	\$ 0
Total funds needed:	\$ 865893	Funds needed for current year:	\$

Origin of funds - Organisation:	Amount:	\$
Organisation:	Amount:	\$
Organisation:	Amount:	\$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:	Address:
Project Administrator: WWF-I	Address:Ave du Mont Blanc/ CH-1196/ Gland/ Switz
Project Executant:	Address:
Project Originator: WWF-Cameroon	Address:PMB 1/ New Bell/ Douala
Collaborating Bodies:	

439

Background: The Ministry of Tourism has administrative responsibility for the protection of the country's national parks and wildlife reserves. However, due to low budgets and lack of trained personnel, the capacity of the Ministry to manage the areas is extremely weak. This sub-project will provide emergency support which will provide some basic infrastructure to permit some supervisory tasks to be carried out. The project will provide a radio network, vehicles, control posts, office and field equipment, and training for six persons in wildlife management.

Objectives: The objectives are to provide the Ministry of Tourism with a basic infrastructure to enable them to supervise and manage the protected area system, together with facilities for increasing the allocation of trained manpower.

Activities: The project would take place over a three-year period and would begin as soon as possible. Two persons would be trained in wildlife management at the M.Sc. level each year. The radio network would be installed beginning with the Ministry, proceeding to the national parks, then to the provincial delegations and the wildlife reserves. Vehicles would be provided as soon as possible.

Outputs: A comprehensive, country-wide single side band radio network connecting the protected area system and the provincial administrators to the Ministry. Infrastructure to permit the Ministry to supervise field operations, to act quickly in the case of wildlife emergencies and to intercept smugglers of wildlife products.

Project Title: IMPROVEMENT OF THE CAPACITY OF IRZ TO CONDUCT FIELD RESEARCH

Database Project No. 440

Date last updated: 11/08/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CONCEPT

Fund Raising Status: NIL

Project Objective: Essential equipment and refresher courses will be provided in order to permit the Institute of Zootechnical Research to continue its research functions.

Project Activities: 1. Institutional Support 2. Research 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 219,665

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 0		Infrastructure:	\$ 0		
Monitoring & Research:	\$ 0		Local Development:	\$ 0		
Staff Costs:	\$ 0		Recurrent Costs:	\$ 6640		
Training:	\$ 100000		Miscellaneous:	\$ 0		
Education:	\$ 0		Project Management:	\$ 26046		
Equipment:	\$ 67000		Contingency Provision:	\$ 19969		

Fund Raising Information :-

Total funds raised: \$ 0
Total funds needed: \$ 219655
Funds raised for current year: \$ 0
Funds needed for current year: \$

Origin of funds - Organisation: Amount: \$
Organisation: Amount: \$
Organisation: Amount: \$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project: Address:
Project Administrator: WWF-I Address:Ave du Mont Blanc/ CH-1196/ Gland/ Switzerland
Project Executant: Address:
Project Originator: WWF-Cameroon Address:PMB 1/ New Bell/ Douala
Collaborating Bodies:

440

Background: The Institute of Animal Research (Institut de Recherches Zootechniques) IRZ of the Ministry of Higher Education, Computer Sciences and Scientific Research is the responsible body for wildlife research in Cameroon. Data on wildlife is essential for any informed management of protected areas, yet the Institute has been crippled in its ability to conduct research by a lack of equipment, facilities and trained manpower. This component would provide some infrastructure and training to permit the Institute to continue its research function.

Objectives: The objective would be to provide essential equipment and refresher courses to permit the Institute of Zootechnical Research to continue its research functions and provide information essential to management of protected areas.

Activities: The component would begin in the second year and would last for two years. It would provide vehicles, field and laboratory equipment as well as refresher courses for scientific staff.

Outputs: The outputs would be an improved capacity to engage in research which would be measured by field activities and by reports and recommendations for wildlife management.

Project Title: BUILDING AND IMPROVEMENT OF INFRASTRUCTURE IN SOUTH-EAST CAMEROON

Database Project No. 442

Date last updated: 11/11/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CONCEPT

Fund Raising Status: NIL

Project Objective: Guard facilities at Yokadouma and Mouloundou will be improved. A new post at Salapoumbé and an administrative building at Mambeke will also be built.

Project Activities: 1. Security 2. Park Management 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name. Approx Numbers :

Budget Information

Total Budget :- \$ 557,865

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCE standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:		\$ 0	Infrastructure:		\$ 285000	
Monitoring & Research:		\$ 0	Local Development:		\$ 0	
Staff Costs:		\$ 0	Recurrent Costs:		\$ 0	
Training:		\$ 0	Miscellaneous:		\$ 0	
Education:		\$ 0	Project Management:		\$ 66150	
Equipment:		\$ 156000	Contingency Provision:		\$ 50715	

Fund Raising Information :-

Total funds raised:	\$	Funds raised for current year:	\$
Total funds needed:	\$ 557865	Funds needed for current year:	\$

Origin of funds - Organisation:	Amount:	\$
Organisation:	Amount:	\$
Organisation:	Amount:	\$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:	Address:
Project Administrator: WWF-I	Address: Ave du Mont Blanc/ CH-1196/ Gland/ Switz
Project Executant:	Address:
Project Originator: WWF-Cameroon	Address: PMB 1/ New Bell/ Douala/ Cameroon
Collaborating Bodies:	

442

Background: Most of Cameroon's elephants live in the East province, where poaching pressure is heavy and where policing and guard facilities are few. It is also important that the protected area system be extended into these forests and that an administrative building be provided for the protected forests.

Objectives: The objectives would be to improve the guard facilities at Yokadouma and Mouloundou, and to create a new post at Salapoumbé and an administrative building at Mambélé, between Lake Lobéké and Boumba Bek on the Yokadouma to Mouloundou highway.

Activities: The sub-project would take two and a half years to complete. It would begin with the construction of the Mambélé administrative building, which would take one year and which would be used by Project 441. The improvement of Yokadouma and Mouloundou guard posts would follow in the second year, each would take six months. The building of the Salapoumbé guard post would take six months.

Outputs: Equipped, functioning guard posts in Yokadouma, Mouloundou, and Salapoumbé and an administrative building at Mambélé.

(See Figure 2)

Project Title: IMPROVEMENT OF THE MANAGEMENT INFRASTRUCTURE OF NATIONAL PARKS
AND WILDLIFE RESERVES

Database Project No. 443

Date last updated: 11/11/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CONCEPT

Fund Raising Status: NIL

Project Objective: Basic infrastructure, equipment and essential materials will be provided to permit basic management of the protected areas system to be carried out.

Project Activities: 1. Institutional Support 2. Park Management 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 2,216,925

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 0		Infrastructure:	\$ 544000		
Monitoring & Research:	\$ 0		Local Development:	\$ 0		
Staff Costs:	\$ 225000		Recurrent Costs:	\$ 58630		
Training:	\$ 88000		Miscellaneous:	\$ 0		
Education:	\$ 0		Project Management:	\$ 262577		
Equipment:	\$ 836500		Contingency Provision:	\$ 201538		

Fund Raising Information :-

Total funds raised: \$ 0

Funds raised for current year: \$ 0

Total funds needed: \$ 2,216,925

Funds needed for current year: \$

Origin of funds - Organisation:	Amount:	\$
Organisation:	Amount:	\$
Organisation:	Amount:	\$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:

Address:

Project Administrator: WWF-I

Address: Ave du Mont Blanc/ CH-1196/ Gland/ Switzerland

Project Executant:

Address:

Project Originator: WWF-Cameroon

Address: PMB 1 / New Bell/ Douala/ Cameroon

Collaborating Bodies:

443

Background: Due to the economic crisis in Cameroon, budgets allocated to the protection of the national, parks and wildlife reserves have shrunk to derisory levels and because of a lack of investment budgets, infrastructures have deteriorated and collapsed. The fact that any protection is being carried out is testimony to the dedication of a few persons working with virtually no support. This project will provide emergency resources without which the integrity of the protected area system must surely be compromised.

Objectives: The objectives are to provide infrastructure, equipment and essential materials to permit basic management of the protected area system to proceed. and to help maintain the integrity of the national parks and wildlife reserves.

Activities: The project would take three years to implement and would affect all national parks with the exception of Mozogo–Gokoro and also the wildlife reserves of Douala–Edea and Santchou. Equipment and material would be provided as quickly as possible, with the building programme taking place over the three years. Regional training and refresher courses for park personnel would help to raise morale.

Outputs: Well-equipped guards and guard posts in the most critical of the national parks and wildlife reserves.

Project Title: ROLE OF ELEPHANTS IN TROPICAL MOIST FOREST ECOLOGY AS SEED DISPERSERS

Database Project No. 446

Date last updated: 11/15/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CONCEPT

Fund Raising Status: NIL

Project Objective: This project will investigate how forest elephants affect rain forest structure, species distribution and composition, and whether they aid secondary forest regeneration by dispersing seeds of deep forest species or depress growth due to their feeding activities.

Project Activities: 1. Research 2. Park Management 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 175,000

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 34500		Infrastructure:	\$ 0		
Monitoring & Research:	\$ 0		Local Development:	\$ 0		
Staff Costs:	\$ 18000		Recurrent Costs:	\$ 12000		
Training:	\$ 0		Miscellaneous:	\$ 0		
Education:	\$ 0		Project Management:	\$ 0		
Equipment:	\$ 105500		Contingency Provision:	\$ 5000		

Fund Raising Information :-

Total funds raised: \$ 0

Funds raised for current year: \$ 0

Total funds needed: \$ 175000

Funds needed for current year: \$ 175000

Origin of funds - Organisation:	Amount:	\$
Organisation:	Amount:	\$
Organisation:	Amount:	\$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project: Address:

Project Administrator: WCI Address:

Project Executant: James Powell Address: Korup Project BP 303/ Buer / SW Province/ Cameroon

Project Originator: James Powell Address:

Collaborating Bodies:

446

Background: Few animals have a more significant impact on their environment than the elephant. Initial work in West Africa suggests that elephants may be the sole or most important seed dispersal agents for a number of rain forest tree species. Elephants also appear to play an important role in maintaining tree-fall gaps in the forest. These phenomena are likely to be major determinants of tree species composition and may, in turn, affect the diversity of animal species that associate with various habitat types.

It is not unusual for plants to co-evolve in association with an animal symbiont that facilitates pollination or seed dispersal (Janzen 1978). The high proportion of large, heavy seeds in rain forests suggests that these species may be dependent on elephants for their dispersal and reproductive success (Alexandre 1978). The distribution and representation of these species in the forest, and those dependent on tree-gap formation, would be greatly influenced by the presence or absence of elephants. As elephant numbers decline, so might a number of tree species, thus changing the composition and structure of the forest and dependent fauna. In turn, this may have a cascade effect that would likely stimulate changes in the movements and distribution of forest elephants.

Objectives: The project will investigate: 1. How forest elephants affect rain forest structure, species distribution and composition. 2. Whether the loss of or a significant reduction of elephants would alter rain forest succession. 3. Whether forest elephants aid secondary forest regeneration by dispersing seeds of deep forest species or depress regrowth due to their feeding activities.

Activities: An estimate of general elephant densities, distribution and movements will be determined using standard dung counts. Information on individual movements and home range will be obtained by a combination of on-ground 'un-aided' tracking of individual elephants and elephant groups, radio-tracking of 5-6 collared individuals via satellite and VHF, individual identification by photographic traps and trail signs. The distribution and movement information will be compared to indices of human activity, plant phenology of key fruit species, and assessments of habitat.

Information on food species, food type, and factors influencing foraging habitat selection by elephants will be gathered by direct observations and tracking as previously described. Data on the germination and food growth characteristics of food seeds as they are transported from source trees or pass through the elephant's digestive system will be obtained by direct in situ observation and experimental seed germination trials.

Outputs: The main output will be a report on the ecological role of elephants in a rain forest system. This information will be important for development of management plans to maintain biodiversity of moist forests in Cameroon and elsewhere. Recommendations for protection of elephants in the Korup Project Area, Southeastern Cameroon and elsewhere will also be included.

Project Title: MONITORING OF ELEPHANT POPULATIONS IN THE REGION OF KORUP NP

Database Project No. 435

Date last updated: 11/08/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: PROPOSAL

Fund Raising Status: NIL

Project Objective: The objective of this project is to determine the ecological factors which influence elephant movements, to clarify normal migration routes and to identify factors which might help to minimise human/elephant conflicts.

Project Activities: 1. Monitoring 2. 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 233,392

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 41250		Infrastructure:	\$ 0		
Monitoring & Research:	\$ 54750		Local Development:	\$ 0		
Staff Costs:	\$ 27000		Recurrent Costs:	\$ 17500		
Training:	\$ 8500		Miscellaneous:	\$ 6000		
Education:	\$ 0		Project Management:	\$ 27675		
Equipment:	\$ 28500		Contingency Provision:	\$ 21217		

Fund Raising Information :-

Total funds raised:	\$ 0	Funds raised for current year:	\$ 0
Total funds needed:	\$ 233392	Funds needed for current year:	\$

Origin of funds - Organisation:	Amount:	\$
Organisation:	Amount:	\$
Organisation:	Amount:	\$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:	Address:
Project Administrator: WWF-I	Address: Ave du Mont Blanc/ CH-1196/ Gland/ Switz
Project Executant: Powell/Tchamba	Address:
Project Originator: WWF-Cameroon	Address: PMB 1 / New Bell/ Douala
Collaborating Bodies:	

435

Background: Korup is Cameroon's first rain-forest national park, having been created by Presidential Decree in 1986. It is a refuge for an important forest elephant population which lives partly in the protected area and partly outside. It is known that the park elephants migrate seasonally, but the precise triggers are not known. The migrations and their diurnal movements bring them into frequent contact with villagers and cause crop damage. Elephant poaching in Korup National Park and its buffer zones has increased in the last year, and it is important to understand the effects of this on population density and movements.

Objectives: The objectives would be to determine the ecological factors which influence elephant movements, to clarify normal migration routes and the causes of migration, and to identify factors which might help to minimise human/elephant conflicts.

Activities: This project would begin at the completion of Project 437 and would involve the same personnel. Field studies of the ecology and feeding behaviour of elephants would be carried out (from direct observation and from analysis of faeces). Seasonal movements would be observed and ecological correlates sought.

On ground tracking will be done by experienced guides and supervisors. Radio-tracking will be accomplished by tranquilizing subject elephants and attaching a combination VHF/satellite transmission collar to each. Some individuals will be followed directly, using a hand-held VHF receiver to locate them. Location information derived from satellite tracking will be received via computer linkages.

Outputs: A final report would provide information of value to park and land-use planners. It would make recommendations aimed at minimising human-elephant conflicts and reduce elephant damage. It would help improve farmers' attitudes towards elephants.

Project Title: DESIGN AND DEVELOPMENT OF AN ENVIRONMENTAL EDUCATION PROGRAMME

Database Project No. 205

Date last updated: 03/26/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: PROPOSAL

Fund Raising Status: PART

Project Objective: Objectives include: producing a reference document of environmental problems, creating a professional core of environmental educators, introducing courses and ensuring media coverage.

Project Activities: 1. Public Awareness 2. 3.

Funding Start Date: 07/01/1991 End Date: 06/30/1994 Further phases?: T

Elephant Population directly affected - Name: Approx Numbers:

Budget Information

Total Budget :- \$ 345,496

Original Currency: US\$

Exchange Rate Used: 0.0000

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 128000		Infrastructure:	\$ 0		
Monitoring & Research:	\$ 0		Local Development:	\$ 0		
Staff Costs:	\$ 33800		Recurrent Costs:	\$ 33320		
Training:	\$ 40000		Miscellaneous:	\$ 0		
Education:	\$ 0		Project Management:	\$ 40968		
Equipment:	\$ 37000		Contingency Provision:	\$ 31408		

Fund Raising Information :-

Total funds raised: \$ 129322

Funds raised for current year: \$

Total funds needed: \$ 216164

Funds needed for current year: \$

Origin of funds - Organisation: WWF-I

Amount: \$ 129322

Organisation:

Amount: \$

Organisation:

Amount: \$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project: Address:

Project Administrator: WWF-I (Concept No. 58) Address: Ave du Mont Blanc / CH-1196 Gland / Switzerland

Project Executant: Manasseh Ngome Address: WWF-Cameroon

Project Originator: WWF-I (Education Department) Address: Ave du Mont Blanc / CH-1196 Gland / Switzerland

Collaborating Bodies:

#205

Background: There is almost complete environmental illiteracy in Cameroon combined with an almost total lack of reliable, usable information on the environment. There is an urgent need to initiate environmental awareness. It is important that the project addresses both the formal and the non-formal sectors. This project comprises a number of quasi-autonomous sub-projects in the areas of a) studies, b) training, c) material development and d) field activities. These sub-projects should contribute ultimately to the goals of effective delivery of relevant facts and information that will bring about increased awareness and changes in opinions, attitudes and behaviour towards environmental degradation and the need to halt or reverse it. The programme of work outlined here covers two years, but it is expected that the project will continue for five years.

It is important for the initiation of the project that an environmental profile of Cameroon and an inventory of current environmental activities is compiled. Implementation of a national environmental education programme will need a core of professional, technical and support staff who will need training or retraining. It is necessary that educational materials be developed for course work in vocational schools and that a primer of environmental education for primary schools is developed. A media campaign is foreseen together with a programme of support for organisations which are (or could be) implicated in the promotion of environmental activities

This project would concentrate on both forest and savanna areas and would be under the direction of a national coordinator based in the Ministry of Tourism.

Objectives: These are to produce a reference document which will outline a) the status of selected environmental problems, and who is doing what and where in environmental protection in Cameroon, b) to assist in the creation of a professional core of environmental educators, c) to introduce courses in environmental education in vocational schools and a primer for use in primary schools and d) to ensure the adequate coverage of environmental issues by the national media and to provide technical and material assistance to groups and institutions in order to help them sensitise members and communities about environmental problems.

Activities: Reference documents will be produced by literature analysis, field observation and surveys. Manuals and guidelines will be produced, seminars and workshops held. Technical working groups will be set up to review current teaching materials and propose new materials and approaches. Meetings will be held with media officials and individual journalists. Organisations will be contacted and invited to participate in environmental education of their members.

Outputs: The outputs will include final reports on the environmental situation in Cameroon and on environmental activities being undertaken. A nucleus of trained personnel who can assist in environmental education activities will be established. Technical recommendations will be made on the content of courses and teaching methods in vocational schools and two draft teaching manuals developed to the level of testing. It is also expected that at the completion of the project a significant fraction of the population will begin to understand basic environmental problems.

Project Title: RURAL DEVELOPMENT IN THE PERIPHERAL ZONE OF THE KORUP PROJECT

Database Project No. 433

Date last updated: 11/08/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CURRENT

Fund Raising Status: PART

Project Objective: Livestock and fishing activities will be developed in the villages to reduce the need for hunting within the park boundaries. Health facilities and schools will also be provided where necessary.

Project Activities: 1. Rural Development 2. Training 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 2,147,287

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 1000000		Infrastructure:	\$ 223000		
Monitoring & Research:	\$ 75000		Local Development:	\$ 80000		
Staff Costs:	\$ 96000		Recurrent Costs:	\$ 80460		
Training:	\$ 20000		Miscellaneous:	\$ 4000		
Education:	\$ 0		Project Management:	\$ 254619		
Equipment:	\$ 0		Contingency Provision:	\$ 195208		

Fund Raising Information :-

Total funds raised:	\$	Funds raised for current year:	\$
Total funds needed:	\$ 2147287	Funds needed for current year:	\$

Origin of funds - Organisation:	Amount:	\$
Organisation:	Amount:	\$
Organisation:	Amount:	\$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:	Address:
Project Administrator: WWF-I	Address: Ave du Mont Blanc/ CH-1196/ Gland/ Switz
Project Executant:	Address:
Project Originator: WWF-Cameroon	Address: PMB 1/ New Bell/ Douala
Collaborating Bodies:	

433

Background: Korup National Park, Cameroon's first rainforest national park was established in 1986. Unlike the establishment of most previous national parks in Africa, it was determined from the outset that the protected area and the areas outside it where people live would be fully integrated and this is the particular characteristic of the WWF Korup Project. Rural development and extension have been an important component of the project and it is wished to extend and develop this aspect of the project.

Objectives: The objectives would be to develop livestock and fishing activities in the villages to reduce the need for hunting within the park boundaries, to improve agricultural techniques, to provide improved health facilities including water to villages, and to provide schools where necessary. The general aim is to improve the standard of living and quality of life of villagers in order that they may see that forest conservation can bring improvements to their lives.

Activities: Activities would take place over a five-year period. Model aquaculture and livestock projects would be established in villages to provide protein sources. Tree nurseries would be established. Four agriculture extension posts would be built and four wells constructed. Three dispensary/maternity posts would be constructed and two schools. A supervised, managed hunting commune would be set up, trained in shooting, record keeping and monitoring.

Outputs: Model livestock and aquaculture projects and tree nurseries established, Four agriculture extension posts built, four wells sunk, three maternity cum dispensary posts constructed, two schools constructed. A village hunting commune would be set up to rationally and sustainably exploit the mammals living in the buffer zones of the park.

Project Title: PROVISION OF INFORMATION CENTRES IN FOUR NATIONAL PARKS

Database Project No. 432

Date last updated: 11/08/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: CURRENT

Fund Raising Status: PART

Project Objective: Information centres will be provided in Waza, Benoue, Boubanjiah and Korup NPs. As well as assisting tourists, they will serve a more general educative and a socio-cultural function.

Project Activities: 1. Park Management 2. Public Awareness 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 222,640

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 6000		Infrastructure:	\$ 60000		
Monitoring & Research:	\$ 0		Local Development:	\$ 0		
Staff Costs:	\$ 40000		Recurrent Costs:	\$ 0		
Training:	\$ 50000		Miscellaneous:	\$ 0		
Education:	\$ 0		Project Management:	\$ 26400		
Equipment:	\$ 20000		Contingency Provision:	\$ 20240		

Fund Raising Information :-

Total funds raised:	\$	Funds raised for current year:	\$
Total funds needed:	\$	Funds needed for current year:	\$

Origin of funds - Organisation:	Amount:	\$
Organisation:	Amount:	\$
Organisation:	Amount:	\$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:	Address:
Project Administrator: WWF-I	Address: Ave du Mont Blanc/ CH-1196/ Gland/ Switz
Project Executant:	Address:
Project Originator: WWF-Cameroon	Address: PMB 1/ New Bell Douala
Collaborating Bodies:	

432

Background: The national parks of Cameroon possess an important population of elephants. However, visitors to these parks are not provided with any information or interpretive materials to inform them about the particular ecosystem they are visiting or its significance. The provision of appropriate information to visitors in the national parks would ensure that their visits are more satisfactory than at present. The centres would also serve a more general educative and environmental education and possibly serve as cultural centres, where appropriate. The centres would be appropriately designed following the principles of sustainable architecture. They would be equipped for audio-visual presentations and be stocked with books and brochures.

Objectives: The objective would be the provision of one information centre in each of four national parks that currently possess a significant elephant population, Waza, Benoué, Boubanjidah and Korup. The centre would also serve a more general educative and possibly also a socio-cultural function. They would also provide information, souvenirs and other materials for sale to tourists and could contribute towards maximisation of the income from the country's natural resources.

Activities: An appropriate site would be chosen in each national park. Planning of the first centre (Korup) is well advanced and building should soon commence. Planning, design and construction of one centre each in Waza, Benoué and Boubanjidah will take place at the rate of one per year in the order indicated.

Outputs: Four information centres each with three rooms of 60m² per room.

Project Title: DEVELOPMENT OF PROTECTED AREAS IN SOUTH-EAST CAMEROON

Database Project No. 441

Date last updated: 11/11/1991

Region: CENTRAL

Country: CAMEROON

Summary Information

Project Status: PROPOSAL

Fund Raising Status: PART

Project Objective: The two forest areas of Lake Lobéké and Boumba Bek will be surveyed using rapid appraisal techniques to assess their biological value for conservation. Boundaries will then be demarcated.

Project Activities: 1. Park Management 2. Monitoring 3.

Funding Start Date: End Date: Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 3,107,712

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 1900000		Infrastructure:	\$ 0		
Monitoring & Research:	\$ 21800		Local Development:	\$ 15000		
Staff Costs:	\$ 216000		Recurrent Costs:	\$ 79680		
Training:	\$ 0		Miscellaneous:	\$ 0		
Education:	\$ 0		Project Management:	\$ 368622		
Equipment:	\$ 225000		Contingency Provision:	\$ 282610		

Fund Raising Information :-

Total funds raised:	\$	Funds raised for current year:	\$
Total funds needed:	\$	Funds needed for current year:	\$

Origin of funds - Organisation:	Amount:	\$
Organisation:	Amount:	\$
Organisation:	Amount:	\$

Organisation through which funds are being channelled:

Future donor interest:

Donors actually approached:

Organisations and People Involved with the Project

Govt/Local agency executing project:	Address:
Project Administrator: WWF-I	Address: Ave du Mont Blanc/ CH-1196/ Gland/ Switz
Project Executant:	Address:
Project Originator: WWF-Cameroon	Address: PMB 1 / New Bell/ Douala / Cameroon
Collaborating Bodies:	

441

Background: Most of Cameroon's elephants, over 70%, live in the forests of south-east Cameroon and outside the protected area system of parks and wildlife reserves. The highest densities (up to 2.6 per square kilometre) yet recorded in Africa occur in this region. It is important for management of the national herd that protected areas are set up in this part of the country, and that the protected areas are provided with management facilities. This component assists in the first of these functions, the identification, definition and demarcation of the areas with provision of a management plan as a basis for gazettelement.

Objectives: The objectives would be to survey the two forest areas of Lake Lobéké and Ecumba Bek by rapid appraisal techniques in order to assess their biological value for conservation. Proposed boundaries of the protected areas would then be surveyed and marked on the ground. Data would be compiled into a tentative management plan which would provide the informational basis for the gazettelement process.

Activities: The component would begin in the second year of the project and would last for four years; two years in each site. Survey teams of biologists trained in rapid assessment techniques would survey the areas for their biological important and diversity. Park planners and biologists would then recommend boundaries of the proposed protected areas which would be marked on the ground. The cooperation of local inhabitants would be assured by their involvement in a participatory rural assessment programme. Technical descriptions of the boundaries would be prepared as well as preliminary management plans; these would include integration of the protected area with the economy of the surrounding communities..

Outputs: Biological surveys of two proposed protected areas; land surveys and boundary descriptions, preliminary management plans; participation of local peoples.

(See Figure 2)

Elephant Conservation Plan

for

BEST AVAILABLE DOCUMENT

Cameroon

PART C:

POLICY REFORMS

&

STRATEGIES

Ministère du Tourisme,
Direction de la Faune et des
Parcs Nationaux
Yaoundé, Cameroon

1 THE CONSERVATION PLAN

1.1 The Outline

The general outlines of Cameroon's National Elephant Plan revolve around seven principal concerns, which are as follows:

- 1 the general need for data and for information about elephants. There is a fundamental need for a knowledge of the distribution and current status of the elephant population, on elephant mortality and the ivory trade.
- 2 the need for education of the public about wildlife generally; this education must be appropriate.
- 3 the need for the development of research and monitoring programmes in order to understand elephant ecology and behaviour.
- 4 the need for integration of the protected areas into the local economies with financial benefits accruing to local populations.
- 5 the need for increasing the capacity of the Ministry of Tourism to manage its wildlife, including elephants and at the same time providing infrastructural and technical assistance to improve protection of the national parks and wildlife reserves.
- 6 the need for extension of the protected area system into the south-east forests; gazettment of Lake Lobéké and Boumba Bek for example would protect over 9,000 elephants or over 40% of the national herd.
- 7 the need for regional collaboration between countries with elephant populations to control cross-border poaching and for harmonisation of legislation between adjacent countries.

The total cost of implementation of the entire package of measures outlined here would be \$U.S. 11,157,397.

The controlled management of a natural resource such as elephants with the objective of the conservation maintenance of a permanent national herd which is rationally exploited, is a long-term goal. The provisions of this plan cover a period of five years. If an adequate number of the project components have been carried out by the end of this period, there is a good chance that Cameroon will be on the way to achieving a permanent national herd while benefitting economically from its exploitation. If few or none have been carried out, there is every possibility that the situation will have degenerated even further than today with increased confrontation between elephants and farmers, increased killing and illegal trading in ivory, and increased degradation of the national protected area system (and the animals it contains) with continuing economic losses to the national treasury.

The fundamental prerequisite for any project aimed at management of a natural resource is a body of knowledge about the dimensions and distribution and status of the resource. The management of elephants is no exception. The first task of the plan therefore will be to carry out surveys throughout the national territory in order to build up a picture of where elephants live and their abundance. The techniques to be used in the savanna zones could include aerial survey techniques as well as line transect methods, but in the dense forest zone aerial surveys cannot be used as a census technique.

Having achieved an understanding of the dimensions of the national herd, there is then the possibility of developing a national policy. In this respect elephants become something of a symbol for all wildlife concerns: One does not preserve elephants in isolation, and the protection of a population of elephants will also result in the protection of the habitat and of other mammalian members of the ecosystem. The development of a national policy on elephants must address the problems of protection of the current populations living in protected areas, it must deal with the need for protection of the largest part of the national population living in the East Province which are currently unprotected, and must deal with the development of a utilisation policy in terms of development of a managed cropping system in and outside the protected areas, particularly in the forest zone.

At the same time as the surveys are being carried out, it is important that a campaign of public education be implemented to improve people's attitudes towards wildlife in general and elephants in particular. This will not be an easy task. Where elephants and people co-exist there are often conflicts between them and there is little possibility under these circumstances that farmers will respond to the kind of public awareness campaigns so successful in the West. There is a need for the protected areas (National Parks and Wildlife Reserves) to be better integrated into the local economy of the region so that some economic benefits from the exploitation of the protected area accrue to local people. Furthermore, if elephant herds are properly managed and exploited for tourism or for sport hunting, and if the local populations benefit economically from such activities, then the sharpness of the confrontations between farmers and elephants will decrease. The elephant will then increasingly be seen as a valuable resource rather than as a destructive influence.

An important follow-up to the acquisition of data on population distribution will be the development of monitoring and research programmes. To have well informed management it is important not only to understand the size and distribution of the population, but also its ecology, population dynamics, behaviour, migration patterns in order to design better management strategies for the population.

A number of other activities need to be carried out: It is essential that the portion of the national elephant herd living in the protected area system should receive adequate protection from poaching. This will require a strengthening and improvement of the national protected area infrastructure (vehicles, guards posts, radios) and development of an improved management capacity through training. This could also involve the creation of specific anti-poaching units where necessary, and facilities for better control of exports at ports and airports.

A detailed study of the ivory industry in Cameroon need to be carried out on all aspects of the industry from obtaining the raw materials in the field to processing and disposal of the finished product. Improved information should be made available to visitors and tourists on the export of ivory and other elephant products. This would involve the production of brochures and posters for use in travel agencies, hotels, etc and the development of information centres in national parks.

It is important that the protected area system of national parks and wildlife reserves be extended into the forests of the East Province, where most of the nation's elephants live.

Finally, there needs to be a strengthening of regional collaboration to assist in the control of cross-border elephant poaching and also for a harmonisation of legislation affecting the management, exploitation and export of elephants and elephant products.

1.2 The Objectives

The major objective of the action plan is to provide sufficient information and set in motion programmes which can permit the Government of Cameroon to develop a rational policy of conservation and protected area management, including elephant protection and exploitation. The general purpose is to use the elephant as an indicator or flagship – a species which is highly visible and well-known which can act as an indicator of progress towards development of a national conservation programme. The fact that elephant conservation presents particular problems is seen as an additional challenge.

Cameroon needs the basic tools for the well informed management of the national elephant herd in order to ensure its permanent survival, and to bring economic benefits to the national and local economies. At the end of the project period, Cameroon should be in possession of a body of data on the national herd, have made policy decisions on the protection of those sections of the herd currently living outside the protected area system, and on the exploitation and management of elephants living inside and adjacent to the protected areas. It should have an improved capacity for elephant protection and management, and the public should be better informed about elephants and other wildlife matters. And finally, there should be monitoring and research programmes in place to provide information on the ecology, behaviour, migration, and population trends of the national herd. There should be the beginnings of regional collaboration in the harmonisation of laws and regulations and in the control of cross-border poaching.

1.3 The Justification

There is currently virtually no management of Cameroon's national elephant herd. The size of the herd and its distribution and status are not known. Information about ecology, behaviour, migrations and other seasonal movements are fragmentary and the rural public is hostile towards elephants. Annual budgets for the protected area system are tiny, infrastructures do not exist or have deteriorated, staff are under-paid and do not possess basic equipment such as transport or radios. The pressures on the elephant population from development activities, logging, shifting agriculture, road building are increasing and populations are becoming increasingly fragmented.

Most of Cameroon's elephants live in the dense forest zone and 70% of them occur in the East Province outside the national protected area system. It is essential that protected status be given to parts of this forest and its elephant population. It is equally important that management provisions be made for those elephant populations living outside the protected area system and which could, presumably, be sport-hunted on a sustainable basis.

It is clear that if effective actions are not taken immediately to improve the knowledge of elephant distribution and ecology in Cameroon, to educate the public on the need to protect them, to improve the management of the protected area system and to integrate it into the local economy, then there would be very little future for the elephant in Cameroon. The government would have lost the chance to derive substantial economic benefits from an important sustainably managed resource.

2 STRATEGY OF THE PLAN

2.1 The strategy of the plan

The strategy of Cameroon's national elephant conservation plan is broad-based. It attacks the problem of elephant conservation by providing a battery of different projects ranging from an international convention, to improving the capacity of the Ministry of Tourism to manage the protected area system and extension of that system. Completion of all components of the plan would result in a strong protected area system, underpinned by a robust scientific understanding of the management issues, a public better informed about environmental matters, and benefitting from the existence of the protected area system. Elephants would be a major, but by no means the only, beneficiary of this national plan.

2.2 Conservation Plan phasing

Cameroon's national elephant conservation plan will take five years to implement. Because of the urgent need for protection and for information, many of the projects need to be started as soon as possible. There has been dovetailing of projects as far as possible to minimise duplication of equipment and personnel. A timetable for implementation of the various phases is given below.

Project Number	Year 1	Year 2	Year 3	Year 4	Year 5
431	XXXXXXXXXXXXXXXXXXXX				
206		XXXXXXXXXXXXXXXXXXXX			
205	XXXXXXXXXXXXXXXXXXXX.....				
432	XXXXXXXXXXXXXXXXXXXX				
433	XXXXXXXXXXXXXXXXXXXX				
434		XXXXXXXXXX			
435			XXXXXXXXXXXXXXXXXXXX		
436			XXXXXXXXXXXXXXXXXXXX		
437	XXXXXXXXXXXXXXXXXXXX				
438	XXXXXXXXXXXXXXXXXXXX				
439	XXXXXXXXXXXXXXXXXXXX				
440		XXXXXXXXXXXXXXXXXXXX			
441		XXXXXXXXXXXXXXXXXXXX			
442	XXXXXXXXXXXXXXXXXXXX				
443	XXXXXXXXXXXXXXXXXXXX				
444	XXXXXX				

2.3 Investment needs

The total cost of the entire plan will be \$U.S. 11,969,671 spread over a period of five years. The range in sub-project cost is from \$87,286 (Project 017) to \$3,107,712 (Project 014). Apart from the requested external assistance, the Government of Cameroon will also be required to invest in the protected area system by providing the necessary manpower, and the legislative and administrative instruments which will be required in terms of extension of the protected area system.

REFERENCES

- Allaway, J. (1989) *The Ivory trade in Cameroon*. In: Cobb, S. (Ed.): *The Ivory Trade and the Future of the African Elephant*. Final Report of the Ivory Trade Review Group.
- Barnes, R.F.W. & Jensen, K.L. (1987) *How to count elephants in forests*. AERSG Technical Report 1: 1-16.
- Barnes, R.F.W. (1989) *The status of elephants in the forests of Central Africa: results of a reconnaissance survey*. In: Cobb, S. (Ed.): *The Ivory Trade and the Future of the African Elephant*. Final report of the Ivory Trade Review Group.
- Bowden, C.G.N. (1986) *Records of other species of mammals from Western Cameroon*; p 201-203. In: *Conservation of Cameroon Montane Forests* (S.N. Stuart, Ed.), I.C.B.P. Cambridge, U.K. 264 pp.
- Dougherty, N. (May 1991) *An updated and rapid appraisal of the status of elephant conservation in Cameroon*. Draft and interim report; Typescript, 22 pages.
- Fotsch, P. (1988) *Projet d'harmonisation de la politique et de la législation des états membres en matière de faune*. Typescript 90 pp. plus tables. Khartoum, O.C.F.S.A.
- Happold D.C.D. (1973) *Large Mammals of West Africa*. Longman, London, 106 pp.
- Mbuagbaw, T.E., Brain, R., & Palmer, R. (1987) *A History of the Cameroon*. Longman, London, 151 pp.
- Mitchelmore, F., Beardsley, K., Barnes, R. & Dougl-Hamilton, I. (1989) *Elephant population estimates for the Central African forests*. In: Cobb, S. (Ed.): *The Ivory Trade and the Future of the African Elephant*. Final report of the Ivory Trade Review Group.
- Ngoh, V.J. (1987) *Cameroon 1884-1985: A Hundred Years of History*. Navi Group Publications, Yaoundé, 373 pp.
- Norton-Griffiths, M. (1978) *Counting animals*. African Wildlife Leadership Foundation, Nairobi.
- Tchamba, Martin, N. (no date) *Factors affecting migration pattern of elephants and the design of ecological infrastructure in northern Cameroon*. Research proposal. Typescript 17 pp.
- Tchamba M, Atanga, E. & Gartlan, S. (1991) *The effectiveness of the ivory ban in Cameroon*. Typescript. Prepared for WWF.
- Theodor Haltenorth & Helmut Diller (1980) *Mammals of Africa (including Madagascar)*. Collins, London, 400 pp.

Elephant Conservation Plan

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for

Cameroon

ANNEXES

1. NAMES AND ADDRESSES OF CONTACTS

2. ACRONYMS USED IN THIS PLAN

Ministère du Tourisme,
Direction de la Faune et des
Parcs Nationaux
Yaoundé, Cameroon

ANNEXE 1 NAMES AND ADDRESS OF CONTACTS IN CAMEROON

Department	Contact Name	Address	Phone	Fax	Telex
Ministry of Tourism					
	His Excellency Benjamin Itoe	Yaoundé	[237] 231137 or 224411		8325
Directeur des Parcs Nationaux et Aires Protégées	Augustine Bokwe, Director	Yaoundé	[237] 224411 or 222137		
Secretariat d'Etat de Tourisme	Mahamat Amine	Yaoundé			
Ministry of Agriculture					
	His Excellency John N Ngu	Yaoundé	[237] 221190 or 220765		
Département des Forêts	Joseph Bawak Besong, Adjoint Directeur Général	Yaoundé			
Ministry of Higher Education and Scientific Research					
	Victor Balinga	PO 1457 Yaoundé			
School for Training Specialists in Wildlife					
École de la Faune	Dr J Ngog- Nje, Director	BP 271 Garoua	[237] 271025 or 271125		novogar 7625
Centre Universitaire de Dschang					
Centre d'Etude de l'Environnement et du Développement au Cameroun	Marin Tchamba, Homologue-Coordinateur	BP 336 Maroua	[237] 292950 (b) or 292708 (d)	[237] 293391	7688 kn

Department	Contact Name	Address	Phone	Fax	Telex
European Commission					
Delegation de la CEE au Cameroun	His Excellency the Delegate of the European Economic Community	BP 847 Yaoundé	[237] 221387 or 23347 or 201387	[237] 222149	8298 delegfed
World Bank					
	The Resident Representative	BP 1128 Yaoundé	[237] 230836 or 223157		
World Wide Fund for Nature					
	The Resident Representative	PMB 1, New Bell Douala	[237] 430664	[237] 430664	
Bureau Régional	Steve Gartlan	BP 1016 Douala	[237] 430664		
Projet de Korup	Dr Andrew Allo	PO Box 303 Buca	[237] 322331		
	John Hazam	South West Province			
United Nations Development Programme					
	The Resident Representative	BP 836 Yaoundé	[237] 224199 ou 224369		
British Embassy					
	His Excellency the British Ambassador to Cameroon (for ODA)	BP 547 Yaoundé	[237] 220545 or 220796		
German Embassy					
	His Excellency the Ambassador of the Federal Republic of Germany to Cameroon (for GTZ)	BP 1160 Yaoundé	[237] 230056 or 220566		

Department	Contact Name	Address	Phone	Fax	Telex
Ambassade de France					
	His Excellency the Ambassador of France to Cameroon	BP 46 Yaoundé	[237] 222334 or 220015		
United States Embassy					
	Her Excellency the Ambassador to Cameroon	BP 817 Yaoundé	[237] 234014		
Royal Dutch Embassy					
	His Excellency the Dutch Ambassador to Cameroon	BP 310 Yaoundé	[237] 220544 or 224704		
United States Agency for International Development					
	The Director	BP 817 Yaoundé	[237] 230581		
Canadian Embassy					
	Her Excellence the Ambassador of Canada to Cameroon	BP 572 Yaoundé	[237] 221887 or 221090 or 230203		
Wildlife Conservation International					
WCI Korup Project		BP 303 Buca			
Institute for Zootechnical Research					
	Dr John Banser Director	MESIRES BP 1457 Yaoundé	[237] 232486		
Organisation for the Conservation or African Wildlife					
	Permanent Secretary	PO Box 3567 Khartoum, Soudan			

ANNEXE 2 ACRONYMS USED IN THIS PLAN

ABF	Association Bois de Feu
AECCG	African Elephant Conservation Coordinating Group
AERSG	African Elephant and Rhino Specialist Group (IUCN)
CARE	CARE International
CDD	Comité Diocésain de Développement
CFA	Communauté Financière Africaine (franc)
CIDA	Canadian Agency for International Development
CITES	Convention on International Trade in Endangered Species
CRS	Catholic Relief Services
DFAP	Directorate of Wildlife and Protected Areas
DGTOUR	Director General of Tourism
EEC	The European Economic Community.
GEF	Global Environmental Facility (of the World Bank)
GTZ	Gesellschaft für Zusammenarbeit (Germany)
HELVETAS	Swiss Association for Technical Assistance
HPI	Heifer Project International
ICBP	International Council for Bird Preservation
INADES	Institut Africain pour le Développement Economique et Social
IRZ	Institute for Animal Research
IUCN	International Union for the Conservation of Nature
MAB	Man and Biosphere Programme (of UNESCO)
MESIRES	Ministry of Higher Education, Computer Sciences and Scientific Research.
NGO	Non-Governmental Organisation
NP	National Park
OAU	Organisation of African Unity
OCAW	Organisation for the Conservation of African Wildlife.
OCFSA	Organisation pour la Conservation de la Faune Sauvage d'Afrique
ODA	Overseas Development Administration (United Kingdom)
PDT	Provincial Delegate for Tourism
SC	Service des Chasses
SCF	Save the Children Federation
SETOUR	Secretary of State for Tourism
UDEAC	Union Douanière et Economique d'Afrique Centrale
UEBC	Union des Eglises Baptistes du Cameroon (UEBC)
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USAID	United States Agency for International Development
WCI	Wildlife Conservation International
WWF	World Wide Fund for Nature (World Wildlife Fund in U.S.)