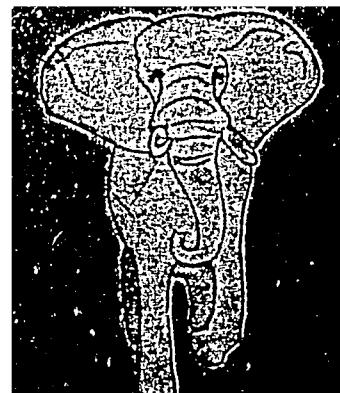
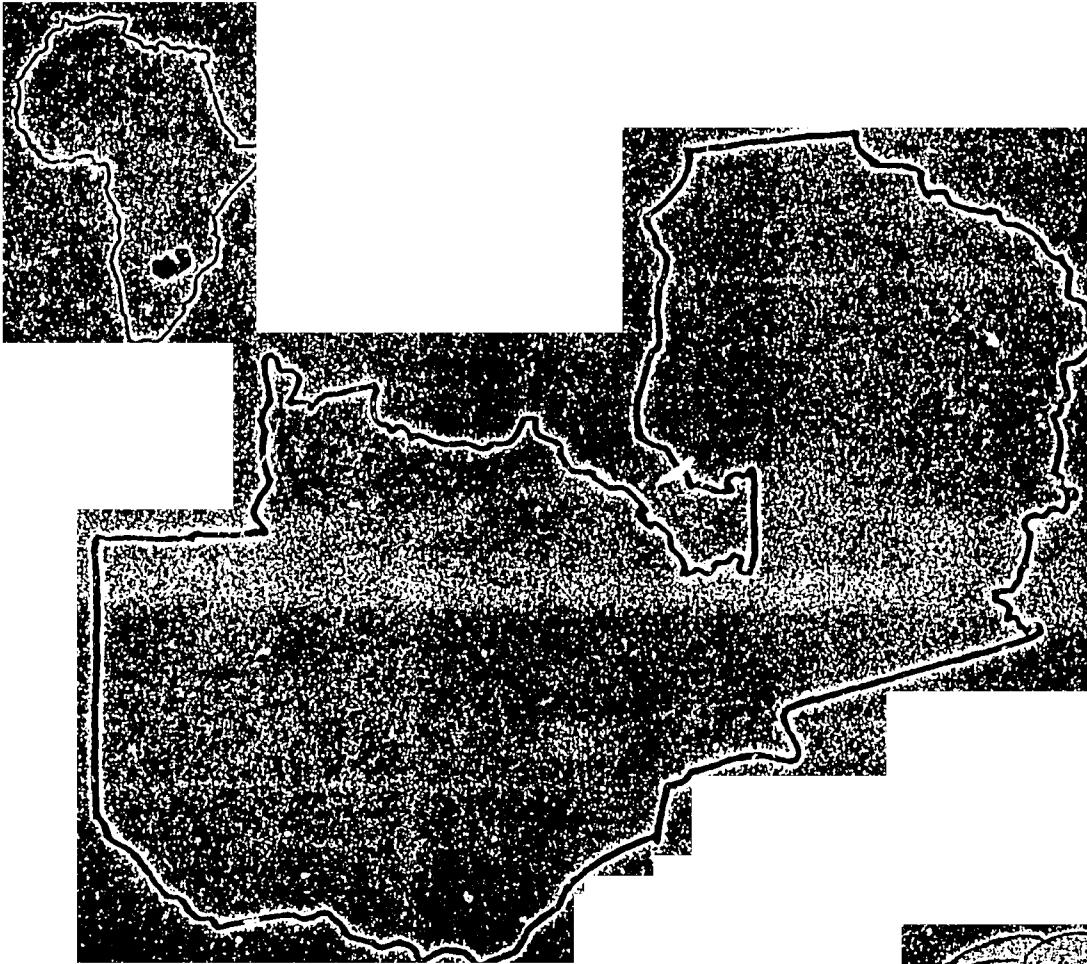


ELEPHANT CONSERVATION

PLAN

ZAMBIA



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January 1992

Ministry of Lands and Natural Resources
National Parks & Wildlife Service
Private Bag
Chilanga, Zambia

ELEPHANT CONSERVATION

PLAN

for

ZAMBIA

January 1992

**Ministry of Lands and Natural Resources
National Parks & Wildlife Service
Private Bag 1
Chilanga, Zambia**

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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 analyzed 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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SUMMARY

Elephant Situation

The decline in elephant numbers was not very noticeable until the mid-1970s when commercial poaching for ivory became prevalent. The largest decline in elephant numbers has been in the Luangwa Valley which, between 1973 and 1991 lost 90% (90,000) of its population. Other areas which have also lost substantial numbers of elephants are Kafue, Lower Zambezi, Sumbu, West Lunga, Lavushi Manda and Kasanka National Parks.

In the 1960s Zambia had an estimated elephant number of about 250,000. By 1975 this population had been reduced to 100,000. Currently, the population is estimated at only 20,000. Clearly this demonstrates how sharply the elephant population has declined in the last two decades in Zambia.

Conservation Situation

Three main types of conservation areas are recognised in Zambia, namely: National Parks, Game Management Areas and Open Areas. All of these are under the jurisdiction of the Department of National Parks and Wildlife Service, Ministry of Tourism. The Department is responsible for the protection, conservation and control of all the wildlife estates of the country.

Currently to support the conservation effort of the Department, community based conservation programmes have been formed in some National Parks and Game Management Areas. These are Administrative Management Design (ADMADE) in 17 out of 33 Game Management Areas, the Luangwa Integrated Resource Development Project (LIRDPA) in the south Luangwa National Park and Lupande Game Management Area, the Wetlands project in Kafue and Bangweulu flats and the North Luangwa Conservation Project in the North Luangwa National Park.

The recently revised National Parks and Wildlife Act has given Wildlife Officers more powers and introduced mandatory jail terms of not less than five years for any person who is convicted of hunting, wounding or molesting any elephant or illegal trafficking of ivory.

Main activity	Number of projects	Funding Status	
		Funds raised (US\$)	Funds needed (US\$)
Security	1	0	3,720,000
Research	1	0	1,878,000
TOTAL	2	0	5,598,000

The plan is available in English only.

Elephant Conservation Plan

for

Zambia

PART A:

INTRODUCTION

&

BACKGROUND

January 1992

Ministry of Lands and Natural Resources
National Parks & Wildlife Service
Private Bag 1
Chilanga, Zambia

1 INTRODUCTION

Zambia covers an area of approximately 752,620 square kilometres. This is the equivalent of Great Britain, Germany, Switzerland, Holland and Belgium combined. The wildlife estate of the country is composed of 19 National Parks (NP) and 33 Game Management Areas (GMAs) representing 8% and 22% respectively of the total land area. GMAs are buffer areas bordering NP where recreation and subsistence hunting take place.

All wildlife outside of National Parks and Game Management Areas are the property of the state and is under the jurisdiction of the Director of National Parks and Wildlife Service (NPWS) under which the National Parks and Wildlife Act is implemented.

At one time in the late 1960s and early 1970s Zambia boasted one of the largest elephant populations in Africa of more than a 100,000 elephants. The areas with high concentrations of elephants were the Luangwa Valley, the Kafue NP and its surrounding GMAs, Lower Zambezi NP, Nsumbu NP and West Lunga NP and its surrounding GMAs in the North Western Province. These areas still remain the major elephant strongholds in Zambia but with decreased population densities, brought about by a combination of heavy poaching and human encroachment. Although both human encroachment and poaching have had a bearing on the decline of elephants during the last two decades the latter has been and continues to be a serious threat to the survival of elephants in the country.

The present status of the elephant population in Zambia is now known. The current population is below 25,000 animals, with about 50% of this number occurring in the Luangwa Valley national Parks.

The aims of NPWS concerning elephant management is to arrest this decline in elephant numbers and reverse the trends of a declining population to a growing one. The authorities believe that this can be achieved by the application of both conventional anti-poaching techniques and the alternative approaches of involving local people's participation in wildlife management, and by ensuring that the benefits accrued from wildlife areas also benefit both such communities and the wildlife resource base. Several International Funded Programmes now in Zambia have been designed to effect this concept.

2 ELEPHANT POPULATION TRENDS IN ZAMBIA

The decline in elephant numbers was not very noticeable until the mid-1970s when commercial poaching for ivory became prevalent. During the late 1960s and early 1970s the Zambian economic situation was very prosperous and had attracted a lot of foreigners, who were eager to exploit any quick selling resource such as ivory. When the economic situation deteriorated in the late 1970s the Zambians were easily exploited by foreigners since raw ivory was easily obtainable and its value was increasing substantially on the world market (Martin 1985).

Although all the areas were equally affected by this poaching for ivory, the Luangwa Valley, Kafue National Park, the area along Lake Tanganyika and the North Western Province along the border with Angola and Zaire were most affected. According to Bell et al. the Luangwa Valley where much of the elephant census work had been done through the years, there was a total loss of about 10% annually of the parent population since the early 1980s.

It is at the present time very difficult to tabulate accurate population estimates for elephants in Zambia through the years because such surveys have not been well documented.

During the early 1970s aerial censuses carried out in the Luangwa Valley by Caughley and Goddard (1975) estimated a total of 86,000 elephants in North Luangwa, South Luangwa and the Munyamadzi corridor. At the end of the 1970s Douglas-Hamilton (1979) estimated a population of 33,510 in the same areas showing a total decline of 40% in less than a decade. The census work by NPWS (1985) for the same area, indicated a population of about 53,500 elephants, a sign of continuing decline. This is further supported by the 1991 population estimates which showed a major decline in elephant numbers in Zambia.

In Table 1 below a summary of an indication of elephant population trends is given.

Table 1 Zambia Elephant Population Trends

Estimated Numbers	Date	Source	Estimated Nos Country wide	Source
Luangwa Valley	Date	Source	Estimated Nos Country wide	Source
100,000	1960s	Naylor et al	250,000	NPWS Records
56,000	1975	Caughley and Goddard	100,000	NPWS Records
33,500	1979	Douglas-Hamilton et al	60,000	NPWS Records
25,000	1985	NPWS records	45,000	Projection
10,000	1991	NPWS-LIRD	20,000	Present Status

3 MANAGEMENT PROBLEMS

In Zambia poaching poses the major threat to wildlife conservation in general and the conservation of elephants in particular.

For years now wildlife management efforts have been directed at removing this threat by concentrating on law-enforcement efforts in all the wildlife estates. Unfortunately the 19 National Parks and 33 GMAs have proved to be too large for the small number of staff under the NPWS. To make matters worse the long proven conventional methods of law enforcement have been a liability to the NPWS because it made the relationship between the NPWS and local inhabitants get worse and sour.

What made the situation deteriorate was the worsening economic demise that has prevailed in Zambia since the mid 1970s. Zambia has been undergoing a negative economic growth since the mid 1970s which meant reduced budget allocations for all government Departments. The NPWS was not exception to this.

The light penalties imposed on convicted poachers and the high prices offered for elephant ivory on the international market did not help the situation. The availability of automatic weapons to civilians from freedom struggles in neighbouring countries between 1964 and 1980 meant that poachers became better armed than the law enforcement personnel. By the early 1970s the situation for elephant and rhino had become helpless and could have continued to be so were it not for the creation of a Wildlife Conservation Revolving Fund, and the introduction of community based conservation programmes, such as the Luangwa Integrated Resource Development Project (LIRDP), the Administrative Management Design for GMAs (ADMADE) and similar other projects, which are well supported by some international organisations.

Lack of manpower and equipment caused by low budgets has impeded research and monitoring activities and the promotion of public awareness.

4 ALTERNATIVE MANAGEMENT APPROACHES

4.1 The Ban on Elephant Hunting

The escalation in poaching elephant and black rhino for ivory and rhino horn respectively has led to a tremendous reduction in elephant numbers and near extermination of the rhino. The international concern for the decline has led to the up-grading of the African elephant to Appendix I by CITES recently. Zambia banned elephant hunting in 1983. This move was taken in an effort to slow down the decline in elephant numbers. It is evident now that this ban did not have any impact to slow down the poaching of elephant, but completely eliminated the decline arising from legal off-takes. The ban could not work because the Department lacked manpower and did not have the means to enforce the ban and monitor the situation. The ban on elephant hunting is still in place in Zambia and will only be reviewed if present conservation efforts stop the decline in elephant numbers through poaching.

4.2 Creation of the Save the Rhino Trust (SRT)

In trying to assist the NPWS to control poaching, the Wildlife Conservation Society of Zambia formed the SRT in 1979. The purpose of this organisation was to support law enforcement operations in wildlife estates, by purchasing equipment and fundraising to support anti-poaching patrols. This organisation was quite successful in its operations at its inception in the early 1980s. The Trust is no longer actively involved in law enforcement operations but has concentrated its efforts in fundraising and supporting conservation areas through the Department. One such area where SRT is giving support is the Lower Zambezi National Park, where a Land Rover pick-up has been placed.

4.3 Formation of the Wildlife Conservation Revolving Fund

In 1983 the government authorised the NPWS (NPWS) to establish the Wildlife Conservation Revolving Fund (WCRF) to engage in money ventures so that the money earned could be used for wildlife management, research and anti-poaching. The figures in Table II show WCRF contributions to wildlife conservation. These are major contributions in the light of a continuing ailing economy in Zambia.

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Table 2 Revolving Fund Contribution to Wildlife Conservation

Year	Income in ZK
1985	3,371,648
1986	10,672,320
1987	10,000,040
1988	12,000,000
1989	6,000,000
1990	40,000,000

4.4 Introduction of Community Based Conservation Programmes

In Zambia due to the experience of souring relationships between the NPWS and local inhabitants as a result of the anti-poaching methods used, the NPWS recognised the fact that if wildlife was to be respected by the local inhabitants, their participation was inevitable in both conservation and sharing of the benefit accrued from their areas.

This concept is what eventually led to the formation of the many community based conservation programmes that take into account the socio-economics affecting local communities. The LIRD in Luangwa Valley, the ADMADE Programme in 17 out of 33 GMAs, the Wetlands project in wetland areas of Zambia, are all attempts to effect the community based conservation programmes.

4.5 Review of the Act

The recently revised National Parks and Wildlife Act has armed wildlife officers with more powers and introduced stiffer penalties for illegal hunters and dealers in wildlife products. The Act was passed by Parliament in July 1991. The formation of the Species Protection Department (SPD) of the Anti-Corruption Commission has also gone a long way in deterring would-be poachers and ivory traffickers.

4.6 Increased Support for Law Enforcement

In the bid to thwart poaching even after the community based programmes are in place, the NPWS has been authorised by government to increase the number of law enforcement officers from a mere 591 to 4,000, an increase of 800%. This inevitably means opening up new camps and reducing the size of areas to be patrolled by one person. Already more than 1,500 wildlife scouts have undergone training.

4.7 Conservation Education, Surveys and Research

The NPWS has been weak in this aspect of conservation mainly as a result of shortage of trained manpower and supporting equipment. There is a great need to train personnel at both middle and higher level management. A wildlife estate of 19 National Parks and 33 GMAs has less than eight wildlife biologists. There is at the moment a great need to establish a central Wildlife Research Centre for Zambia to consolidate wildlife research in the country.

5 THE PROPOSED ACTION PLAN

The Elephant Action Plan for Zambia focuses on activities that enforce surveillance and monitoring of populations, public awareness and such similar activities that are likely to thwart poaching activities and human encroachment in both GMAs and National Parks. These activities will not only benefit elephants but generally all the other wildlife species.

Elephants have often been the rallying call for conservation efforts everywhere. The elephant is a symbol of majestic strength. It has long been a motivating force for millions of sympathisers world-wide to offer funds for wildlife conservation in sub-Saharan Africa. The threat is that, despite pleas for help, the elephant continues to decline in numbers and so is its range which is rapidly transforming to other land-uses besides those related to wildlife.

From an historical perspective, the choices for how to ensure the future survival of Zambia's elephants in an age where man rivals the landscape with an ever-growing sense of greed are few. Amongst the choices to consider is to recognise the full economic potential of elephants and to convert this potential into a national economic asset that is shared by both the government and the neighbouring inhabitants, whose lands are co-inhabited with the wildlife. In this way the local communities will become protective of this valued resources and more understanding to its conservation needs. Coupled with this approach should be an "aesthetic" management in which the habitat requirements for elephants are protected from over-use. In this regard the NPWS should address fire control, encroachment and land-use planning procedures to rescue incompatible land-use activities.

5.1 Field Actions

Field actions are adequately defined in the document providing guidelines for the preparation of Action Plans. These have been specified as follows:

- i) Holding actions
- ii) Strengthening conservation areas
- iii) Pilot projects – integrating conservation and development
- iv) Land acquisition

5.1.1 Holding Actions

Elephants occur in six of the nine Provinces of Zambia. The largest concentrations occur in Kafue NP and adjoining GMAs, Lower Zambezi Valley and the Luangwa Valley. These populations should be conserved as a matter of priority. The next populations to be considered are the populations in West Lunga NP and adjoining area. Sioma-Ngwezi and Nsumbu NP and lastly the Kasanka and Lavushi Manda National Parks, Chete Island and Kotakota Peninsula populations. For the seven key areas with viable elephant populations, the following activities are recommended.

5.1.2 Strengthening of Law Enforcement Capabilities

Law enforcement can be strengthened by either opening up more camps in both GMAs and NPs or by increasing the number of personnel in the existing camps. Due to increased numbers of camps and personnel it would be required that such personnel are provided with transport for picking and dropping patrols, and for servicing camps. When personnel are provided with such equipment they would then devote all their time to anti-poaching.

What would further strengthen law enforcement is the provision of firearms and ammunition as well as communications equipment. These are at present inadequate. The Kafue NP, an area of about 22,000 square kilometres, is operated by two land-cruiser pick-ups. Comparatively the Serengeti NP in Tanzania with an area of 15,000 Km² operates with 15, 4x4 pick-ups for anti-poaching alone. In the whole of Kafue National Park foot patrols are conducted without radio contact.

For effective control of poaching in our NPs there is need to determine the minimum number of facilities to be made available using size of the area as a determining factor.

For the Kafue NP anti-poaching units to be effective there is need to allocate well over 15 pick-up, 16 base radios and 25 hand-held radio sets.

To protect the elephant populations in the seven mentioned priority areas, ie. the Lower Zambezi, the Luangwa Valley and Kafue NP blocks, the NPWS would need the following facilities:

Area	4x4 pick-ups	Lorry	Boats	Firearms	Base Radios	Hand-held Radios
Kafue NP & adjoining GMAs	15	2	3	250	6	30
Luangwa Valley	15	2	3	250	10	30
Lower Zambezi NP	5	1	2	70	4	16
Sioma Ngwezi NP	5	1	3	80	4	20
Sumbu/Mweru-Ntipa NP	5	1	5	100	6	20
Kasanka/West Lunga NP	4	2	4	100	8	40
TOTAL	49	9	20	850	38	156

On average there is now only one firearm for every six scouts hence the large number of firearms required. The ideal situation would be to allocate one 4x4 pick-up to each anti-poaching unit.

5.1.3 Strengthening Conservation Areas

The NPWS believes that the provision of facilities in (a) above can considerably strengthen elephant conservation in the seven important National Park regions and their surrounding GMAs. This will obviously be supplemented with some of the inputs from the ADMADE, LIRD and Debt for Nature Swap Programmes which have been active in some areas.

What is required most in this respect is really Departmental strengthening in terms of recurrent expenditures for services for men and women in the field and strengthening of supervisory and monitoring capabilities. The NPWS is very poorly equipped to supervise and monitor all activities in the field.

Project proposal for this particular requirement would be "Departmental Strengthening". The objective of the project would be to strengthen Departmental capabilities to supervise field actions. Here the inputs would be to supplement funding for recurrent expenditures for fuels, subsistence allowances, bonuses, ammunition, rations and provision of uniforms. These are all the requirements which government is often unable to sustain because of shortfalls in funding.

5.1.4 Pilot Projects – Integrating Conservation and Development.

Zambia has now got four such projects that integrate conservation and development. The LIRD, the North Luangwa Conservation Project, the ADMADE and Wetlands programmes. The latter has nothing to do with elephant conservation but deals with the conservation and sustainable utilisation of Wetland areas. The ADMADE Programme covers some of the key GMAs which have potential for wildlife stocks including elephant. The LIRD covers the South Luangwa National Park and the Lupande GMA. Unfortunately, not all the potential areas are taken care of by these programmes.

There is great need to expand these programmes to the remaining GMAs and NPs. It is fortunate that the North Luangwa National Park is partly being taken care of by North Luangwa Conservation Project which is supported by Frankfurt Zoological Society and the Owens Foundation, and has adopted some of the ideas from ADMADE.

Funding for the ADMADE Programmes are supplemented by USAID and WWF (USA). In 1990 government funding for NPs operations was equivalent to US \$2.1 million. This was supplemented by over US \$4 million grant and donation to purchase equipment and vehicles from USAID and WWF (International and USA). Funding from government increased to 35 million Zambian Kwacha in 1991 from 22 million Kwacha in 1989 but this was overshadowed by continuing depreciation of the Kwacha, which made the increase meaningless.

Further funding is still required to sustain the existing pilot projects and expanding them to other potential areas.

5.1.5 Control of Human Encroachment

In order to control human encroachment in GMAs where the ADMADE Programme is in place, land-use plans have been proposed. These land-use plans shall advocate that the land is used for activities best suited to it. The plan shall put emphasis on land-use classification for each GMA. Land best suited for wildlife will be designated for that purpose and that for settlements will be appropriately apportioned.

In order to effect this project NPWS will need to employ a land-use planner and provide him with the necessary equipment. The expected result will be controlled land-use activities in the GMAs a situation that will definitely safeguard wildlife habitats. The NPWS does not have a trained land-use planner. The Department through the ADMADE Programme has for sometime now been scouting for funds to establish a land-use planning unit which has not been established up to now.

5.2 Trade Actions

Zambia banned elephant hunting in 1983. The objective of this ban was to try and arrest the inevitable decline in elephant numbers due to increased poaching at the time. The expected result of the ban was that elephant poachers would be easier to catch since any one found with ivory would have obtained it illegally and that elephants would increase in numbers as a result of the ban. What happened instead, is that elephant poaching and ivory trafficking increased at an alarming rate and the NPWS was unable to control it. The reason for this was that there was no surveillance system in place to monitor and check on poachers. So the poachers have had a field day ever since. The SRT did try to work hard and stop the carnage but it could not raise enough resources to match the sophistication of the poachers and the magnitude of the problem.

All confiscated and found ivory including that from crop control were earlier on sold to generate government revenue later in 1984 after the creation of the WCRF by the Department, all such ivory was purchased from the Department by the fund and auctioned to international buyers to raise funds to supplement anti-poaching operations. Since the onset of the campaign to ban all trade in ivory and listing of the elephant to Appendix I in 1989 by the Parties to CITES, Zambia was obliged to join those members of the Southern African States that entered a reservation concerning the ban on trade in ivory. The present government however, is considering this issue based on the current elephant population data which has further shown a decline.

5.3 Survey and Research

The NPWS has put in place a Research and Management Division whose duties are to conduct research pertaining to NPs and GMAs as well as population monitoring. Inception of the LIRD and the ADMADE Programme are all as a result of the work of the research division.

5.3.1 The Value of Elephants

Some work concerning research on elephants has been conducted by Lewis (1986). More work is required to quantify the economic value of elephants, such as safari hunting, photographic safaris, and ecological diversity values. These programmes despite their importance may have to wait until more pressing programmes have been done.

5.3.2 Baseline Population Identification

Variations in elephant traits for Zambia's population of elephants has not been well studied, except for some work by Ansell (1978), not much as been done. In order to ensure that the representative populations are conserved, there is need to study the various populations on the basis of demographic, morphological, ecological, bio-geographical and ecosystem relationships.

Initially this is a project that can be commenced by the team of Zambian biologists and will require the assistance of ten 4x4 pick-ups and some literature, ie., subscription to journals and the improvement of the library and at Chilanga.

Generally to improve research activities NPWS is seeking assistance to construct a wildlife central Research Centre at Chilanga or anywhere in the field. This will include offices, laboratories and accommodation for officers and the provision of equipment.

5.3.3 Baseline Population Monitoring

In accordance with the plans for the ADMADE Programme the NPWS has for a long time planned intensive Baseline elephant censuses. These were planned to commence in 1990, but could not because of lack of funding and a suitable aircraft. When the Departmental aircraft was finally fixed with funding from USAID and WWF at the beginning of 1991, after fitting a radar altimeter in Zimbabwe it crashed on the way from there and therefore could not be available for these surveys.

Some funds were made available from about the middle of 1991 and surveys commenced only in October. The preliminary results indicate that the elephant population has generally further declined.

It is the intention of NPWS to undertake this programme each year if funding and aircraft can be available. NPWS is therefore seeking assistance to enable it to purchase its own aircraft for these surveys. To complete detailed elephant surveys in the elephant range areas, well over 300 hours would need to be flown. The NPWS is therefore soliciting for funds to purchase its own aircraft preferably a Cessna 182 or 206. Computer equipment and packages for data processing would be an added advantage, if purchased together.

5.4 Public Awareness

NPWS in Zambia has been very weak in this aspect. The reason for this weakness has been mainly lack of qualified manpower and equipment to sustain this aspect of conservation. Through ADMADE Programme at least one park interpretation course for middle level park managers has been conducted. This was only possible with assistance from USAID. More courses of this nature are planned and technical assistance in this respect will continue to be welcome for many years to come. The provision of printing facilities and transport will be essential to enable the NPWS to carry out awareness campaign targeted at both rural communities living around key conservation areas and decision makers.

For this to be adequately addressed the NPWS will need to train a fairly senior person to spear-head this activity. This person is yet to be identified.

5.5 Coordination and Development

Zambia borders with eight other countries and some of the areas that hold elephants are along these borders. Animals being what they are do not see these borders and cross to and from any one of these countries. If conservation measures being effected on one side of the country are not complemented with similar measures in the neighbouring states, then such efforts would be wasted.

NPWS in Zambia believes in coordinated efforts in the drafting of Action Plans so that elephant populations along borders can be conserved on both sides of the borders. It is proposed that these elephant populations along common borders are identified and joint conservation strategies be formulated. These strategies should be effected initially with outside assistance and slowly incorporated in to national strategies.

Overall, Zambia supports joint cross-border conservation efforts in order to protect threatened elephant populations. The proposed joint programmes could be set up in the following border areas.

Areas for Complementary Cross-Border Elephant Conservation Programmes between Zambia and her Neighbours:

	Zambia	Malawi
i)	Nyika National Park and Musalangu GMA	Nyika and Vwaza National Parks
ii)	Lukusuzi National Park	Kasungu National Park
		Zimbabwe
iii)	Lower Zambezi National Park	Mana Pools National Park
iv)	Mosi-Oa-Tunya National Park	Victoria Falls National Park
		Namibia
v)	Sioma-Ngwezi National Park	Caprivi Conservation Area
		Botswana
vi)	Sichifulo-Mulobezi GMAs	Chobe National Park

These programmes can be undertaken as either joint projects or each state can solicit for funding to increase protective measures for elephants in each of the areas.

6 CONCLUSION

The Elephant Action Plan for Zambia first and foremost considers the immediate activities that can be instituted to reduce the decline in elephant numbers in the key areas. These have already been identified as, the Kafue NP and its GMAs, the Luangwa NP and their GMAs, the Lower Zambezi, Sioma-Ngwezi, West Lunga, Sumbu/Mweru-Wantipa, Kasanka and Lavushi-Manda NPs.

The plan is to put in place effective anti-poaching patrols while at the same time implementing alternative approaches of involving local communities in conservation through sustainable utilisation of the available natural resources in conservation areas.

Continued research in National parks and wildlife matters will perhaps continue to provide us with some solutions to reducing poaching and may generate further workable approaches that can bring local communities and Zambians in general to terms with wildlife conservation.

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Elephant Conservation Plan

for

Zambia

PART B

PROJECT OUTLINES

January 1992

Ministry of Lands and Natural Resources
National Parks & Wildlife Service
Private Bag 11
Chilanga, Zambia

1 INTRODUCTION

Three main categories of projects relevant to elephant conservation can be recognised: those which are fully funded, those which are proposed or require further funding, and those which are still at the concept stage, but will require funding in the near future. All of these projects are presented in the same two-page format, in the following pages. Further details of these projects may be available on request.

The large scale of the foreign aid programmes listed in Table 3 (Section A 5.3) is likely to stretch the capabilities of DGW, until changes to the infrastructure, recruitment and training have been effected. For this reason, large numbers of projects aimed specifically at elephants are not presented in this conservation plan. Given that the main threat to elephant survival in Ghana is habitat destruction and fragmentation, programmes which improve the efficiency of wildlife institutions and reserve protection are most likely to provide effective elephant conservation.

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 Projects Seeking Funding (see green pages)

Project Number	AECCG Database Number	Title	Project Activity	Budget (US\$)
1	476	Elephant Conservation & Management	Security & Institutional Support	3,720,000
2	477	Elephant Research & Monitoring	Research & Monitoring	1,878,000

Project Title: ELEPHANT CONSERVATION AND MANAGEMENT

Database Project No. 476

Date last updated: 02/18/1992

Region: SOUTHERN

Country: ZAMBIA

Summary Information

Project Status: PROPOSAL

Fund Raising Status: NIL

Project Objective: The aim of this three year project is to improve the effectiveness of the NPWS in conserving elephant populations, through the provision of equipment, infrastructure and training.

Project Activities: 1. Security 2. Institutional Support 3. Training

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

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 3,720,000

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

	Yr 1:	\$	Yr 2:	\$	Yr 3:	\$
	Yr 4:	\$	Yr 5:	\$		
Technical Assistance:	\$ 0		Infrastructure:	\$ 1720000		
Monitoring & Research:	\$ 0		Local Development:	\$ 0		
Staff Costs:	\$ 0		Recurrent Costs:	\$ 0		
Training:	\$ 400000		Miscellaneous:	\$ 0		
Education:	\$ 0		Project Management:	\$ 200000		
Equipment:	\$ 1500000		Contingency Provision:	\$ 0		

Fund Raising Information :-

Total funds raised: \$ 0

Funds raised for current year: \$ 0

Total funds needed: \$ 3720000

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: NPWS Address: Private Bag 1/ Chilanga/ Zambia

Project Administrator: Address:

Project Executant: NPWS Address:

Project Originator: NPWS Address:

Collaborating Bodies:

24

476

Background: Since the 1970s Zambia's elephant population has decreased from 250,000 to less than 25,000. The remaining elephant populations are in the following key areas, South Luangwa National Park, North Luangwa National Park, Kafue national Park, Lower Zambezi National Park, Sioma-Ngwezi National Park, Sumbu National Park, West Lunga National Park and Kasanka National Park. Despite the importance of these National Parks regarding elephant concentrations, poaching for ivory in these areas has been severe mainly due to logistical problems.

This project is to provide funds to strengthen the NPWS.

Objectives: To improve the effectiveness of NPWS to conserve elephant populations in the above named National Parks through the provision of necessary equipment, infrastructure, training, project management funds and additional staff allowances.

Activities: Over a period of 3 years activities will include:

1. Purchasing of 50 4x4 Landcruiser pickups, 20 boats, 40 base radios and 156 hand-held radios.
2. Construction of 12 high-cost staff houses, 60 low-cost staff houses and 4 field office blocks.
3. Training of 12 technical officers (Wildlife Rangers Mweka, Tanzania).

Output: To increase effectiveness and efficiency of our anti-poaching operations in order for the elephant population to recover.

Progress to date: None

Project Title: ELEPHANT RESEARCH AND MONITORING

Database Project No. 477

Date last updated: 02/18/1992

Region: SOUTHERN

Country: ZAMBIA

Summary Information

Project Status: PROPOSAL

Fund Raising Status: NIL

Project Objective: This project seeks to improve the research division of the NPWS by providing the necessary research equipment, research infrastructure and manpower development.

Project Activities: 1. Research 2. Monitoring 3.

Funding Start Date: 01/01/1992 End Date: 01/01/1996 Further phases ?:

Elephant Population directly affected - Name: Approx Numbers :

Budget Information

Total Budget :- \$ 1,878,000

Original Currency: US\$

Exchange Rate Used:

Budget Breakdown according to AECCG standardisation

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

Technical Assistance:	\$ 0	Infrastructure:	\$ 133500
Monitoring & Research:	\$ 0	Local Development:	\$ 0
Staff Costs:	\$ 0	Recurrent Costs:	\$ 0
Training:	\$ 280000	Miscellaneous:	\$ 0
Education:	\$ 0	Project Management:	\$ 600000
Equipment:	\$ 864500	Contingency Provision:	\$ 0

Fund Raising Information :-

Total funds raised:	\$ 0	Funds raised for current year:	\$ 0
Total funds needed:	\$ 1,878,000	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: NPWS Address: Private Bag 1/ Chilanga/ Zambia

Project Administrator: Address:

Project Executant: NPWS Address:

Project Originator: NPWS Address:

Collaborating Bodies:

477

Background: The NPWS has put in place a Research and Management Division whose duties are to conduct research pertaining to National Parks and wildlife management as well as population monitoring. However, the division has been ineffective for over a decade due to lack of equipment, infrastructure and staff. With the improving staff position, lack of transport and research equipment continue to cripple the research activities of the division. Research is a prerequisite to proper management of our wildlife populations especially the elephant which has sharply declined in the last decade. Elephant research and monitoring are the only means for measuring the effectiveness of new conservation action plans.

Objectives: To improve the research division of NPWS by providing necessary research equipment, research infrastructure and manpower development.

Activities:

1. Purchasing of 10 4x4 Landcruiser pickups, 20 binoculars, 10 cameras, 1 aircraft (Cessna 182), 10 computers, 10 printers, 2 plotters, 10 scientific calculators, 2 overhead projectors, 10 light microscopes, 10 solar panels and computer software.
2. Construction of a central research station to be based an NPWS Headquarters.
3. Training of 4 undergraduate staff and 4 graduate staff at appropriate African Universities.
4. Annual counting of elephant populations to monitor trends.

Output: To increase effectiveness and efficiency of Research Division in order to monitor the elephant and other wildlife populations.

Progress to date: None

Elephant Conservation Plan

for

Zambia

ANNEXES

1. NAMES AND ADDRESSES OF CONTACTS

2. ACRONYMS USED IN THIS PLAN

January 1992

Ministry of Lands and Natural Resources
National Parks & Wildlife Service
Private Bag 11
Chilanga, Zambia

ANNEXE 1 NAMES AND ADDRESSES OF CONTACTS IN ZAMBIA

Department	Contact Names	Address	Phone	Fax	Telex
Ministry of Lands & Natural Resources					
National Parks & Wildlife Service	Ackim Tembo, Director Nenry K Mwima	Private Bag 1 Chilanga	[260] (1) 278439		70520 game za
Ministry of Tourism					
	Dr Harry Chabwela, Permanent Secretary	PO Box 30575 Lusaka			
Wildlife Conservation Society of Zambia					
	Alistair Scott	PO Box 30255 Lusaka			
Save the Rhino Trust					
	Oliver J Irwin	PO Box 320168 Woodlands, Lusaka	[260] (1) 227222		
Luangwa Integrated Resource Development Project					
	Dr Richard Bell, Co-Director Fidelis Lungu	PO Box 510249 Chipata			
World Wide Fund for Nature					
	Richard Jeffery, WWF Representative	PB 1 Chilanga	[260] (1) 253749	[260] (1) 250658	
IUCN					
	Mr Derek Medford, IUCN Consultant	House 17 PO Box 30475 Lusaka	002601 211300	002601 253788	40450 motel za

ANNEXE 2 ACRONYMS USED IN THIS PLAN

ADMADE	Administrative Management Design
AECCG	African Elephant Conservation Coordinating Group
CITES	Convention for International Trade in Endangered Species of Wild Fauna & Flora
GMA	Game Management Area
LIRD	Luangwa Integrated Resource Development Project
NP	National Parks
NPWS	National Parks & Wildlife Service
SPD	Species Protection Department
SRT	Save the Rhino Trust
UNEP	United Nations Environment Programme
USAID	US Agency for International Development
WCRF	Wildlife Conservation Revolving Fund
WWF	World Wide Fund for Nature