

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Proposal to downlist the Zambian population of African elephant (*Loxodonta africana*) from Appendix I to Appendix II of CITES subject to the following:

- a) trade in raw ivory under a quota of 17 tonnes of whole tusks owned by Zambia Wildlife Authority (ZAWA) obtained from management operations;
- b) live sales under special circumstances.

B. Proponent

The Republic of Zambia.

C. Supporting Statement

This proposal to downlist the Zambian elephant population from Appendix I to Appendix II of CITES is contemplated to promote sustainable conservation of the elephant population through out Zambia. The proceeds generated from the sale of ivory stockpile will be reinvested into elephant conservation.

In 1992 about 9 tons of raw ivory stockpile was burnt to ashes to demonstrate Zambia's commitment to setting up serious measures that would ensure total protection of its elephant population which was sharply declining due to poaching. The promised donor buy out of the ivory burning did not, however, fulfil the anticipated financial compensation that was assumed and expected to be ploughed back into improving elephant management in the National Parks and Game Management Areas.

The government of the Republic of Zambia has now put in place effective conservation measures such as:

- i) The new Zambia Wildlife Act No. 12 of 1998 and the revised wildlife policy, which have enhanced Zambia's conservation programmes.
- ii) The creation of an efficient semi-autonomous Zambia Wildlife Authority, which is a product of this statute. As an autonomous institution ZAWA is operating with a free hand to generate its own funds by commercialising a number of its business components but without compromising its core function of biodiversity conservation.
- iii) Introduction of stringent penalties for illegal use of elephant and its products.
- iv) Involvement of local communities in conservation matters and the sharing of revenue between stakeholders.

In enforcing the law, ZAWA has adopted, zero tolerance policy to all incidences of poaching. Under this new policy, violation of the wildlife Act is prosecuted to the fullest extent of the law including the confiscation of any equipment used in the commission of the offence.

Successful legal and institutional reforms in wildlife management have yielded positive results of reversing the declining trend of elephant population. To strengthen the elephant management programme, ZAWA needs additional resources to reinvest into elephant protection. To obtain the best out of the elephant population, it is therefore, wise to down list the elephant population to appendix II of the CITES to facilitate the sale of the 17 tons stockpile of raw ivory that has accumulated through management operations and natural elephant mortalities. The proceeds from the sale of the ivory stockpile will be re-

invested into elephant conservation and sustainable development in local communities for the benefit of the people living with the elephant.

The proposed transfer of the elephant population from appendix I to appendix II is supported by the following **precautions**:

- i) Only Ivory from Zambian elephant population is included in this proposal;
- ii) Only the registered stock of ivory will comprise the export quota;
- iii) Ivory stockpile will have all tusks marked with individual identification system;
- iv) Sale of ivory will be to one single center who shall not be allowed to re sale or re export;
- v) Only direct export of ivory to importing country will be permitted;
- vi) Enforcement personnel from CITES secretariat shall be free to inspect, monitor and check all the stages and processes of ivory sale;
- vii) Revenue accruing from sale of ivory will be used for conservation activities; and
- viii) Veterinary Measures; Trade in wildlife products in Zambia is governed by veterinary regulations. All the individual ivory specimens shall be fumigated prior to shipment in compliance with veterinary regulations. The African elephant has not suffered from major disease outbreaks in Zambia except for the 1987 anthrax epidemic in the Luangwa Valley when elephant carcasses were recorded. The ivory recovered from these carcasses were disinfected in accordance with veterinary recommendations. These specimens formed part of the stockpile that was burnt to ashes by Government in 1992. Since 1987 no anthrax has been recorded in the elephant population in Zambia.

Rationale

a) Elephant conservation

Elephants are in competition with people in Zambia. Protected areas alone are inadequate to ensure the survival of the elephants especially in arid and semi-arid areas, where competition with humans for resources is high.

It is important, and makes ecological sense from management stand point, that elephants are allowed to roam freely between and across wild habitat on privately owned land, natural and customary land. Competition for space in Zambia is higher and increasing on customary land. Yet this is even the land where human/elephant conflict is more pronounced. Elephants in this case must return demonstrable tangible economic benefits to landowners or communities sharing habitat with them without which elephant conservation will always be marginal to other land use forms. This means that elephants must simply have a strong commercial value – the value that is not only limited to ecotourism for the latter has its serious limitation. Thus stated, controlled legal trade in ivory and other products is preferred.

b) Support to local community

The liberalized Zambian economy has introduced, and challenged many resource-poor local communities. Poverty alleviation strategies to them are meaningful but only on paper. Their primary concern is to fight the injustice that elephants further inflict on them in the destruction of their livelihood by loss of crops and human life.

Revenue from controlled trade in elephant products will significantly assist local communities who in a great way have suffered costs of conservation exacerbated by there being no scheme for

compensation. The undertaking will offer relief and bring confidence to the community, as they will now place value on elephants unlike at present where communities see elephants as a threat to their livelihoods. Conservation of elephants is important but satisfying basic needs of resident human populations is even more crucial.

The funds would be used to develop strategies to protect crops in the elephant range areas. This will contribute to improved food security, a situation that is currently critical in the elephant range areas. A changed perception about elephants would enable the community to tolerate and accept to coexist with them. This would secure promise for habitat and thus diminish threats to land conversions. The scenario will be that costs should be covered by income from the limited or controlled use of elephants and products.

At the moment elephants are at the mercy of the communities. Continued lack of goodwill from communities would have telling effects on the future of elephants in Zambia. Many members of the local community believe that the Government of Zambia acting in league with the international community has attached more importance to elephants at the expense of the people. This, indeed, is regrettable and undesirable. Human population is increasing in the elephant range areas while elephants are moving into human settlements. This has heightened human/elephant conflicts. As humans defend their property and crops, more often elephants perish and human life is lost. The provisions in the current Zambia Wildlife Act in which communities are partners with the Zambia Wildlife Authority, offer hope that such conflicts shall be resolved with a promise for improved livelihoods. The Zambia Wildlife Authority has a social responsibility to facilitating improved living conditions of resident communities in GMAs. This is possible through share of income generated from wildlife utilisation in the local areas. This obligation is challenging as resources are limited and about which communities express misgivings questioning the government's sincerity.

If, indeed, the future of elephants is to be assured the international community should have an anthropogenic approach to the conservation. In any case it is the humans that are a decisive factor in that equation. Ethics must be higher for human costs of elephant conservation than otherwise is expressed for loss of animal. Elephants must be seen to pay for the cost of their conservation otherwise with Zambia's poorly performing economy; this activity can no longer be subsidized.

c) Biodiversity conservation and general wildlife management

At low densities elephants are beneficial to other species as well. They open woodland and create grazing grounds. At higher densities like it happens in many protected areas where populations are compressed, elephants are destructive and loss of biodiversity occurs. Therefore, it is desirable to maintain a manageable population of elephants to enable maintenance of biodiversity in the region.

When elephant population grows beyond a manageable capacity, it is desirable that only relocation would be permitted. No licensed hunting would be permitted in the immediate future. Any hunting allowable shall be for the purpose of management operations only. This shall still be the last resort after all other options have failed.

Rather than killing on control activities, Zambia shall encourage capture for training. Trained elephants shall be leased to lodges that shall utilise them in back rides. As numbers of trained animals saturate the market, it will be prudent to export such animals to clearly identified importers in a one-off shipment per year. It is desired that elephants should not be left to die where there is an option of deriving benefits from products. Natural mortality through starvation will be discouraged. In Zambia, it would be considered immoral to allow wastage in a land where to get basic needs is an intelligent life-long struggle.

d) Political imperatives for transfer

i) Ownership

From pronouncements made by the CITES Parties, it is assumed that elephants are a global species. This puts Zambia at a great disadvantage, as a third world country, conservation is usually not a funding priority by the government. The government has too many more pressing needs to be able to consider any meaningful commitment to elephant conservation as well. The local communities who bear much of the cost of conservation viz: Suffer crop damage, bodily harm or death and the trauma of perpetually feeling unsafe among the elephants, are left to find their own solutions. Communities are distanced from gaining tangible economic benefits from the animals. It would be unfair to continue with such an arrangement.

ii) Other Pressures

Local communities have started questioning morals and ethics of CITES authorities where these have been seen to place high value on elephants and less on humans. The pressure is becoming so intense that if the international community fails to provide compensation, it is one reason for allowing controlled legal trade in elephant products. This would help pay for elephant conservation costs and provide revenue to impoverished local communities.

More than 60% of Zambia's population lives in rural areas. They derive their livelihood from the natural resources in their local areas and they bear direct costs of elephant conservation. They have become a force not to be ignored.

e) Strong economic imperatives for transfer

The situation arising from the controlled trade is that incentives will simultaneously benefit conservation of other wildlife species occurring in the same habitat. If there is any delay in reviewing position on elephant in Africa, the elephant shall soon disappear from its range.

The elephants are of high value and manifest themselves with high costs. They should correspondingly be of high benefit to landowners especially local communities. Ironically, the Appendix I listing make elephants in Zambia of low economic benefit. In a regime of low incentives from elephants, landowners respond by reducing investments into conservation activities such as habitat provision and management. This means other species that share habitat with them suffer similar fate, as habitat remains poorly managed. In many cases the elephants also contribute to rapid habitat degradation.

f) Transfer is necessary for enforcement and control

A controlled legal trade could contribute to the survival of the elephant. Today it is still difficult to precisely state the gain from the ivory trade ban (since 1991) in Zambia. It is even difficult to state whether or not the ban achieved its objective. Illegal trading in ivory continued over the year as poaching of elephants had escalated. However, elephant population had stabilised. The stability in population could be the only possible gain though population structure is skewed in favour of the sub-adults and juveniles. A sure indicator for growing population. Current elephant situation must, therefore, be supported with sufficient resources.

The Lusaka Agreement task force commits member states to significant costs, which many may fail to eventuate. A controlled legal trade in ivory products shall provide the required funding for enforcement and management. This would ensure that opportunity costs for poaching are rendered unattractive by reducing success rates. This in turn would make enforcement cheap, as there would be minimum need for it when illegal hunting or poaching will have been reduced.

As Zambia proposes to transfer her elephant population to Appendix II, controls will be put in place to closely co-operate with range states. Zambia will introduce mechanisms that will enable rapid response to situational changes including ascendance to Appendix I. Controls will include tight weaving with other law enforcing agents within the country viz.: the Zambia Wildlife authority, the Zambia Revenue authority on the ports of exit/entry, the Zambia Police Service, the Zambia Intelligence and Security Service to name but a few. Only one port shall be designated for the export of the products including live sales if any.

The ivory shall be labelled clearly and permanently to indicate origin. This shall prevent reselling and thus circumvent re-entering in the trade. Such labelling would be unique and would prevent illegally obtained ivory to enter the trade.

Zambia will also collaborate with other agencies such as the TRAFFIC Southern Africa, and will reinforce the MIKE programme within the country. Existing political will from Zambia's leadership will be exploited.

1. Taxonomy

- 1.1 Class: Mammalia
- 1.2 Order: Proboscidae
- 1.3 Family: Elephantidae
- 1.4 Genus: *Loxodonta africana africana*
- 1.5 Scientific synonyms:
- 1.6 Common names: English: African elephant
French: éléphant d'Afrique
Spanish: elefante africano
- 1.7 Code numbers:

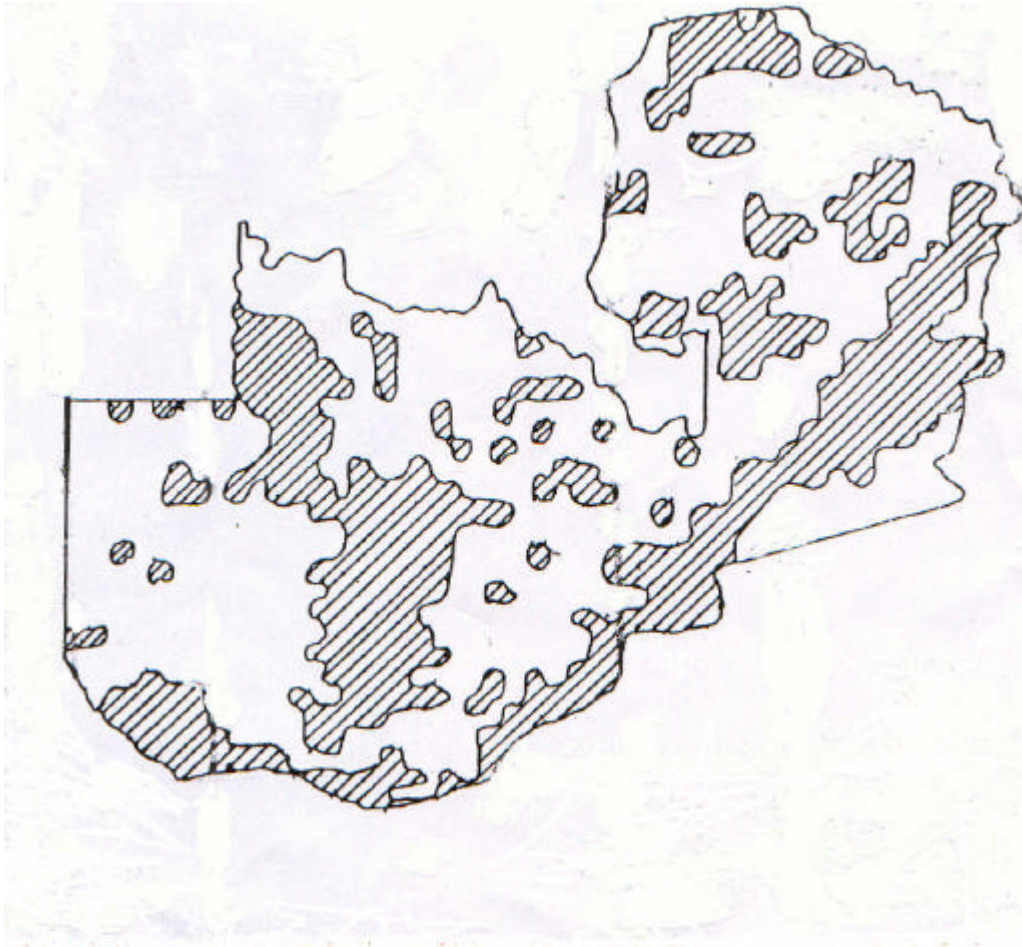
2. Biological Parameters

2.1 Distribution

2.1.1 Historical

Elephants once populated the entire continent of Africa. In the last three centuries elephants inhabited all of sub-sahara Africa in habitats ranging from tropical montane forests to open grasslands, semi arid bush and desert. In Zambia elephants were widely distributed until the early 1970s (see figure 1). The increase in human population and agricultural activities and excessive hunting for ivory during the precolonial and colonial era reduced elephants' populations such that today they are mainly confined to protected areas (see figure 2). By 1989 for example, the numbers had fallen to about 18,000 animals from an estimated 200,000 in the 1970s. The species was later upgraded to Appendix I of CITES in 1989 to save it from extermination from commercial poaching.

Figure 1: Historical distribution of elephant in Zambia (Ansell 1978)



2.1.2 Current

The current distribution patterns and population estimates of elephants are derived from aerial surveys, ground counts, law enforcement reports and other indices. Zambia Wildlife Authority is responsible for population monitoring. The surveys are done in the dry and wet seasons, but due to resource constraints, most of the aerial counts are restricted to few Parks. The last national survey was done in 1996 and up to this time it has not been possible to cover the whole country on a yearly basis. Aerial counts have focussed in the key elephant areas of Luangwa, Kafue and Lower Zambezi areas. The surveys have often been funded by cooperating partners and have not been covering a good proportion of the elephant population.

2.1.3 Elephant range

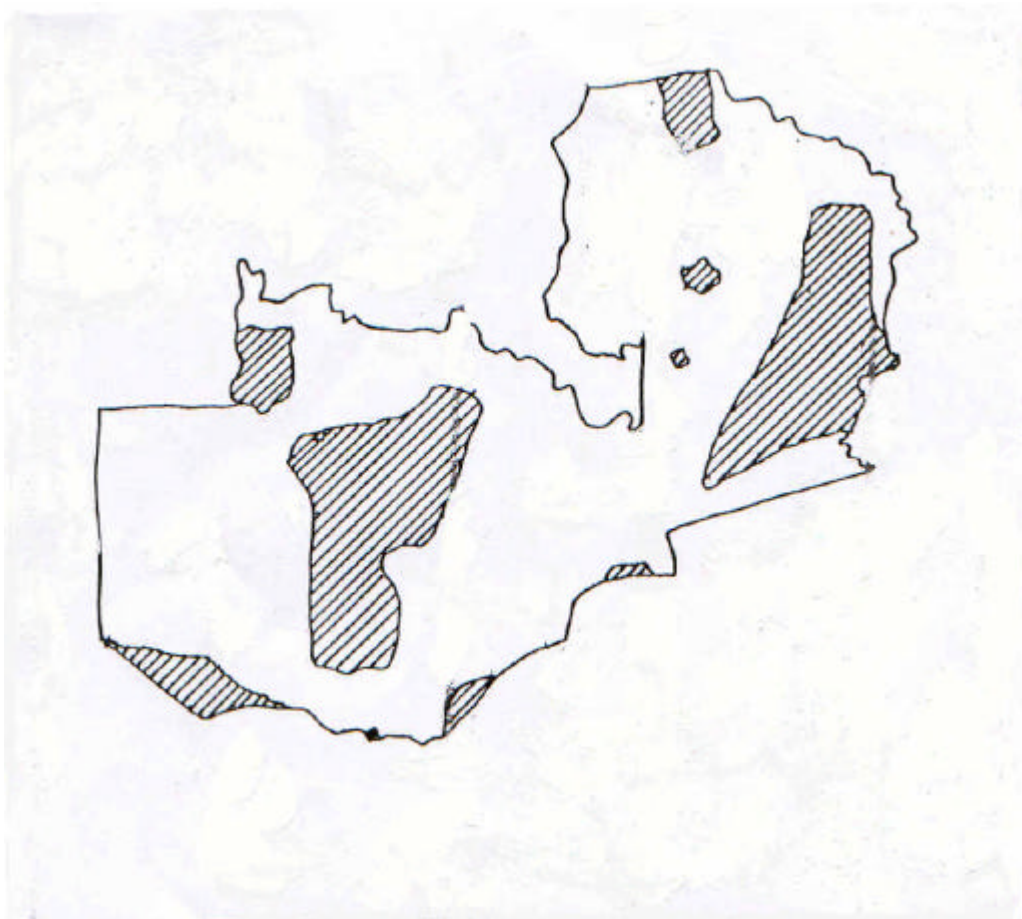
The elephant range is difficult to define since animal ranges tend to tail off with very large areas of low population density around the periphery. Like wise elephants also tend to wander in search of water and food at different times of the year. However, law enforcement reports and anecdotal reports from ZAWA staff, and the local communities through CRBs indicate an increase in elephant / human conflicts in a number of new areas is an indication of expanding elephant range. National Parks in the Luangwa valley, Mid Zambezi valley, Sioma Ngwezi and Kafue system are the core elephant range areas where they are present through out the year, while the remaining areas could be classified as; seasonal range where elephants are present seasonally, erratic range where elephants may

occur periodically but not necessarily every year and unknown range where elephants are known to occur but there is no further information available. Cross border movements have been recorded between Zambia and Zimbabwe; Zambia and Namibia around the Caprivi Strip/Botswana/Southern Angola and Zambia/Malawi to and from the Luangwa valley. A proportion of the elephant's seasonal, erratic and unknown range in Zambia occurs outside the protected areas' network.

2.2 Habitat availability

Most of the elephants in Zambia are found in the following areas: Luangwa valley (in National Parks and Game Management Areas) dominated by mopane woodlands on the valley floor and Miombo woodlands on the plateau; Mid Zambezi Valley (National Park and GMAs), dominated by Acacia woodlands, mopane and miombo woodlands; Kafue area (National Park and GMAs) dominated by miombo woodlands and some *Baïkea plurijuga* woodlands on kalahari sands in the southern parts; Sioma Ngwezi and West Zambezi GMA and other areas put together, mainly miombo and some *Baïkea plurijuga* woodland and flood plains; Bangweulu and Nsumbu are mainly covered by miombo and thickets. Minor elephant areas include; the West Lunga National Park, and Mweru wa Ntipa areas.

Figure 2: Present distribution of elephants in Zambia, 1992



The habitat currently available to elephants in Zambia is considerably large. Over 230,000 km² or about 30% of the total land mass is set aside as Protected Areas in form of National Parks and Game Management Areas and although some traditional movement routes and patterns may have been disrupted by recent changes in land use and human settlement patterns, there is still adequate

habitat to accommodate the increasing elephant population. The availability of water through out the year in most Protected Areas and most communal/traditional land makes Zambia an ideal elephant country.

2.3 Population status and

2.4 Population trends

Zambia boasted of one of the largest elephant population in Africa south of the Sahara in the late 1960's. It is estimated that the elephant population at that time was over 200,000. Combinations of survey results backed by law enforcement reports and anecdotal observation have documented a precipitous decline between 1976 and 1986 because of excessive poaching. The losses in elephant numbers in recent years have levelled off due to intensification of anti poaching activities and community based wildlife management projects in these areas.

The national elephant surveys conducted between 1992 and 1996 estimate a national population of between 22,000 and 25,000 animals (see Table 1). From the early 1990's the numbers have stabilized and shown trends of increasing. These results and field reports from key elephant areas indicate a preponderance of juveniles and sub adults in most elephant populations an indication of increased natality and rapidly increasing population.

2.5 Geographic trends

Areas known to have had viable populations of elephant in the past are the Luangwa Valley, the Lower Zambezi Valley, Sioma Ngwezi, the Nsumbu/Mweru Wa Ntipa, the Kafue National Park and adjacent areas, Sesheke/Senanga districts, Kasanka/Lavushi Manda areas and Chizera/West Lunga areas in North Western province. This is shown in Fig. 1. Presently, most of the current elephant populations are in National Parks and some Game Management Areas as shown in Fig. 2. of the distribution map.

2.6 Role of the species in its ecosystem

Elephant is a keystone species, which plays an important role in the ecology of the habitats. Their feeding habits of breaking woody vegetation and opening up forest canopy and thickets, modifies the habitat. Pathways are created which other animals and humans alike can use. Opening forest canopy and thickets makes the habitat unsuitable for thicket loving species such as Black rhino.

Elephants also facilitate seed dispersal. Seeds of species such as *Faidhebia albida* are known to germinate from elephant dung. Several other woody plants benefit in the same way. Elephants are also known to dig for water in dry riverbeds making water available to other species. Loss of this keystone species would have a significant impact on the ecology of its habitat and other species.

Key reasons for protecting the elephant as a species in the ecosystem include the following:

- as a tourist attraction,
- as part of Zambia's rich wildlife and cultural heritage both as a species and component of the ecosystem,
- their role in the ecosystem as a keystone species is important for biodiversity conservation,
- that elephants have relatively long generation time as well as being vulnerable to poaching and habitat loss,
- that their numbers at national level are much lower than the early 1970s estimates and hence the need to ensure their increase.

Whilst national parks are increasingly becoming islands functionally due to human settlements around their borders, it is recognized that key ecological systems often extend beyond protected

area boundaries and may also overlap international borders. As a migratory and keystone species, the African Elephant can be used to identify ecological corridors and so as to promote the corridor approach that will connect protected areas of the sub region or neighbouring countries.

2.7 Threats

The major threats to the elephant population are the increasing human / elephant conflicts as the population recovers from the heavy poaching scourge of the early 1970s to late 1980s. As the populations start to increase country wide, more range is reclaimed and most of the elephant's traditional movement routes that have been taken over by human settlements in the last ten years are being reclaimed. This has resulted into rising human / elephant conflicts. Damage to various agricultural crops caused by feeding and trampling as well as loss of human life are problems that cannot be ignored particularly in areas with high elephant densities.

Perhaps, it is the plight rural households face in their struggle to live on land shared by elephants and where life is often not very generous in the adversity of sickness, hunger and poverty. It is in this environment that conservation of elephant must succeed for it is these same people whom should make their lands safe for elephants while accepting their dangers and risks of living with these large and sometimes destructive animals. Perhaps by understanding this potentially life threatening relationship between elephants and people a more objective view of the CITES status for elephants can be undertaken.

3. Utilization and Trade

3.1 National utilization

Zambia banned elephant sport hunting in 1982. Local trade in elephant products continued until 1989 when the species was up listed to Appendix I of CITES. By 1992 about nine (9) tons of ivory had accumulated and disposed of by way of burning.

Zambia has not directly exploited its elephant for commercial trade or domestic consumption, either as live or their products, except through sport hunting before the ban in 1982.

Under this recreational hunting activity small quotas for elephant were allocated in selected Game Management Areas with potential elephant populations. All the revenues generated from hunting were banked into government treasury. National Parks and Wildlife Service (now ZAWA) could not use these revenues directly for the conservation of the elephant population.

When the decline in the elephant population was noticed, due to indiscriminate killings by poachers the ban on elephant hunting was declared. The country has however, continued to utilize its elephant population for eco-tourism purposes through photographic tourism. Utilization of elephants for back riding is also being considered.

3.1.1 Past use of elephant products

For the purpose of supplementing government funding, National Parks and Wildlife Service (NPWS) was, in 1984, authorized to form a revolving fund called Wildlife Conservation Revolving Fund (WCRF) to raise its own funds for use in the management and conservation of the country's wildlife estate.

Among other animal products used for this purpose was also the government controlled raw ivory and other elephant products such as tails and feet, which were purchased from government and processed into various carvings. These worked ivory and other products were then sold locally. There were also in place few small local ivory carving industries. But

when the ban on trading in African Elephant and its products was instituted in 1989, all such dealings in ivory were disbanded.

3.1.2 Ivory stock pile

i) 1992 stock pile

By 1992 after the African Elephant population was upgraded to Appendix 1, in 1989, the ivory stockpile stored by National Parks and Wildlife Service, had accumulated up to nine (9) tones. However, as a demonstration and commitment to the rest of the world to the policy of total protection of the elephant, Zambia burnt to ashes all these tones of ivory on 14th February 1992. By taking this painful action Zambia showed to the rest of the world that she was against the scourge and international trade in ivory products.

Disappointingly, after taking this action, ZAWA has not seen major investment in the conservation of the elephant by the advocates. This action has until now, continued to receive condemnations from the public sector, particularly the local communities who felt a total loss of the possible revenue which could have been made from the ivory sale and re-invested into the conservation and management of elephant populations and the wildlife areas, in general.

ii) Current stock pile (2002)

Currently ZAWA is holding approximately 17 tones of raw ivory from natural mortalities, problem animal control and confiscations from poachers. An analysis of this stockpile is provided in Table 2.

This stockpile is stored in a well-secured storeroom at ZAWA Headquarters and 24 hours surveillance is provided. However, the longer it will remain under storage the more it will decline in quality and value. Zambia is therefore referring to this ivory component for international trade through this proposal. Any unknown ivory or that originating from outside Zambia has been clearly marked and shall by no means be mixed with the Zambian genuine ivory for trading transaction under this proposal. See table 2 below.

Table 2: Ivory stocks

Source	Weight	Description
Natural mortality and Management operations	16,145.05	Whole tusks and pieces
Picked from wildlife estate	536.20	Whole tusks and pieces
Seized	813.41	Worked and cut pieces of ivory
Unknown	219.30	Whole Tusks and pieces
GRAND TOTAL	17,713.96	

Currently, ZAWA's capacity to continue managing the wildlife estate, effectively, is constrained by lack of financial resources. Therefore, the commercial utilization of the current ivory stock pile, and future stocks including other elephant parts will certainly be beneficial to ZAWA in terms of the financial resources to continue managing and protecting the elephant population, while at the same time provide the financial incentive to the local communities who are not only co-managers in this industry but also who bear the costs of living with the elephants.

3.1.3 Eco-Tourism

Zambia's Tourism is mainly wildlife based. Elephants, along with other big game, make up the main attraction that mostly interest tourists.

The demand for the utilization of Zambian elephant for back riding, in some of Zambia's protected areas, by local safari operators has also increased. Apparently, this form of elephant utilization is quite lucrative and can earn ZAWA extra revenue for conservation purposes. Consultations with Botswana, Namibia and Zimbabwe, which have already ventured into the eco-tourism activity, have confirmed that the activity has the economic potential. For this reason, Zambia is planning to start training some of her elephants, particularly those reported as problem animals for back riding. The trained elephants will then be leased out to approved safari operators while others will be sold outside Zambia under special circumstances for the same purpose. This plan, however, shall only be affected once the proposed down listing of the Zambia elephant has been achieved. It is estimated that about USD 13,820 can be made from Elephant Back-Rides (from eight elephant per concession, i.e. USD 13,320 for variable fees and USD 500, for Fixed fees) per month.

3.2 Legal international trade

Elephants in Zambia are on Appendix I of the CITES listing, prohibiting commercial trade in elephant and elephant products. Since the listing in 1989, Zambia has not sold any ivory. The 9 tones of ivory stockpile that accumulated before and after 1989 up to 1992, was burnt in an attempt to discourage commercial trade in ivory.

In Zambia, the ivory (worked ivory) that is allowed out of the country is part of the stock obtained by individuals before Zambia acceded to the Convention and that acquired before the total ban in ivory trade in 1989, as personal effects. These individuals possess valid certificates of ownership from the wildlife department as proof of both source and ownership.

If approved, this proposal will only allow for international trade to off-load the registered stocks of ivory as well as allow for the importation of live elephants for the purposes of elephant back rides safaris, before Zambian trained elephants are put on the market. In the case of exporting raw ivory, Zambia will ensure that only the trade takes place between the proponent and the importing country, according to obligations laid out in this document.

3.3 Illegal trade

In the last decade poaching for Ivory in Zambia's Protected Areas appears to have decreased considerably. Between 1980 and 1990 there were more reported incidences compared to the last decade. Although statistics may not be readily available, field reports and aerial observations, indicate a reduction in poaching trends.

The decline in poaching for ivory incidences can be attributed to the improved strategies and effective law enforcement operations in all Area Management Units. The Area Management Units require additional funding to counter the sophistication of poachers. This proposal, therefore will add to the resources needed to monitor both the illegal killings and trafficking.

3.4 Actual or potential trade impacts

Many concerns have been raised on the potential increase in the poaching of the elephants once trade is resumed. It is not easy for Zambia to confidently state that such concerns are valid or otherwise, but can comfortably state that the continued act of stockpiling has not been of any benefit, to the Zambia Wildlife Authority.

The elephants have continued to be conserved at the expense of other species that are hunted for conservation purposes when financial resources can be derived from the dead elephants (in terms of ivory and other derivatives) to save the living ones.

Communities in areas where elephants have caused unquantifiable crop and home damage including human life do not appreciate the unseen value of the elephant regardless of its status at the national and international level. Zambia Wildlife Authority received very strong and emotional contributions in favour of this proposal from local community representatives and leaders arguing that the contributions from the utilization of a species that is known for its devastating effects were long overdue.

The legal trade proposed will directly benefit the survival of the species since all revenue will be reinvested in elephant conservation in Zambia, including local community conservation programmes, and the monitoring of the impact of the resumption of the trade in ivory will be supported.

3.4.1 Live Specimens

The major interest is the import of live elephants for elephant back ride safaris. Trained elephants from the sub region have been earmarked for the initial set up of elephant back rides safaris in Zambia, a tourism activity that has attracted a number of operators within the country. In future, Zambia intends to export on similar grounds. Other reasons could be export as and when carrying capacities are exceeded as an option to culling/control.

3.4.2 Parts and Derivatives

Sale of hides and other derivatives from dead elephants (natural mortalities and management operations) to both internal and external markets will be added revenue to the ZAWA coffers for the protection of the elephants.

4. Conservation and Management

4.1 Legal status

4.1.1 National

The status of all protected areas in Zambia is embodied in the Zambia Wildlife Act No. 12 of 1998. Under this piece of wildlife legislation is conserved and managed in two categories of protected areas namely; National Parks and Game Management Areas.

National Parks (Category II of IUCN) are natural areas of land declared so by law for the purpose of protecting the integrity of one or more ecosystems for the present and future generations to exclude exploitation or occupation inimical to the purpose of designation of the area, and to provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible (IUCN-CNPPA 19). Game Management Areas (Category IV of IUCN) are protected areas comprising mainly communally owned land that is used primarily for sustainable utilization of wildlife, through hunting and/or non consumptive tourism concessions, for the benefit of local communities and the wildlife resources, but which can be used for other land uses such as settlement, agriculture, forestry, mining etc.

Law also protects wild animals inhabiting areas outside the two categories of protected areas and private land.

The conservation and management of elephant and other wild animals in Zambia is demonstrated by the designation of 19 National Parks and 36 Game Management Areas representing about 8% and 22% respectively, of the country's total land area.

The existing wildlife policy, legislation and regulations are adequate to effectively and efficiently conserve and manage wildlife resources for sustainable development, if supported by adequate funding.

4.1.2 International legal issues

As a signatory to CITES, Zambia abides by the conditions applicable to Appendix I listing of the species.

Additionally, Zambia has achieved necessary wildlife law reforms, which prohibits any commercial use of the elephant and its products. The Lusaka Agreement and SADC wildlife protocol have been incorporated into the domestic legislation to facilitate collaborative enforcement.

4.2 Species management

4.2.1 Population monitoring

Three methods have been employed to determine the elephant population in Zambia namely aerial transects sampling techniques, aerial total counts and ground counts/field observations. For systematic sampling a baseline is drawn on an appropriate 1:250,000 map so that sampling occurs across major features such as rivers and streams. Transects are drawn at right angles to the baseline at equal interval determined by the required sampling intensity. Sampling intensities have varied between 4% and 50% depending on the area being surveyed. The flying speed has usually been 160km/hour with an average height maintained at 100 meters. Total counts have been conducted on some islands and the North Luangwa National Park. In areas where elephants are occasionally seen information of their existence is obtained from field staff or local residents.

Table 1.0: Showing the national elephant population estimates for 1992, 1994 and 1996

Area	1992	1994	1996
1.0 LUANGWA VALLEY	9605	15469	16550
2.0 KAFUE SYSTEM	10263	4792	4980
3.0 LOWER ZAMBEZI SYSTEM	359	32	218
4.0 OTHER AREAS	2240	7	770
TOTAL NATIONAL ESTIMATE	22467	21000 *	22518 **

NB: Note that the last national survey was done in 1996, surveys after 1996 did not cover the whole country and hence not included in this table.

The number killed by poachers has declined over the last nine years while those killed on control have been on the increase.

Table 2.0: Record of elephants killed by poachers in the last nine years

Year	1994	1995	1996	1997	1998	2000	2001	2002
Number killed by poachers	27	22	18	18	16	16	13	0

4.2.2 Habitat conservation

The impact on habitats caused by elephants while feeding and moving depends on the observer's value system and the management goals. However, it is generally accepted that the most obvious feature of the interaction between elephants and habitats is the effect of elephant feeding on particularly woody plants. Elephant feeding on woody plants affects plant survival and recruitment and this changes food supplies for elephants survival and also modifies habitat for other species such as Black rhino by opening up thickets.

Elephant habitat conservation practices in Zambia therefore, will focus on ensuring that a balance between elephant populations and their habitats is maintained for maintenance of biological diversity and long-term survival of the elephant.

So far, ZAWA has put in place General Management Plans in the key elephant areas, to guide management to achieve sound management and maintain a balance between preservation and use of the ecosystems. A number of species and subject specific policies are in their final stages of ratification. Among them is the fire policy, which is designed to maintain the integrity and ecological functioning of the habitat. However, the vastness of the protected area network (30% of the total landmass) makes the implementation of the fire policy tenuous. It is however believed that with the increasing levels of community participation through the CRBs wild fires are likely to be reduced.

4.2.3 Management measures

i) The Monitoring of the illegal killing of elephants - MIKE

The monitoring of the illegal killing of elephants became operational in Zambia in 2002. The programme is now well established in South Luangwa National Park and is expected to include surrounding GMAs soon.

The programme is also targeting border areas and other key elephant areas, in order to get countrywide data on the illegal killing of elephants, for monitoring purposes.

MIKE as a programme is not an anti poaching operation to stop the illegal killing of elephants, it only provides information and skills needed for effective monitoring of the illegal killing of elephants important for management decisions.

ii) Elephant policy

The Zambia Wildlife Authority is in the process of finalizing formulation of an elephant policy. The policy statement expresses government's intention to regulate use of elephant by such means and measures that will ensure its long-term survival, by providing for human benefit particularly to local communities, and enjoyment of the elephant by the public in such manner and by such means as will not deplete their populations but to leave them for enjoyment and benefit of future generations.

iii) Reinvesting revenues in elephant conservation

ZAWA shall operate two accounts with a commercial bank. Revenue generated from sales of elephant products obtained from natural mortality and management activities in GMAs shall be deposited in one account while revenue generated from National Parks shall be deposited in the other account. The revenues shall be specifically retained for elephant conservation.

Community Resources Boards shall be trained in monitoring and collecting specific information on elephant. Accurate account of where elephant product recovery was made will be maintained so as to help clearly trace origin.

The Community account operated by ZAWA on behalf of the CRB or local community shall service respective community that produced the products. Such funds shall be applied on the maintenance of Village Scouts who protect wildlife, and elephants in particular, in local GMAs. Funds shall be disbursed annually in arrears to respective beneficiary communities. Such funds would be transferred in the first quarter of each year.

Funds generated from products recovered in National Parks shall be used on operations that will boost the protection of elephants in the elephant range areas.

4.3 Control measures

4.3.1 International trade

The Zambian Government has the following measures in place to control international trade in wildlife products.

The Zambia Revenue Authority (ZRA) facilitates the export of wildlife and wildlife products on the strength of the CITES Export Permits and Veterinary Health Certificates. The Department of Animal Production and Health (DAPH) issues Veterinary Health Certificates on the strength of a valid export permit from the ZAWA. In situations where either the veterinary or customs officials are doubtful of the transaction they always call upon the ZAWA CITES office for further verification. During this period the consignment is confiscated by the veterinary or customs officials and is kept in their custody.

Since Zambia will now join all the Southern African Development Community (SADC) member states in down listing its elephant population to Appendix II, it will be much easier to implement regional control mechanisms through the SADC Wildlife Protocol.

4.3.2 Domestic measures

The Zambian Government has been marking its ivory using a two letter code, in compliance with CITES requirements. All the ivory brought to the ZAWA Head Office is marked and weighed immediately on arrival.

Wildlife crimes in Zambia are punishable under the Zambia Wildlife Act No 12 of 1998. The penalty varies from crime-to-crime. Equipment used in poaching are forfeited to the state.

To enhance wildlife law enforcement, ZAWA has been collaborating with other Institutions in the country such as the Drug Enforcement Commission, Anti-Corruption Commission, Zambia Police, National Airports Corporation, Immigration Department and Zambia Revenue Authority, which have formed surveillance, network, and is now in the process of establishing and applying forensic techniques.

Recently, the Zambian Government approved the formation of the CITES National Co-ordinating Committee that will enhance intersectoral enforcement of the CITES regulations in the country. Membership to the committee will be drawn from a number of institutions and individuals with relevant expertise. Notable among these institutions are the ZRA and DAPH and other law enforcement wings of Government. A draft memorandum of understanding (MoU) is in place to guide the operations of the committee, which has been tasked among other issues to prepare a statutory instrument on the Management of the

Convention in Zambia. There are plans to conduct a national CITES Training Course targeting all institutions that are party to the NACC as this will enhance effective implementation of the convention among the member institutions.

For purposes of the export of ivory, Zambia will provide maximum security to the consignment from the point of storage to the port of exit until the consignment leaves the Zambian borders.

5. Information on Similar Species

6. Other Comments

7. Additional Remarks

8. References

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