CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA
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CITES

Fifteenth meeting of the Conference of the Parties
Doha (Qatar), 13-25 March 2010

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Transfer of the population of African elephant (*Loxodonta africana*) of Zambia from Appendix I to Appendix II for the exclusive purposes of allowing:-

a)   trade in hunting trophies for non-commercial purposes;

i)   trade in live animals to appropriate and acceptable destinations, as defined in Resolution Conf. 11.20;

b)   trade in raw hides;

c)   trade in registered raw ivory subject to the following:

ii)   a one-off sale of 21,692.23 kg as ivory from registered government-owned stocks, originating in Zambia (excluding seized ivory and ivory of unknown origin);

iii)   only to trading partners that have already been designated by the Standing Committee, as having sufficient national legislation and domestic trade controls to ensure that the imported ivory will not be re-exported and will be managed in accordance with all requirements of Resolution Conf. 10.10 (Rev. CoP14) concerning domestic manufacturing and trade: these are Japan designated as a trading partner at the 54th meeting (SC54 Geneva, October 2006), and China designated as a trading partner at the 57th meeting (SC57, Geneva, July 2008).

iv)   not before the Secretariat has verified the registered government-owned stocks;

v)   the proceeds of the trade are used exclusively for elephant conservation and community conservation and development programmes within or adjacent to the elephant range in Zambia;

vi)   On a proposal from the Secretariat, the Standing Committee can decide to cause this trade to cease partially or completely in the event of non-compliance by exporting or importing countries, or in the case of proven detrimental impacts of the trade on other elephant populations. All other specimens shall be deemed to be specimens of species included in Appendix I and the trade in them shall be regulated accordingly.

B. Proponent

This proposal is submitted by the Republic of Zambia pursuant to Article XV of the Convention with precautionary measures in accordance with Resolution Conf 9.24 (Rev. CoP 14)[*].

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[*]   *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

C. Supporting statement

1. Taxonomy

    1.1 Class: Mammal
    1.2 Order: Proboscidae
    1.3 Family: Elephantidae
    1.4 Genus: *Loxodonta africana africana*
    1.5 Scientific synonyms: None
    1.6 Common Names: English: African elephant
                                French: Elephant d'Afrique
                                Spanish: Elefante africano
                                Nyanja: Njovu
                                Bemba: Insofu

    1.7 Code number: CITES A115.001.002.001
                                ISIS   5301415001002001001

2. Overview

This proposal is intended to advance sustainable conservation practices for the African elephant population in the Republic of Zambia. The Zambian population of the African elephant no longer meets the biological criteria for listing in Appendix I as outlined in Resolution Conf. 9.24(Rev.CoP14) Annex 1. The wild population is large (about 27,000 animals) and steadily increasing. The majority of the animals are neither found in small sub-populations, nor are they concentrated in one sub-population. The wild population does not have a restricted area of distribution nor is this area subject to fluctuation or fragmentation. The species is not vulnerable in Zambia as past and present experience has shown. Therefore the current population is clearly an Appendix II population meeting criteria A of annex 2b of Resolution Conf. 9.24(Rev.CoP14). The proposed annotation is also in conformity with the precautionary measures as spelt out in annex 4 of the above-mentioned Resolution, particularly paragraphs 1.1, A 2(b) i) and ii) and (c).

This proposal is for the transfer of the Zambian population of the African elephant in order to clear government owned stocks of ivory while at the same time to allow for sustainable use of the species through trophy hunting and sale of raw hides from management actions Problem Animal Control) for commercial purposes, and trade in live animals to acceptable destinations. Zambia has accumulated over 30 tonnes of ivory in the last 16 years of which 67% of the ivory stock was obtained from natural mortalities and problem animal control. Secondly, ZAWA will establish a national annual export quota through CITES of 120 trophy hunted elephants per year (240 tusks per year). (See section 6.1.1)

Currently, the primary risk to the long-term survival of the elephant in Zambia is not international trade but increasing conflicts with legitimate human interests such as agriculture as shown by the rising number of human-elephant conflicts. The Zambian government by law owes it to the rural communities to conserve and to benefit from wildlife resources in a serious partnership. Situations where human beings rise against the elephant due to rising incidences of crop damage, injury and worse still loss of human life cannot be tolerated in an era where various sustainable use options for intervention exist as has been demonstrated by Botswana, Namibia, South Africa and Zimbabwe whose populations are in Appendix II according to the respective Annotation.

2.1. Precautionary measures
The proposed transfer of the elephant population from Appendix I to Appendix II is supported by the following precautionary measures:

a) Ivory trade

Zambia's registered ivory
Only ivory from the elephant population of Zambia is included in this proposal.

Ivory to be marked with a standard system
In accordance with Resolution Conf. 10.10 (Rev. CoP12) b) all whole tusks in the stockpile have been individually marked and allocated a unique serial number in indelible ink. The marks are correlated with the register (database) entry showing area of origin and source. Pieces smaller than 1 kg and 20 cm in length will be weighed together in bags. Ivory of unknown origin or seized is kept separate from Zambia's stockpile and are not included in the requested sale.

<u>Sale through one single centre</u>
All ivory sales and subsequent packaging and dispatch will take place only at a single and secure place with ample working space selected by the Zambian Wildlife Authority - ZAWA.

<u>Number of ivory shipment limited</u>
For ease of monitoring and control, there will be a maximum of two shipments of ivory after the sale.

<u>Direct export of ivory to importing country</u>
Export permits will only be issued to the importing country or countries.

<u>Importing countries</u>
The importing countries should have internal controls and make a commitment not to re-export

<u>Independent monitoring</u>
Enforcement personnel from the CITES Secretariat, or Parties agreed to in advance by Zambia and the CITES Secretariat, may be present at the time of sale, packaging, and shipment process to check all details and inventory. Similar inspection may take place when the containers are unloaded and the tusks distributed in the importing country. Access to the central ivory store is guaranteed to CITES Secretariat staff.

<u>Trade will be administered under veterinary regulations</u>
Trade in wildlife products in Zambia is governed by veterinary regulations. All the individual ivory shall be shipped in compliance with veterinary regulations.

b) Hunting quota

i) Only trophies from Zambian elephant population are included in this proposal;
ii) Hunting shall be based on a scientifically based quota system from a given hunting block;
iii) Trophies shall be exported in a raw form to enhance enforcement;

c) Live sales
Only to appropriate and acceptable destinations, as defined in Resolution Conf. 11.20;

d)   Hides shall be exported in a raw form to enhance enforcement. All the individual hides shall be shipped in compliance with veterinary regulations.

<u>Use of revenue</u>
All revenue accruing from sale of ivory, trophy hunting, sale of raw hides and live animals will be used for conservation (including, monitoring, research and law enforcement) activities plus the development activities of communities living within or adjacent to the elephant ranges. A Fund is already operational in Zambia where income from elephant trophy hunting is deposited and then shared between ZAWA and the respective communities on a 50 – 50 % basis in line with the provision of the Zambia Wildlife Act, No. 12 of 1998. Communities will be encouraged to come up with viable projects related to elephant conservation such as chilli fencing and resource protection prior to disbursement of funds.

2.2. Rationale

a)   Elephant Conservation
African elephants are in competition with man particularly in recent years when the population has been recorded to be on the increase and reclaiming its former range. The protected areas are now becoming grossly inadequate to accommodate the wet and dry season needs of the species within the protected areas of Zambia. If the elephant is to survive in the long-term, there is need to ensure that the diversity of habitats in and outside the protected area system are secured so that elephants can freely range across huge areas of natural, wild habitat on private and customary land. This makes sense from an ecological and management standpoint. However, the challenge is on private and customary land as this is where competition for space between man and elephants is greatest and conflict most severe and increasing. To compete successfully with other forms of land use, such as agriculture, elephants must be able to contribute significant economic value to the landholder and the economy of Zambia.

b)   Enhancement of rural livelihoods
Zambia subscribes strongly to the United Nation's Millennium Development Goals especially regarding poverty alleviation and environment therefore any chance to meet this goal will be pursued. Sustainable trade in elephant specimens is not only essential as an economic incentive mechanism for the conservation

of the elephants, its habitat and a myriad of other species, but is also crucial for satisfying basic human needs in rural areas especially those that are challenged by the co-existence of humans and elephants. Unfortunately, these are the same areas where poverty and disease are a serious challenge to human development. In many rural areas where elephants exist in Zambia, human-elephant conflicts are increasing creating substantial negative attitudes to the conservation efforts of elephants. Eventually elephants are the victims of the protection of human life and property. As the elephant population increases accompanied by the spread of its range into areas inhabited by humans, conflicts are a well known consequence. Under such circumstances, negative attitudes towards the elephant have been demonstrated and the future of the species can only be guaranteed if there is goodwill and tolerance of the rural poor who share the rural frontier with the elephant. Tolerance is likely to increase if communities realise and appreciate economic returns earned from the sustainable use of elephant.

Like many other countries in southern Africa, Zambia is fortunate to have a well developed Community Based Natural Resources Management Programme which offers the best hope for livelihoods in arid and semi-arid areas where agriculture and livestock keeping are largely subsistence and may not be sustainable. Economic returns from the sale of the ivory stockpile and the inclusion of hunting trophies, sale of raw hides for commercial purposes and exports of live specimens to acceptable destinations will undoubtedly enhance the participation of local communities in elephant conservation in Zambia.

More than 21.6 tons (67 %) of the ivory in stock in Zambia was derived from human-elephant conflicts and natural mortalities from areas which include those inhabited by resident rural communities. For a long time, explanations have been given to these communities as to why government cannot derive tangible economic benefits from elephant conservation. However, the Zambian community is concerned with the increasing attitude by the international community of placing the welfare of the elephant over and above that of people who incur larger opportunity costs in relation to the conservation of elephants. The human costs of elephant conservation are supposed to be given higher ethical consideration than the loss of animal life or freedoms usually propagated by animal rights groups who may never have experienced or incurred the cost of co-existing with elephants. Zambia hereby presents a timely undertaking for local communities to realise income from the one-off ivory sale and other activities contained in the annotation to this proposal and would like to demonstrate that indeed man and the elephant can share their frontiers under conditions where the elephant contributes to the economic wellbeing of rural communities.

c) Political imperative
i) Sovereignty
The elephant is a flagship species that has attracted global sympathy and concern. Consequently, Parties to CITES make decisions regarding the elephant as a global resource and heritage, which may be acceptable but range States have a level of sovereignty which should be exercised when it is in their national interest to do so or when there is a national imperative in the interest of the wellbeing of the people of Zambia that override all other considerations. Though CITES may be a good mechanism to intervene in illicit trade of endangered species however the Convention does not provide actual funds to Parties to conserve species. The current and overly restrictive trade regime applicable to national elephant populations do not "recognize that [these] peoples and States are and should be the best protectors of their own wild fauna and flora" as stated in the Preamble of the Convention. The elephant range States incur the cost of conserving them and are often held accountable for the Decisions made at Conferences of Parties to CITES whilst non-range States and majority of animal welfare groups are neither held accountable nor do they take the responsibility for their survival. Furthermore, range States such as Zambia have not fully benefited from previous pledges for alternative funding from other Parties and animal welfare groups.

Since the costs of conservation are incurred by Zambians, it is evident that the African elephant is not a global resource *per se*. Zambia is left entirely responsible for the conservation of its elephants among other competing human demands such as provision of food, healthcare facilities and shelter. The elephant is one of the few economic assets in Zambia from a sovereign stand point, the prohibition of trade from one or its few resources would be iniquitous and detrimental to the elephant's own existence.

ii) Socio-political interest
More than 60% of Zambia's 12 million people live in rural areas where natural resources are the basis of their daily subsistence and sustenance. Given the current political landscape of democratization, politicians are now held accountable to their constituents more than ever before and communities living in Game Management Areas[1] (GMAs) have become a democratic force that cannot be ignored by Government.

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[1] Game Management Areas are Protected Areas where sustainable and quota based hunting is allowed to bring benefits to conservation and local communities.

Consequently, pressure has been mounting for the politicians to address the desperate plight of the rural poor who have a big stake in the local resources. Elephants therefore should not only attract conservation costs but contribute to the rural economy, which elephants are able to do. Given this chance, revenues can accrue directly to the wildlife institution and to local communities.

Income generation from elephants is essential to secure political and economic support by the wildlife institution for conservation at both local and national levels. At the level of the national conservation agency, money generated from the sale of ivory, trophy hunting, the sale of hides and trade in live specimens would go a long way in financing conservation and management of wildlife resources, which is currently negatively affected by lack of resources.

iii) The integrity of CITES
Zambia has demonstrated its capacity to comply with the requirements of CITES both by the implementation of the Convention and by further enacting legislation to domesticate the Convention. However, the majority of the Zambian people do not see a corresponding reward for such effort, particularly regarding the controversy over the trade in elephant specimens which often preoccupies meetings of the Conference of Parties to CITES. The amount of damage over time that may be caused to the species as Parties argue and procrastinate to resolve the issue of down listing the species by the range States which deserve to do so may be irreversible and costly. Maintaining the Zambian elephant population in Appendix I is unjustified and tantamount to punish the country in return for the elephant conservation successes achieved in the last decade. In the absence of controlled trade options, the Parties to CITES should offer solutions to habitat destruction, increasing animal numbers, escalating elephant human-conflicts, the cost of continued stockpiling of ivory and the loss of revenue from hides lest failure to break this elephant impasse creates serious doubts on the integrity of CITES especially among local communities and Parties who are in favour of sustainable utilization.

Since the report of the Panel of Experts of 2002, Zambia has made tremendous progress in addressing issues raised by the Panel which were not unique to Zambia alone. The report by the Panel was used as a checklist for various issues which are now part of the progress for backing up this proposal. Parties to CITES should acknowledge and appreciate the effective elephant conservation measures in Zambia that have led to the recovery and growth of the elephant population.

iv) African consensus
The African geopolitical landscape is heterogeneously diverse and one does not expect consensus on elephant trade from all the sub-regions before a decision can be made. Therefore, to base the decision whether to permit Zambia to trade or not on the views of range States who e.g. may have insignificant human-elephant conflicts or enough resources including substantial donor support, or smaller populations, or who have not been able to bring domestic trade under control would be unrealistic and unacceptable and would only provide a platform for non-range States to block a justifiable and noble cause for sustainable use. In such instance, the decision that would emerge within CITES would be based on factors extrinsic to the conservation and management requirements for the elephant population of Zambia, and will in fact work against the conservation objectives of the range State. Surely this should not be condoned in CITES.

d) Biodiversity Conservation
For as long as elephant populations continue to increase, the range will continue to expand. Protected areas by themselves cannot meet the seasonal needs of the elephant populations. As keystone species, which have a great impact on the savannah ecosystems, it is advisable to maintain their populations at low densities, which is beneficial to biodiversity otherwise accelerated destruction of the elephant habitat may counteract government efforts to attain Millennium Development Goal (MDG) number seven (7) of securing the environment and may contribute to climate change. This implies that additional dispersal areas are required. In order to secure additional habitats outside national parks, it will always remain crucial to pacify land owners through economic incentives and sometimes through problem animal control programs.

e) Transfer is necessary for enforcement
Preventing legal trade in elephant will not prevent the possible decline of the species in some range States. There is sufficient evidence to demonstrate that Zambia has not benefited from the ivory ban, and considers that the continued ban is an infringement of its sovereign right to utilise the species to generate income that would strengthen the law enforcement strategies. It must be noted that Zambia derives income for law enforcement and staff emoluments from the sustainable use of wildlife resources. Zambia is not ready to continue struggling to raise funds to support elephant conservation, personnel welfare and in addition to continue incurring the already existing costs of securing the ever increasing stockpile. Controlled legal trade shall provide the required funding for enforcement and management. This would ensure that opportunity

costs for poaching are rendered unattractive by reducing success rates while attracting the local communities to actively participate in elephant conservation.

f) Economic imperatives for transfer

The African elephant is a species of enormous economic potential. The challenge for Zambia is how this economic potential can be translated into direct economic incentives for all players in conservation. One way is to allow controlled trade, sustainable trophy hunting and sale of hides. In the absence of economic benefits accruing from the elephant, negative attitudes towards the elephant will heighten and may place the elephant population under renewed risk of increased poaching which may reverse the progress made by the country so far. To compensate the direct costs of living with elephants, which include crop damage, injury and loss of human life, implies that the elephant must yield economic returns to the landholders. The Appendix I listing has put Zambia at a disadvantaged economic position and could result in reduced support for conservation. Consequently, elephant and other wildlife populations will be negatively affected through reduced conservation efforts arising from low funding and goodwill from the communities, when in reality the elephant has the economic potential to raise adequate funds to support itself and other species.

3.   Species characteristics

3.1 Distribution

3.1.1   Historical

In Zambia, elephants were widely distributed until the 1970s (Figure 1). As was the case in other southern African countries, the increase in human population and accompanying agricultural activities as well as disproportionate hunting during the colonial era reduced the elephant population. The problem was further compounded by increasing poverty levels following the fall in the copper prices in the 1970s (the major export commodity) and the increase in world oil prices. These events forced many people to engage in poaching activities resulting in further decline of elephant populations to below 20,000 by 1989.

3.1.2   Current status

The range for the elephant in Zambia can be considered in seven sub-regions as follows: Luangwa Valley system, Mid/Lower Zambezi system, Kafue system, Mosi oa Tunya, Sioma - upper Zambezi system, Bangweulu system, Nsumbu – Mweru wa Ntipa, Lusenga -Tanganyika system, and West Lunga system (Figure 2 and Table 1). Each of the sub regions is larger than 10,000km2 and a total area far exceeding 200,000 km2. From an ecosystems point of view, none of the subsystems is fragmented according to the biological criteria of Annex 5 of Resolution Conf. 9.24(Rev.CoP14). Furthermore, these elephant sub regions cover a diverse landscape and land tenure systems encompassing National Parks, Game Management Areas and some open areas creating an almost contiguous landscape in which elephants can roam between habitats. Still others form a continuum with the neighbouring countries linking into the southern African sub-region population (Figure 3).

3.2 Habitat

The habitat in the major elephant areas are: the Luangwa valley system, dominated by mopane woodlands on the valley floor and miombo woodlands on the plateau; Mid/Lower Zambezi valley dominated by mopane woodlands, Acacia woodlands, and miombo woodlands; Kafue system, dominated mainly by miombo woodlands, and some Baikea plurijuga woodlands mainly in the south; Mosi-oa-Tunya, Sioma – upper Zambezi system, dominated by miombo woodlands, some mopane and Baikea plurijuga woodlands; Bangweulu system, dominated by miombo woodlands and expansive wetlands; Nsumbu, Mweru wa Ntipa, Lusenga – Tanganyika system dominated by miombo woodlands, and itigi thickets; West Lunga is mainly dominated by wet miombo woodlands.

3.3 Role of the species in its ecosystem

Elephants play a critical role in maintaining biodiversity in savannahs. Their large body size, substantial food requirements, capacity to change vegetation structure and species composition, and their importance in nutrient cycling and seed dispersal, and many others make them a keystone species for both forest and savannah ecosystems. Their feeding habits of breaking woody plants contribute to the opening up of forest canopy and thickets and creating pathways for people and other animals. Generally this modifies the habitat making it favourable to some species and unfavourable to others. Elephants also heavily impact subsistence farming activities and community life, which is of greater importance at present than their broader ecological role in these ecosystems.

4. Status and trends

4.1 Habitat trends
Zambia still has a large area with diverse habitat types for elephants. Protected Areas alone cover over 200,000 km^2 or 30% of Zambia's total land mass of 754 614 km^2 in form of National Parks and Game Management Areas. With trans-frontier conservation initiatives in and around Zambia, the elephant habitats are growing larger.

4.2 Population size
The status of elephant population in the major range is determined by systematic aerial sample counts the method approved by MIKE programme. The aerial population survey conducted in 2008 covered approximately 166,712.51 km² of the major elephant range, representing about 80% of the total range and resulted in a population estimate of 26,382 elephants (Table 1). It is envisaged that there could be several hundred more existing in the unsurveyed areas.

Additionally, most of the sub-populations within Zambia are contiguous with populations in neighbouring countries (Figure 3), hence the formation and implementation of the modern concept of Trans-frontier Conservation Areas (TFCAs) in southern Africa to promote the maintenance of movement corridors for elephants between countries in the region.

4.3 Population trends
In 2008, Zambia conducted a countrywide aerial survey of the African elephant at a cost of USD 191,460 to update the numbers surveyed in the previous years. The results estimated an elephant population of 26400± 4400 (Table 1) indicating a stable population in reference to previous estimates of 2002 and the 1990s when estimates were 25000±3000 and 22000±3000 elephants respectively. Although confidence intervals are overlapping there is notable evidence that populations are stable and in some areas growing. The 2008 aerial survey results for elephant estimates show low carcass ratios in Kafue (0.97%), Luangwa (1.57%) and Upper Zambezi (3.20%), with Lower Zambezi (>5%) as the only exception. The ratios indicate stable or expanding populations. Table 2 and Figure 4 show elephant population trends in the major elephant ranges in Zambia. Furthermore, the elephant population fluctuations in Lower Zambezi could be explained by the movements of elephants between Zambia, Zimbabwe and Mozambique.

4.4 Geographic trends
Since the early 1980s, most of the elephants have been restricted to National Parks, Game Management Areas and adjacent lands (Figure 2). Areas known to have had viable populations of elephants 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.

5. Threats
The elephant population of Zambia is secure and viable, as evident from population increases, the extent of available range, and especially the combined population size, their representation in major protected areas, and the community-based natural resource management policies followed.

The major threats to the short and medium term survival of the African elephant in Zambia are the increasing human - elephant conflicts (Figure 5). Between 1996 and 2008 survey results indicate that the elephant population is on the increase. This implies that the species will continue to reclaim its former range for years to come and as human settlements continue to expand in the GMAs, human-elephant conflicts will continue to be a management challenge.

From 2002 to 2008, a total of 9,969 reports of problem elephants were made to Zambia Wildlife Authority ((Table 3). The human-elephant conflicts have increased in the past decade, and will become the most serious area of conflict in future. This situation can be counteracted if elephants are perceived to have value to the people living with them.

Conflicts between people and elephants include damage to crop fields and barns and, sometimes, human death. Over 95% of reports concerned elephant crop damages.

6.   Utilization and trade

6.1 National utilization
Since 1989 when the elephant was placed on Appendix I of CITES, Zambia has not utilised its elephant for any commercial trade. However, there are eight (8) trained elephants used in the elephant back-ride safaris imported from Zimbabwe into Zambia to facilitate expansion of the recreation activities around the Victoria Falls.

6.1.1 Hunting
Zambia has an annual voluntary quota of 20 individuals per year since 2005 for trophy hunting for non-commercial purposes. This quota level is too low to generate enough resources for community-based conservation activities and the impact on elephant population has been non-existent. Table 4 below demonstrates the revenues derived from elephant hunting which contributes to the coffers for conservation and 50% of the total income composed of the monies disbursed to the local communities in the hunting areas under the CBNRM programme. Local communities in other elephant areas have expressed a strong desire for government to open elephant hunting activities in their areas for the same social economic benefits.

The level of sport hunting is largely determined by the 0.5% of standing population guideline (Martin 1986 and 2005). This implies that the maximum adult male off-takes through sport hunting at present should not exceed approximately 135 per year at current population size. ZAWA will establish a national annual export quota through CITES of 120 trophy hunted elephants per year (240 tusks per year). This conservative quota level, slightly below the standing population guideline, will be necessary to allow for the possibility that the tusks of elephants hunted in one year may only be exported the following year, as could result from delays in importing countries or the processing of specimens by taxidermists, and will not in anyway threaten the survival of the species in Zambia.

6.1.2   Live Sales
Zambia does not sell live elephants for any purpose from the national population but it would like to do so in cases where elephant's conservation could be enhanced, to appropriate and acceptable destinations, as defined in Resolution Conf. 11.20.

6.1.3 Trade in elephant hides
Zambia presently does not recover elephant hides from elephants killed in protection of property or in other management actions. Zambia would like to collect hides and trade them for the benefit of elephant conservation.

6.1.4   Ivory stockpile
i) The 1992 ivory stockpile
Zambia's (9) tonnes of ivory were set ablaze as a supposed signal of tenacious commitment to conservation.

ii) Current stockpile
The elephant ivory available in central storage facilities of the Management Authority comprises ivory from problem animal control (PAC), natural breakages and natural mortality and confiscations/seizures from illegal hunters or traders. The current status of the stockpile of the Zambian ivory stocks is 32 tonnes. Ivory records from 1993 to 2009 are detailed in Table 5.

The ivory stockpile shown in Table 5 is secured in a newly constructed and modern strong room with a computerized ivory database fully installed and functional, and the premises is under 24 hours armed surveillance. All seized and confiscated ivory are kept separate from ivory obtained from management operations. The ivory is clearly marked and cannot by any means be mixed with ivory from other sources for trading purposes under this proposal.

iii) Management of the ivory stockpile
Zambia has enhanced the Ivory Management System to meet CITES requirements and more so has worked on the issues raised by the Panel of Experts who visited Zambia to review the country's proposal for down listing in 2002. (CoP12 Doc.66 Annex 4)

The ivory stocks are now held in a new secured strong room constructed at ZAWA Headquarters at Chilanga at a cost of USD158,169.00. The ivory management and record systems have been standardised in all Area Management Units (AMUs) and are supported by a coordinated system to deliver ivory from the AMUs to the headquarters at Chilanga. The movement of ivory from the AMUs to the strong room is carried out on a

quarterly basis or earlier when the quantity of ivory stocks is enough to warrant the cost of transportation. The vehicles carrying the ivory stocks are escorted by armed personnel and are accompanied by an ivory ledger and ivory dispatch note to the strong room at Chilanga where the ivory receipt voucher is issued after reweighing and verifying the records. Duplicate copies of the dispatch note are returned to the AMUs where it is attached to the main ledger.

All ivory received from the AMUs is marked with a National Serial Number in conformity with the CITES Resolution Conf. 10.10 (Rev. CoP 13). Before the ivory is stored, it is entered into the central ivory register which is supported by a computerised database. The new strong room stores ivory from natural mortalities and management operations while the old strong room stores confiscated/seized ivory from various law enforcement activities.

To ensure timely capture of data, particularly in areas far from the central strong room, ZAWA has implemented an early warning system where a form is filled out in the field each time there is a seizure, management control or recovery of ivory. This information on the form is remitted to headquarters by fax, email or radio transmission within 48hrs.

In the effort to improve its ivory information management, ZAWA officials visited Botswana and Namibia in March, 2008. Officials from TRAFFIC also visited ZAWA and shared their ideas of an ivory information management database used in Kenya. Based on the lessons learnt from systems in these countries, ZAWA developed its own Ivory Information Management Database System. This database system is secured with a high level password authentication system based on limited user roles.

6.2 Legal trade
Since the listing of the species in Appendix I of the CITES in 1989, Zambia has not sold raw ivory on the international market. The only ivory that is allowed out of the country is that obtained before 1989 and pre-convention specimens with proof that the specimens were obtained during the periods. For non-commercial purposes, raw ivory has been exported from the annual voluntary hunting quota of 20 individuals.

6.3 Parts and derivatives in trade
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.

6.4 Illegal trade
ZAWA in collaboration with other law enforcement agencies such as the Drug Enforcement Commission (DEC), Anti Corruption Commission (ACC), Zambia Police and Customs has had a number of seizures (Table 6). All seizures have been reported to Elephant Trade Information System (ETIS). This is a demonstration of a strong domestic network that the Management Authority has established with other law enforcement agencies to control illegal trade at national level. The high frequency of seizures and should not be treated as a weakness in law enforcement but as a strength in combating illegal activities. This proposal when approved therefore, will add to the resources needed to detect, deter and monitor illegal trafficking.

6.5 Actual or potential trade impacts
Uncorroborated concerns are always expressed that there would be an increase in poaching of elephants when commercial trade in ivory is permitted. Reports at recent CoPs by TRAFFIC indicate that previous one-off trades in ivory as well as trade in other products have not been linked to the negative effects on illegal trade or illegal hunting or the conservation of other populations. Instead, most illegal killing and illegal trade stem from situations where domestic trade is not regulated. Zambia hereby reiterates that the approval to transfer of the Zambian population of the African elephant to Appendix II will not stimulate illegal trade and therefore encourages Parties to move from this mythical fear which is totally unjustified. This is basically an opinion nurtured by the anti sustainable utilisation lobbyists who are often not in any way involved in the actual conservation activities and community development programmes. This proposal and the subsequent socio-economic benefits will go a long way in deterring illegal trade by investing and strengthening law enforcement.

7. Legal instruments

7.1 National

The combination of the Wildlife Policy, the Zambia Wildlife Act No. 12 of 1998 and all the subsidiary legislation and other supporting laws makes the conservation of elephants in Zambia effective. In addition to the legal frame work, Zambia has a vast protected area network of National Parks (Category II of IUCN) and Game Management Areas (Category VI of IUCN) covering up to 30% of the country's land area of 754 614 km2. The range available to the elephant is therefore in excess of 200,000 km2. The predicament however, is the inadequacy of financial resources to implement these well intended legal provisions hence the need to sustainably utilise wildlife resources to bridge the financial gap.

7.2 International

Zambia has domesticated the CITES legislation which is currently being revised to update it from Category 2 to Category 1. The elephant population of Zambia is subject to the Southern African Development Community (SADC) Protocol on Wildlife Conservation and Law Enforcement, which places significant obligations on Member States concerning the protection and sustainable management of biodiversity resources. In addition, SADC has adopted a regional elephant conservation strategy that Zambia is a part of. Furthermore, Zambia is an active signatory to the Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora, a formidable instrument in tracking illegal trafficking in wildlife. Also of importance is the existence of TFCAs between Zambia and most of its neighbouring States which are fully functional in terms of conserving resources that are trans-boundary. Allowing the sale of ivory from one member State would not negatively affect other range States in the region.

8. Species management

8.1 Management measures

Protected areas in Zambia are managed to ensure minimal disturbance and to ensure the maintenance of biodiversity through research and monitoring of key environmental parameters and the provision of security through anti-poaching work by wildlife protection units. In 2003 Zambia Wildlife Authority formulated an elephant management policy to specifically address issues relating to elephant management. The policy expressed government's intention to regulate the use of the elephant by such means and measures that would ensure its long-term survival. This policy is currently under review to align it to the existing challenges related to conservation and utilisation of the elephant. In areas where elephants present a severe threat to human life and property, to mitigate conflicts and to maintain support of local communities is critical in order to save lives and secure the good will of communities through problem animal control.

8.2 Population monitoring

Aerial surveys have been the main method used to monitor elephant populations in Zambia. Stratified sample counts, block sample counts and total counts have been used to survey elephants. The transect sample counts involve stratifying the survey area with a sampling intensity ranging from 5 – 20% depending on the density of the population being surveyed. In the hilly terrain of the Zambezi river escarpment and some areas in the Luangwa region, block count census techniques are employed while total counts have been used in smaller areas such as Mosi oa Tunya National Park. Trained staff is engaged to participate in the surveys and to give them scientific credibility. Previous surveys were conducted in collaboration with the support of cooperating partners. In addition to the aerial surveys, ground methods are also used. Starting from 2005, a new system of recording elephant sightings by Wildlife Police Officers while on patrol was improved upon and standardized to cover the whole country. This system has enabled law enforcement personnel to record all elephant sightings while on patrol in a standardized manner. The system is now being tested to function as a monitoring system in the period between aerial surveys.

Zambia implements the ETIS and MIKE programmes and is up to date with the requirements of the two programmes. Zambia is improving its overall elephant monitoring and has already started implementing MIST[2]. A number of personnel have been exposed to MIST programme since July 2009 through the CITES MIKE programme.

The adoption of this proposal would therefore be crucial to improve resources to ZAWA to further improve monitoring of elephants. In addition, the stock proceeds shall serve as an incentive for the local communities

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[2] MIST – Management Information System. An integrated conservation area management information system developed by ecological software solution.

and other beneficiaries to conserve the elephants that could otherwise be considered as a nuisance rather than an asset.

8.3 Control measures

8.3.1   International
Zambia has adequate national legislation that regulates exports and imports of all wildlife specimens, including elephants, through permit systems.

8.3.2   Domestic
Zambia continues to invest in intelligence and investigations in various parts of the country to ensure that the provisions of the Zambia Wildlife Act and other laws are implemented. The support of other law enforcement agencies which include Zambia Police, Anti-Corruption Commission, Drug Enforcement Commission, Customs (Border Authorities) and National Airports Corporation has strengthened the capacity to curb illegal trade.

Law enforcement, like in any other elephant range States, is not without challenges. Incidents of poaching are experienced every year. Although elephant poaching trends indicate fluctuating and increasing tendencies, Figure 6(a) below, the estimated illegal annual off-take of elephants is less than 0.3% of the elephant population estimates. A total of 327 elephants were poached between 2002 and 2008 with an average of 47 elephants poached annually. The law enforcement efforts also indicate increasing trend from 2004 to 2008, refer to Figure 6 (b) below. The generally increasing elephant poaching trend is attributed to increased poaching levels in Lower Zambezi and some areas of Luangwa Valley systems where resources for law enforcement are inadequate. Furthermore, the high human-elephant conflicts exacerbated elephant poaching in these areas as over 67% of problem elephant reports involving crop and property damages, human injuries and deaths were made in the Luangwa Valley and Lower Zambezi systems. The recent recovery in the elephant population has led to a rapid escalation of conflicts with rural communities and that a further intervention is needed to address this problem. Importantly, this proposal is made precisely to change the cost-benefit balance for elephant conservation in these areas, and to arrest the problem of escalating poaching by improving resources for law enforcement but also for community conservation programmes in these affected areas.

The CITES Management Authority of Zambia is deeply concerned about the apparent increase in illegal hunting. However, with the financial support from Cooperating Partners such as Norway, Denmark, World Bank and the United Nations Development Programme, the poaching levels in the project areas has reduced over time particularly in the Luangwa Valley and Kafue System. In South Luangwa Area Management Unit, for instance, between 2006 and 2007 the law enforcement efforts and community support for wildlife conservation resulted in the reduction in total number of poached animals by 23% and that of poached elephant by 62%. In Kafue National Park Programme, on the other hand, there has been an increase in the number of offences recorded, which can be explained in terms of increase in patrol coverage. It is likely that the more park area covered by patrol teams, the more illegal activities they encountered. In Kafue National Park poaching of elephants was negligible.

A joint operation between ZAWA and Zambia Police performed in July and August 2009 in the Lower Zambezi system has resulted in a number of seizures of game meat and arrests of poachers. Such joint operations have been widely televised on the Zambian television station as part of the campaigns against wildlife crimes. This collaboration with other state security agencies is undertaken periodically in order to intensify law enforcement in the area.

The adoption of this proposal would therefore be crucial to improve resources to ZAWA to further improve anti-poaching and law enforcement activities on elephants. In addition, the stock proceeds shall serve as an incentive for the local communities and other beneficiaries to conserve the elephants that could otherwise be considered as a nuisance rather than an asset

8.4 Captive breeding and artificial propagation
Captive breeding plays no role in the conservation of the African elephant and therefore, has no relevance to this proposal.

8.5 Habitat conservation
The Zambia Wildlife Act No. 12 of 1998 provides for the establishment of National Parks, Game Management Areas and other forms of protected areas for the conservation and enhancement of ecosystems. It also makes a provision for the formulation of General Management Plans (GMPs) as a tool to ensure that all socio-

economic activities are compatible with the goals of biodiversity conservation. In addition to the GMPs, there are policy guidelines on fire management, elephant management and others. These guidelines augment the principal legislation. With respect to the impact of elephants on the habitat, the GMPs and elephant management plans provide adequate guidelines on how such impacts would be dealt with. Furthermore, the strong CBNRM policy and programme established more than 15 years ago also supplement ZAWA's efforts to safeguard elephant habitat.

9.   Information on similar species

The Asian elephant (*Elephas maximus*) is the only other extant proboscidean. It is listed in Appendix I of the Convention. The proponent believes that with the precautionary measures adopted, it is not likely that this proposal to continue to trade in ivory will prejudice the survival of the Asian elephant

10.   Consultations

This proposal refers exclusively to the Zambian population of the African elephant and existing ivory stocks. The CITES Management Authorities of the Southern African Development Community (SADC) were consulted and contributed to the development of this proposal, and support this proposal. Nevertheless, range States will have the opportunity to react and comment on this proposal after its submission and its communication to all CITES Parties by the Secretariat. In addition and in accordance with Resolution Conf. 10.9, the proposal shall be subject to a review by a Panel of Experts nominated by the Standing Committee. Panel members or accredited consultants will be given free and unrestricted access to all data in the possession of Zambia regarding elephant populations, elephant management, trade in parts and derivatives of elephants and, as appropriate, law enforcement procedures and actions.

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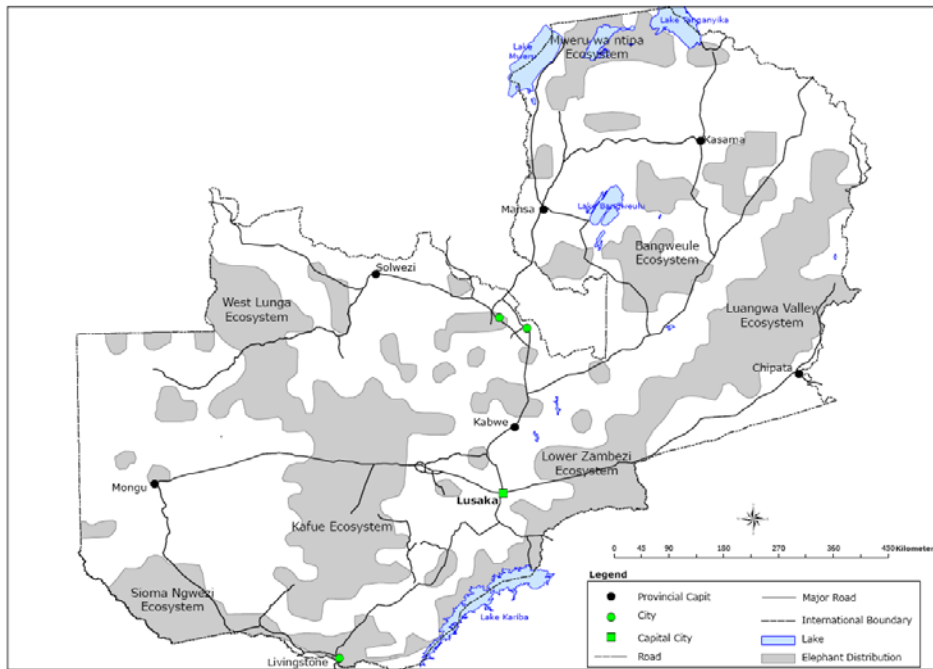
Figure 1 Historical distribution of elephants in Zambia (until mid 1970s)
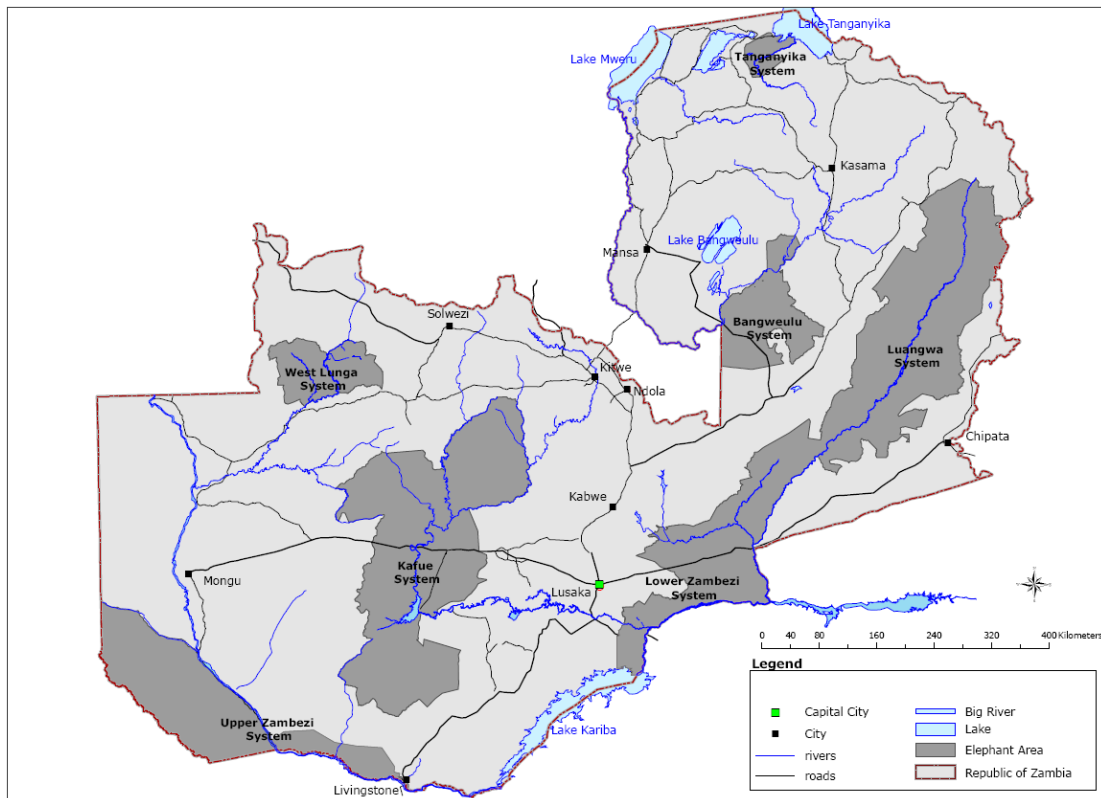(Source: ZAWA records)

Figure 2 Current elephant distribution in Zambia (From Nyirenda *et. al.*, ZAWA 2008)
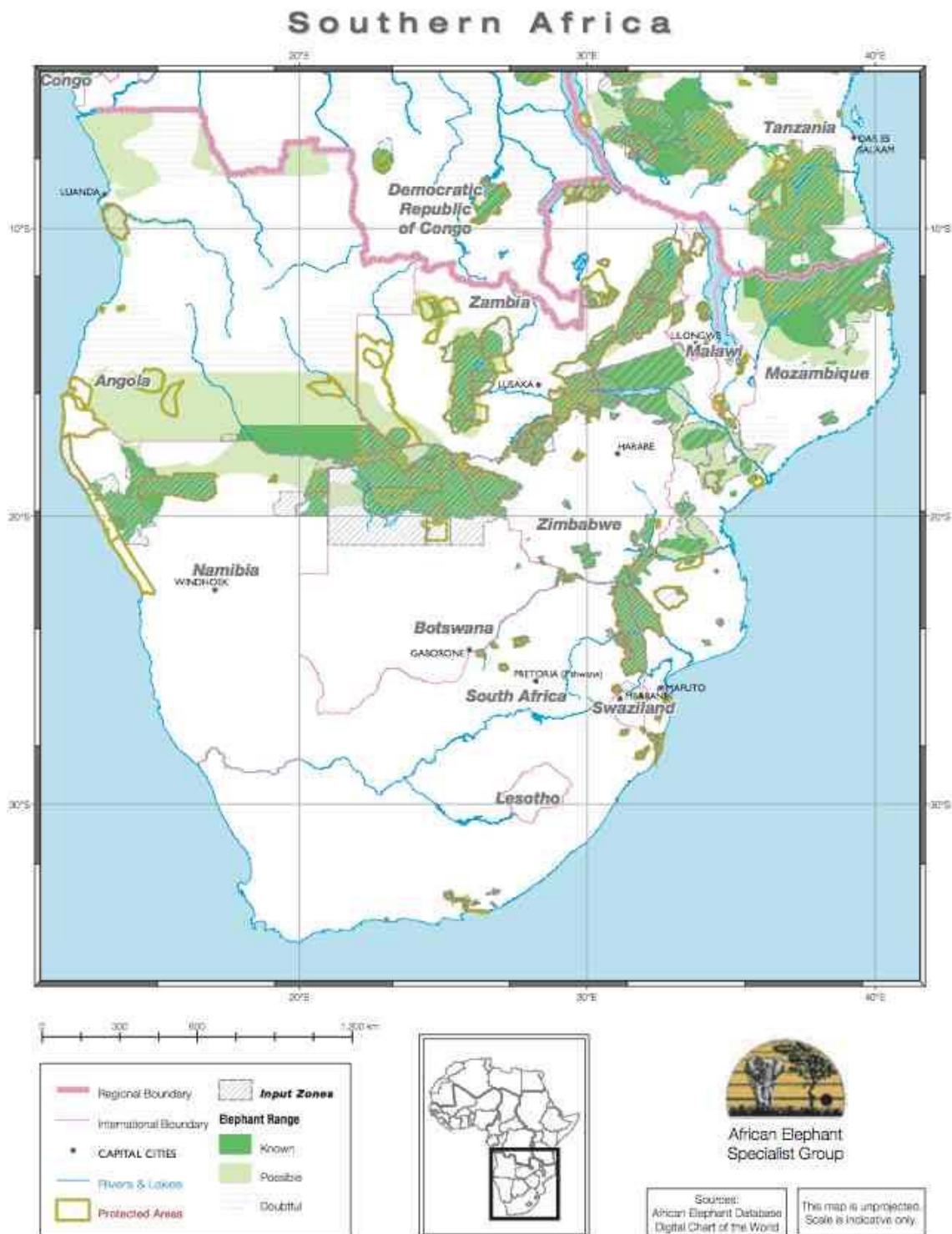
Southern Africa

Figure 3 Elephant Distribution in southern Africa. (From Blanc *et al.* 2007)

Note: In Figure 4, the population estimates refer to the estimates shown in Table 2 in the respective years. For example survey 2 for Luangwa ecosystem was conducted in 2006 whilst survey 1 for Kafue was conducted in 2002.
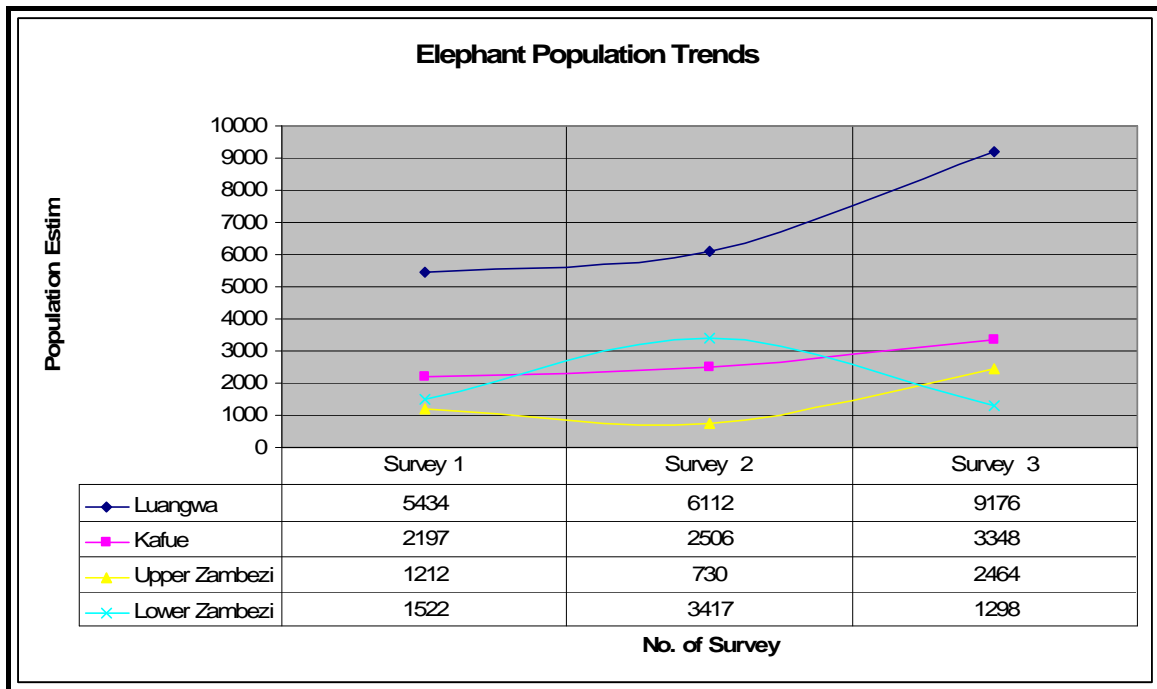
Figure 4: Population Trends in Major Elephant Ranges (Source: ZAWA records)

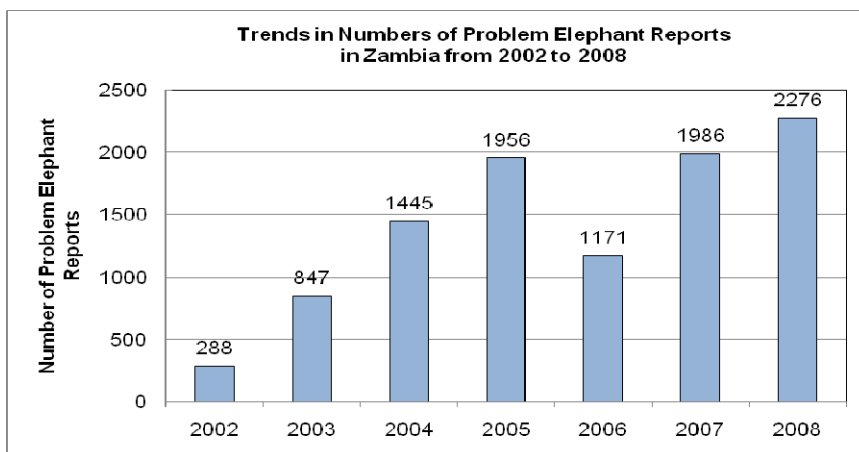|	Survey 1	Survey 2	Survey 3
Luangwa	5434	6112	9176
Kafue	2197	2506	3348
Upper Zambezi	1212	730	2464
Lower Zambezi	1522	3417	1298

Figure 5: Trends in Numbers of Problem Elephant Reports in Zambia from 2002 to 2008
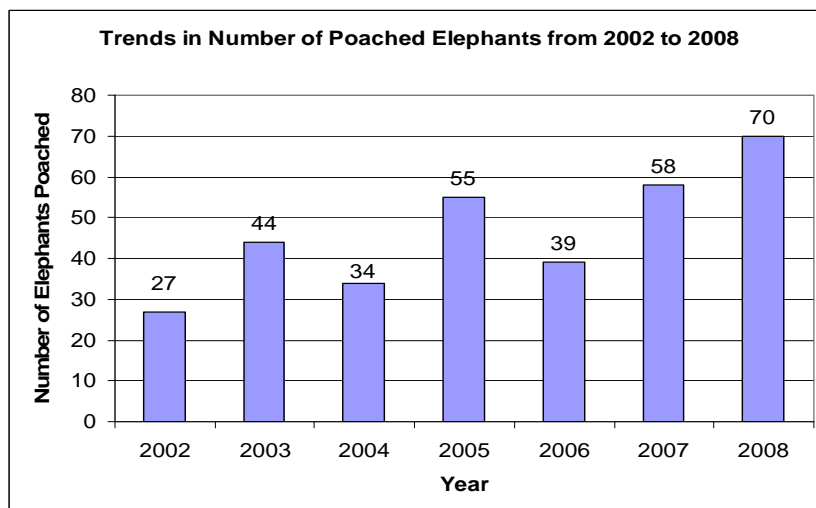(Source: ZAWA records)

Figure 6(a): Trends in Number of Poached Elephants from 2002 to 2008
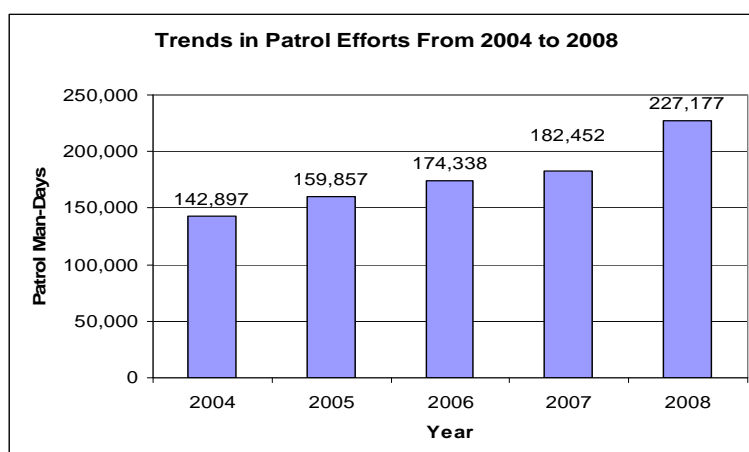(Source: summarised from ZAWA Annual Reports)

Figure 6(b): Trends in Patrol Efforts from 2004 to 2008
Figure 6 (b) – Source: Summarised from ZAWA Annual Reports

Table 1: Elephant population estimates and approximate elephant range (km²) in Zambia

Region	National Parks	Game Management Area	Open Areas	Total elephant population
Luangwa Valley System	16,660	45,550		18,666
Kafue System	22,400	37,238		3,348
Lower Zambezi System	4,092	5,523		1,299
Other areas*	15836	57060	10000	3,069
Total	58,988	145, 371	10,000	26,382

(Source: Zambia Wildlife Authority Records; *Among the other areas West Lunga and upper Zambezi were not surveyed; ** Total open area used as elephant minor range is greater than 10,000 km2)

Table 2: Population estimates in Major elephant ranges
(Source: Summarized from aerial survey records by ZAWA)

No.	Region	Year						
		2002	2003	2004	2005	2006	2007	2008
1	Luangwa	5434				6112		9176[2]
2	Kafue	2197		1555[3]		2506		3348[4]
3	Upper Zambezi			1212[5]			730	2464
4	Lower Zambezi		1522		3417			1298

[2] For comparison purposes, the estimate refers to elephant populations surveyed in South Luangwa National Park and Lupande GMA
[3] Data from Guldemond et al. 2004 referred only to Kafue National Park
[4] Some areas of the Kafue Ecosystem were not surveyed in 2008 (cfr.Frederick H.2008). Particular areas are Lunga Luswishi GMA and the north Eastern part of Kafue National Park, however, the figure above includes extrapolated data into the National Park unsurveyed area.
[5] Sioma Ngwezi National Park, within the Upper Zambezi system, recorded 1099 elephants in 2004 (Chase & Griffin, 2008)

Table 3: Problem Elephant Statistics
(Source: ZAWA records)

Period	Number of Reports				
	Crop damage	Property damage	Human injuries & threats	Human deaths	Total
2002	282	3	0	3	288
2003	836	6	0	5	847
2004	1,432	8	0	5	1,445
2005	1,672	254	16	11	1,956
2006	1,144	7	12	8	1,171
2007	1,931	4	44	7	1,986
2008	2,225	6	35	10	2,276
Total	9,522	288	107	49	9,969

Table 4. Income derived from elephant hunting for the intervening period 2005 – 2008
(Source: ZAWA records)

YEAR	Total Income (US $)	Community Share
2005	148 000.00	74 000.00
2006	135 000.00	67 500.00
2007	217 450.00	103 725.00
2008	149 250.00	74 625.00
	650 200.00	325 100.00

Table 5. Ivory Stock in the Stockpile of the Management Authority of Zambia
(Source: ZAWA records)

Source	No. of ivory pieces	Weight (Kg)	Ivory Description
Natural and Management Operations	3,610	21, 692.23	Whole tusks/broken pieces of ivory
Seized	2739	9, 307.00	Whole tusks/cut and broken pieces of ivory
Unknown	343	1, 230.80	Whole tusks/cut and broken pieces of ivory
Grand Total	6, 692	32, 230.03	

Table 6: Number of ivory seizures from 2002 to October 2009
(Source: ZAWA records)

Year	Raw Ivory	Semi-worked	Worked	Total
2002	3	0	0	3
2003	12	4	1	17
2004	32	0	8	40
2005	11	0	3	14
2006	21	3	0	24
2007	8	2	5	15
2008	9	0	7	16
2009	8	0	2	10
Gland Total				139