CoP18 Prop. Xx CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA



Eighteenth meeting of the Conference of the Parties Colombo (Sri Lanka), May 23 to June 3, 2019

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

1. Proposal

Zambia proposes that the population of African elephant (Loxodonta africana) of Zambia be downlisted from Appendix I to Appendix II subject to:

- 1. Trade in registered raw ivory (tusks and pieces) for commercial purposes only to CITES approved trading partners who will not re-export.
- 2. Trade in hunting trophies for non-commercial purposes;
- 3. Trade in hides and leather goods.
- 4. All other specimens shall be deemed to be specimens of species in Appendix I and the trade in them shall be regulated accordingly
- 5. Proponent

The Republic of Zambia

- 6. Supporting statement
- 1. Taxonomy
- 1.1 Class: Mammalia
- Order: Proboscidea 1.2
- 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
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1. Code number	'S:	CITES A115.001.00	02.001

### 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.CoP17) Annex 1. The wild population is large (about 27,000 animals) and stable. The majorities 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.CoP17). 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).

Zambia proposes to down-list its population of the African elephant to allow for sustainable use of the species through trophy hunting for non-commercial purposes, commercial trade in hides and leather goods. Zambia increased its´ annual export quota for non-commercial purposes from 20 to 80 elephants, which is still below the standing population guideline of 0.5% of the estimated total population. Therefore, hunting of elephants from the national population quota for non-commercial purposes does not in any way threaten the survival of the species in Zambia.

Currently, the primary risk to the long-term survival of the elephant in Zambia is not illegal international trade but increasing conflicts with legitimate human interests such as agriculture as shown by the rising number of human-elephant conflicts.

The Appendix I listing exacerbate the illegal flow of Ivory.

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 annotation.

The downlisting is important for the following reasons;

- 1. It is in the best interest of sustained elephant conservation and management;
- 2. It is in line with the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity
- 3. It will assist in alleviating poverty of the impoverished rural communities;
- 4. It will in the long-term support biodiversity conservation and wildlife management;
- 5. There are strong political and socio-economic imperatives for transfer; and
- 6. Transfer is necessary for enforcement.

## 1. Rationale for this proposal

#### 1. 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.

#### 2. Nagoya Protocol

The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization has been adopted by the Convention on Biological Diversity. Questions arises why CITES shall not adhere to the principles of the protocol especially to those covered by article 5.2 "Each Party shall take legislative, administrative or policy measures, as appropriate, with the aim of ensuring that benefits arising from the utilization of genetic resources that are held by indigenous and local communities, in accordance with domestic legislation regarding the established rights of these indigenous and local communities over these genetic resources, are shared in a fair and equitable way with the communities concerned, based on mutually agreed terms" and article 9 "The Parties shall encourage users and providers to direct benefits arising from the utilization of genetic resources."

### 3. Enhancement of rural livelihoods

Zambia hereby claims her right as enshrined in Article 3 of the Convention on Biological Diversity which states that "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction". The proposal to trade in elephants is in line with Article 3 of the CBD read together with the Nagoya Protocol. 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 realize and appreciate economic returns earned from the sustainable use of elephant.

Zambia has a well-developed Community Based Natural Resources Management Programme pioneered in the Luangwa valley in the 1980s. The Luangwa valley accounts for more than 70% of the elephant population in Zambia. CBNRM has evolved in the Luangwa valley and 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. The Luangwa valley had witnessed stable wildlife populations trends and for 30% of the species monitored between 2000 – 2009. The 2015 surveys indicate an estimate for the whole system (13,898) is greater than previous but comparable to the 2008 (18,211) and 2009 (12,352) estimates. Such gains will undoubtedly be complimented through economic returns from hunting trophies, sale of raw hides for commercial purposes and leather goods to acceptable destinations and ultimately enhance the participation of local communities in elephant conservation in Zambia.

The proposal is also in line with the recently approved United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas and, among others, its articles 3 and 20 that request: "Peasants and other people working in rural areas have the right to have access to and to use in a sustainable manner the natural resources present in their communities that are required to enjoy adequate living conditions, in accordance with article 28 of the present Declaration. They also have the right to participate in the management of these resources" and "States shall take appropriate measures, in accordance with their relevant international obligations, to prevent the depletion and ensure the conservation and sustainable use of biodiversity in order to promote and protect the full enjoyment of the rights of peasants and other people working in rural areas."

4. 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 sovereignty which should be exercised. This can be 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.

ii) Socio-political interest

More than 60% of Zambia's 16 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 Areas¹ (GMAs) have become a democratic force that cannot be ignored by Government. 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 punishing 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 escalating elephant human-conflicts, the cost of securing ivory stockpile, 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.

e) Biodiversity Conservation

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

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.

#### f) 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.

#### g) 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.

Protected areas alone are inadequate to ensure the survival of the elephants especially in arid and semi-arid areas, like the Lower Zambezi and South Luangwa ecosystems, where competition with humans for resources is high. It is important, and makes ecological sense that elephants are allowed to roam freely between and across wild habitats on privately owned land, natural and customary land, yet it is in these areas where human-elephant conflicts are more pronounced. Elephants in this case must return 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 only limited to ecotourism has its serious limitations – is seasonal (roads in rain seasons get unfavourable for eco-tourism

operations and fluctuations in the number of visitors have their own repercussions). Thus stated, elephant sport hunting is based on a quota that accommodates problem animals and cannot be overemphasized.

#### 2.2 Support to local community

The liberalized Zambian economy challenged many resource poor local communities. Poverty reduction strategies to them are meaningful but only on paper when there are no tangible benefits. 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. For example, in the South Luangwa Area Management Unit, Human Elephant Conflicts (HEC) increased by 90% from 301 in 2009 to 572 reports in 2010. In 2017 HEC was at 260. Since 1996, the elephant population in Zambia has continued to increase from 22, 000 elephants to the current populations of about 27,000 elephants (Chansa et al 2012). By 2009, the number of human elephant reports had increased to 3270 reports per annum from only 288 reports per annum in 2002 (Figure 1). Preponderance of these reports (>95%) are attributed to crop damages, destroying the very livelihood of the poor populace of the rural areas. The hotspots of these incursions are the Luangwa Valley, Lower Zambezi area (Mid-Zambezi Valley), areas around Kafue National Park, and areas around Mosi-oa-tunya National Park. In such hotspots, for example, in the case of Luangwa Valley, elephants cause damage exceeding 52.0% of the annual crop production. In Zambia, elephants were responsible for more deaths to humans than any other species in 2009 and 2010 (ZAWA annual report 2010). The number of problem elephant reports is detailed in Table 1.

- 3. Species characteristics
- 3.1 Distribution
- 3.1.1 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, bush and desert. In Zambia elephants were widely distributed until the early 1970s, see figure 1.

## 3.1.2 Current

The range for the elephant in Zambia consists of 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.CoP17). 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 3.2 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 areas (National Park and GMAs) dominated by miombo woodlands and some Baikea plurijuga woodlands on Kalahari sands in the southern parts; Sioma Ngwezi and West Zambezi GMA and other areas put together, mainly miombo and some Baikea 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.

The habitat currently available to elephants in Zambia is about 30% of the total land mass is set aside as Protected Areas in form of National Parks and Game Management Areas. The establishment of trans-frontier conservation areas with Zimbabwe, Botswana, Malawi and Namibia has increased the range of elephants.

#### 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 km² or 30% of Zambia's total land mass of 754 614 km² 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

Zambia's elephant population based on the latest surveys of 2015 can be estimated to between 23,0000 and 27,000 (Table 2) . The 2015 gave an estimated total of  $21,760 \pm 4,523$  elephants were surveyed in 2015. This is similar to the estimate 26,382  $\pm$  4,405 obtained in the 2008 country wide survey which statistically was not significantly different (t=2.4, p=0.015). At ecosystem level, the survey results established that the largest population of the elephants in Zambia was in the Luangwa Valley, estimated at 13,898 followed by the Kafue at 6,688. In the Lower Zambezi, the population of elephant was estimated at 1,125 while in the Sioma-Ngwezi system a very low population size of 48 was estimated (DNPW 2016). However is must be noted that the 2015 survey did not cover all the range area as it excluded Rufunsa, Luano,West petauke, Lower west Zambezi GMA and the entire Nsumbu ecosystem.

Due to the migratory nature of elephants in the Sioma Ngwezi National Park, which shares boarders with Angola and Namibia, the survey indicated a high carcass ratio than other national parks and was the only place where fresh or recent carcasses of less than one year were recorded. At national level, Zambia's average carcass ratio was estimated at 4.2%. The survey concluded that the population size of elephants in the Sioma-Ngwezi NP and Lower West Zambezi GMA was very unstable and was rapidly decreasing. However, as indicated above, the survey recognised the fact that elephants in Sioma-Ngwezi regularly migrate into the neighbouring countries during the dry season.

Based on the survey findings, Zambia's elephant populations were either stable or increasing within the survey areas.4.3 Population trends

The Zambian elephant population has remained stable to increasing in the last 15 years or so (table 2). The two main elephant range areas of Zambia, the Luangwa and Kafue Ecosystems, which together holds over

80% of the countries elephant population, has shown a stable to increasing population. For instance, in the Luangwa ecosystem the population of elephant indicates a stable population since 2004 (r = -0.02 p = 0.71 ns) and carcase ratio on less than 2. (DNPW 2018). This result, is partly attributed to concerted conservation efforts by the government of Zambia and partners such as Norwegian Agency for Development Cooperation (NORAD) and Frankfurt Zoological Society.

The Kafue system on the other hand has recorded population increases from an estimated from 4,813 to about 6,688. Although Kafue indicates a high carcass ratio of 7.02%, it is just within the limits considered sustainable (Douglas-Hamilton *et al.* 1981) and may indicate that the population is stable. (fig 5)

Population declines is recorded in the Lower Zambezi and Sioma-Ngwezi National park the population have gone below 1300. However, the decline in the smaller population of Lower Zambezi and Sioma-Ngwezi National park was more than compensated for by the stabilized population size of the Kafue and Lunagwa ecosystems.

#### 4.4 Geographic range 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. From surveys, patrol sighting reports, collaring and camera traps as well as reports on Human elephant conflicts, elephants in Zambia have largely retained their home range since the 70s when most protected areas when gazzetted or declared.

#### 5. 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 (over 200.000 elephants) to late 1980s (18,000 elephants). As the populations start to increase country wide, more range is reclaimed and most of the elephant's traditional movement routes that have been over taken 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 being a threat to human life are problems that cannot be ignored particularly in areas with high elephant densities.

Zambia is fully involved in the CITES Monitoring of Illegal Killing of Elephants programme currently running in South Luangwa National Park and in four recently added voluntary MIKE site areas in Kafue, Lower Zambezi, Sioma Ngwezi and North Luangwa National Parks. This is for the purpose of monitoring elephant mortality in all key range areas. The programme has been running since 2000 in the South Luangwa National Park. These satellite areas have been monitored according to the requirements of CITES MIKE since 2002 and the office of the CITES MIKE National Coordinator stores data from these areas. A total of 1,029 elephant carcasses were recorded, out of which only 8 were fresh and 19 were recent carcasses in the entire combined survey area. The majority of the carcases observed were old. In the Luangwa Valley a carcass ratio of 1.2% was estimated, indicative of an increasing population, while the Kafue and Lower Zambezi carcass ratios indicated stable elephant populations. Most of the elephant carcasses observed in the Kafue and Luangwa ecosystems where older than one year and no fresh or recent carcases were seen during this survey, which indicated poaching, but at lower levels or deaths of elephants had occurred in the last one year in the Kafue and Luangwa ecosystems.

#### 6. Utilization and trade

#### 6.1 National utilization

Zambia banned elephant sport hunting in 1982 but local trade in elephant products continued until 1989 when the species was up lifted to Appendix I of CITES. Since 1989 Zambia has not exploited its elephant population for commercial trade or domestic consumption. However, elephants originating from Zimbabwe were imported into Zambia's Victoria Falls area for elephant back-ride safaris.

#### 6.2 Legal trade

Elephants in Zambia are in Appendix I of the CITES Listing, prohibiting commercial trade in elephant and elephant products. Since the listing in 1989, Zambia has not had any commercial trade activities.

## 6.3 Sport hunting

Zambia initiated sport hunting of elephants in 2005. A voluntary annual export quota of 40 tusks and other trophies from 20 individual elephants was approved for export as personal effects. However, in 2011, Zambia increased its annual voluntary quota for elephant trophy hunting for non-commercial purposes of tusks and trophies from 20 elephants per year to 80 elephants in 2011. The elephant quota is largely determined by the 0.5- 1% of standing population guideline (Martin 1986), which implies that the maximum adult male off-takes through sport hunting at present should not exceed approximately 260 individuals per year at current population size

In 2010, the USA allowed the import of tusks and other trophies for non-commercial purposes from Zambia. This resulted into an increase in the number of elephants hunted and subsequent revenues generated for ZAWA and the communities. For the first time since sport hunting of elephants was introduced, Zambia was able to utilize 95% of the quota in 2011 from the previous utilization of less than 60% on average between 2005 and 2010 (Figure 4).

#### 6.4 Illegal trade

The Department of National Parks and Wildlife (DNPW) works in collaboration with other law enforcement agencies such as the Drug Enforcement Commission (DEC), Anti-Corruption Commission (ACC), Zambia Police and Customs. This collaboration has been very strong as pointed out in the the panel of expert's report in 2010. Between June 2015 and July 2018, DNPW reported 157 seizures to ETIS. In 2017 Zambia made 37 seizures of raw ivory weighing 730.2 Kg (table 3). There were no seizures of Ivory originating or transiting through Zambia in 2017. 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. This proposal when approved therefore, will add to the resources needed to detect, deter and monitor illegal trafficking.

6.5 Trade in elephant hides and leather goods. 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. Zambia is also committed to develop the tannery industry and trade in elephant leather goods.

#### 7. Legal instruments

### 7.1 National

The African elephant is protected through the enforcement of the Zambia Wildlife Act No. 14 of 2015 and Statutory Instrument for International trade in Endangered Species of Wild fauna and Flora No. 61 of 2007. Zambia has adequate national legislation that regulates exports and imports of all wildlife specimens, including elephants, through permit systems.

7.2 International

As a signatory to CITES, Zambia adheres closely to CITES regulations in trade of Appendix I species as is the case with the African elephant. The Convention is enforced through the national legislation.

8. Species management

## 8.1Management measures

The Department of National Parks and Wildlife has a mandate to promote sustainable elephant conservation in all of its protected areas. To this effect, Zambia has made significant progress on African Elephant conservation. Among the major achievements include the production of a National Strategy for Elephant Management in Zambia in 2005 whose goal is "Conservation of elephants at population level which promote conservation of biodiversity while providing for sustainable utilization. The Zambia National Strategy for Elephant Management and Conservation is currently under review to align it to the African Elephant Action Plan prepared by African Elephant Range States at CITES CoP15 in 2010.

Zambia has been working with various organizations in the conservation of the African elephant. Given the scarcity of resources suffered by the Department of National Parks and Wildlife, research has been focused on estimating the status of elephants in the country as a basis for the creation of trend patterns. These surveys have focused on key elephant range ecosystems of Luangwa, Lower Zambezi, Upper Zambezi, Kafue and the Nsumbu Systems. The surveys have largely been funded by the Government of the Republic of Zambia with occasional aid from other cooperating partners such as WWF and NORAD

## 8.2 Population monitoring

## 8.2.1 Aerial Survey

Three (3) 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. When 2010 records of problem animal control (37), Natural mortality (19) and illegal off take (73) are factored in, the elephant quota of 160 tusks from 80 animals was derived at 0.80% of the population estimate in Zambia and falls within the range 0.5-1% that is widely considered to be the limit to sustainable hunting of trophy-quality males in a healthy elephant population (Martin, 1986).

### 8.2.2 Trophy Quality

DNPW records trophy measurements of tusks for analysis of trophy quality of the sport hunted elephants. Analysis of trophy quality can be used as an indicator of sustainability of hunting. There has been a steady decline in average tusk weight from 23 kg in 2005 to 17 kg in 2011 (figure 4). To mitigate this, DNPW has introduced hunting of tusk less elephants as a management measure to enhance trophy quality. Whilst serving as a management tool to improve trophy quality of sport hunted elephants, the measure will also result into an increase in revenue to DNPW and the communities. As stated above, DNPW has decided to gradually increase the hunting quota with close monitoring of trophy quality as a precautionary measure. To this effect, even though, Zambia was allowed to export tusks and trophies from 80 elephants in 2011 as personal effects, it maintained a precautionary harvest quota of 20 elephants in 2011 and increased the harvest quota to 40 elephants in 2012. The quota was gradually increased to 80 elephants in 2014 to widen chances of selectivity in choice of trophies by hunters. This conservative quota level, is still below the standing population guideline, and is necessary to allow for the harvesting of trophy quality elephant bulls and will not in any way threaten the survival of the species in Zambia.

In addition, professional hunters who hunt below minimum requirement of trophy ivory are penalized by DNPW. In some instances, the professional hunting licenses to hunt in Zambia are revoked as deterrent measures to avoid hunting under age elephants.

#### 8.3 Control measures

#### 8.3.1 International

This proposal when approved therefore, will add to the resources needed to detect, deter and monitor illegal trafficking. 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. 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.

### 8.3.2 Domestic

In enforcing the law, DNPW has adopted zero tolerance policy to all incidences of poaching. Under this new policy, violation of the Zambia Wildlife Act is prosecuted to the fullest extent of the law including the

confiscation of any equipment used in the commission of an offence. The Zambia Wildlife Act has deterrent penalties for law breakers involving elephants. The first category of sentences pertains to illegal hunting of elephants which attracts a minimum sentence of 5 years for first offenders and maximum of 20 years. Subsequent offences attract up to a minimum of 7 years and a maximum sentence of 25 years. The second category of sentences involve illegal hunting and trade or trafficking: For first offenders the Act provides a minimum penalty of 7 years and maximum of 20 years. For subsequent offenders the Act provide a minimum custodial sentence of 10 years and maximum of 25 years in prison.

8.4 Captive breeding and artificial propagation

Captive breeding plays no role in the conservation of the African elephant in Zambia

8.5 Habitat conservation

The Zambia Wildlife Act No. 14 of 2015 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 socioeconomic 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 DNPW'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. 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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# **Figures and Tables**

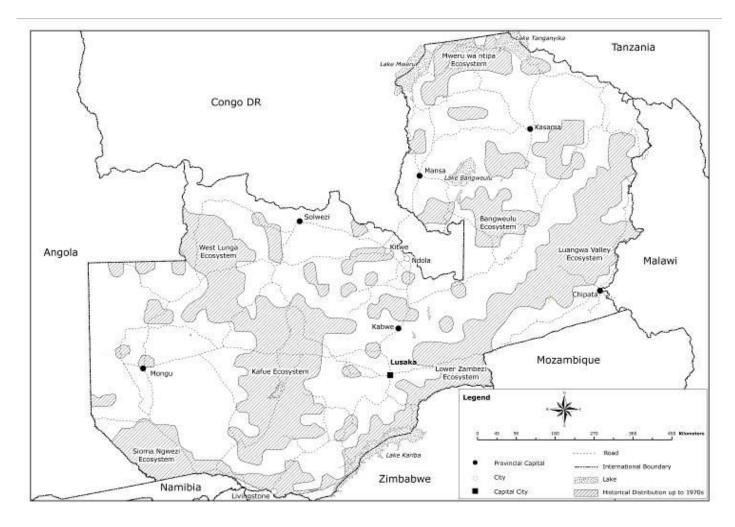


Figure 1: Historical distribution of elephants in Zambia, up to 1970s (Ansell, 1978)

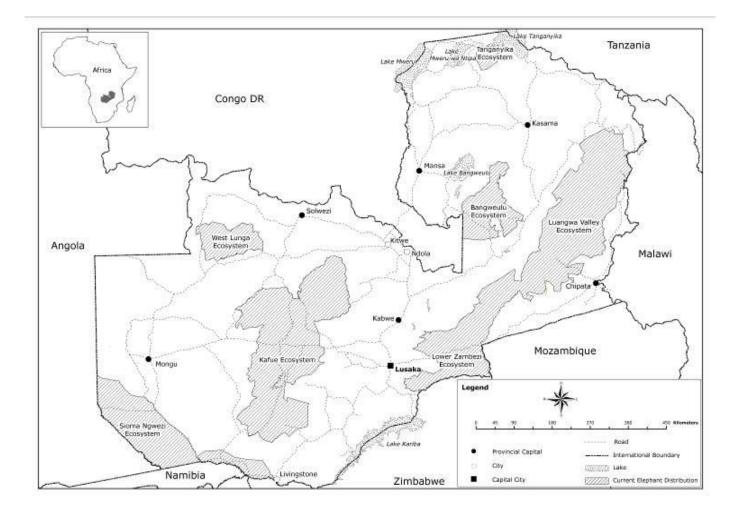


Figure 2 Current elephant distribution in Zambia

# Southern Africa

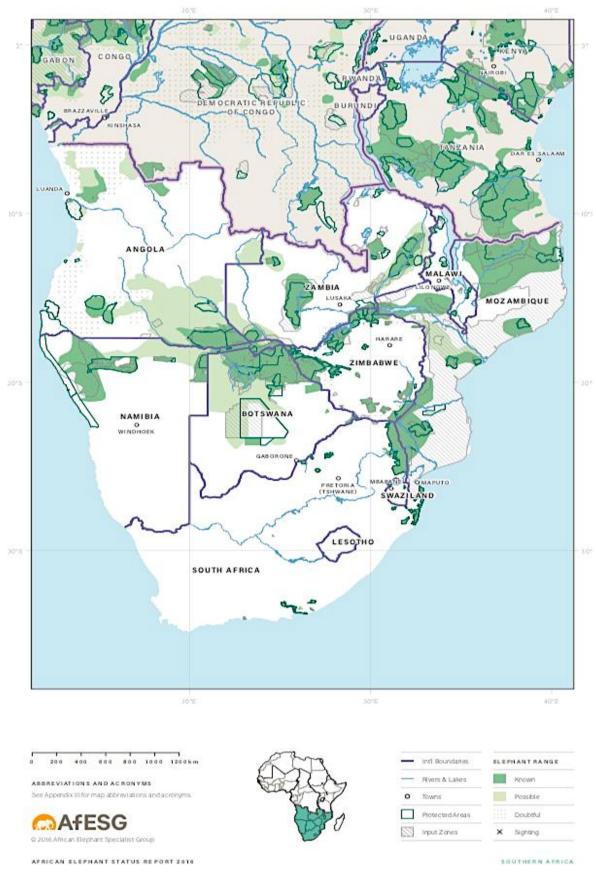


Figure 3 Elephant Distribution in southern Africa. (From Thouless et al .2016)

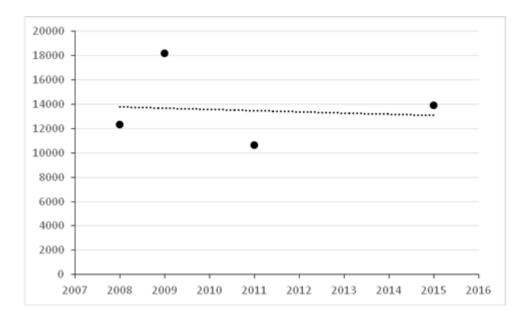


Figure 4: Elephant population trend – Luangwa

(r =-0.02 p = 0.71 ns)

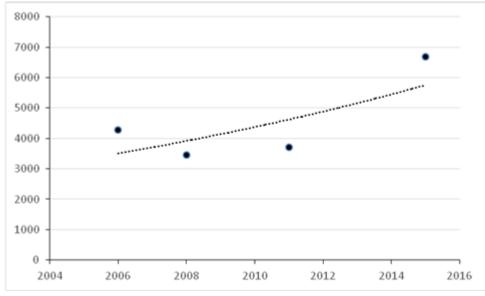


Figure 5: Elephant population trend – Kafue

r = 0.055 p = 0.27 ns. r is the constant of the exponential equation)

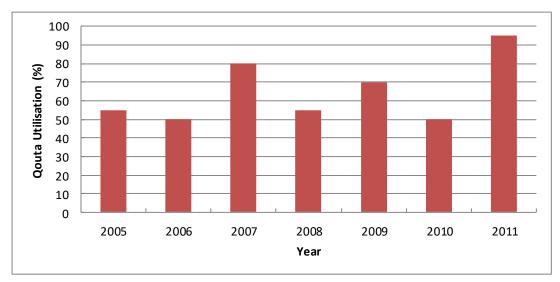


Figure 6: Utilization of trophy elephants in Zambia

	Number of Reports						
Period	Crop damage	Property damage	Human injuries	Human deaths	Total		
2002	282	3	0	3	288		
2003	836	6	0	5	847		
2004	1,432	8	0	5	1445		
2005	1,672	254	16	11	1953		
2006	1,144	7	12	8	1171		
2007	1,931	4	44	7	1986		
2008	2,225	6	35	10	2276		
2009	3,116	5	104	45	3270		
2010	1248	6	65	8	1327		
2011	1947	0	91	6	2044		
Total	12,717	294	263	63	13,337		

Table 1: Details of Problem Elephant Reports in Zambia for the period 2002 to 2011

Year	North Luangwa NP	South Luangwa NP	Luangwa System	Lower Zambezi NP	Kafue NP	Kafue System	Sioma Ngwezi
1991							¹ 1187
1994					² 3862		
1995					³ 3847		
1995					² 3840		
1996					⁴ 4956		
1997					³ 4482		
1997					² 5250		
1998					⁵ 2177		
2000					² 1453		
2000					³ 1486		
2001	⁷ 3750						
2001					⁶ 2141		
2002		⁸ 5434			² 2197		
2002							
2003	⁷ 3235			# ⁹ 1347			
2003				¹⁰ 1522			
2004							¹¹ 1099
2004							# ¹¹ 899
2005							# ¹¹ 385
2005				¹² 2137			
2005				# ¹³ 3417			
2006		¹⁴ 6112					
2006					³ 2506	# ³ 4273	
2007	⁷ 3487						
2008		³ 4419	# ³ 12352		³ 2521	# ³ 3455	
2008	¹⁴ 3990	¹⁴ 7457	¹⁴ 18634	¹⁴ 1298	¹⁴ 2951		¹⁴ 2389
2009	⁷ 3749		# ⁷ 18211				¹⁸ 400
2011	¹⁵ 3460	¹⁵ 3855	# ¹⁵ 11095		¹⁶ 2280	# ¹⁶ 3715	
2012	¹⁷ 2214	¹⁷ 2813					
2013				# ¹² 1795			# ¹⁸ 133
2015	4673	3302	# 13898	# 973	4813	# 6688	# 48

# Table2: Estimates of elephant populations in some range areas since 1991

Estimates in Kafue, both for the National Park (4,813) and the system as a whole (6,688) are greater than previous ones.

 Table 3: Raw Ivory seizures in or from Zambia Source: DNPW records 2017

Country of Origin**	Count of seizures	No. of items seized	Weight of items seized in Kg
Zambia	37	168	730.2
Total	37	168	730.2

**For detailed analysis on seizure in Zambia see ETIS Report

Sources	Weight Kg	Received	Less ivory	Less ivory	Total Kg
	as at 31st	2017	Stolen (kg)	Donated to	
	Dec 2016			Chiefs (kg)	
Unknown	4979.52	459.51	0	0	5439.03
Problem Animal Control	17600.3	381.6	2893.4	0	15088.5
Natural Breakage	365.38	28.6	0	56.5	337.48
Natural Mortality	12568	113.7	655.6	55.1	11971
Illegal (seizures)	19920.9	1348.8	0	16.8	21252.9
Received 2017 un categorized					1118.09
	55434.1	2332.21	3549	128.4	55207

# Table 4Estimate total Ivory in the Strong room as at 31st December 2017