

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

Other proposals

A. PROPOSAL

An annotated transfer of the Botswana population of the African elephant *Loxodonta africana* from Appendix I to Appendix II, submitted pursuant to Resolution Conf. 7.9, with an export quota and a time limit in accordance with Resolution 9.24 (4) (d), in order to allow trade in registered stocks of ivory of Botswana origin with one trading partner who will not re-export, together with the continued export of trophies from recreational hunting.

Transfer of the Botswana population of the African elephant from Appendix 1 to Appendix II will be for the exclusive purposes of allowing:

a) Direct export of registered stocks of whole raw tusks of ivory to one trading partner (Japan) subject to the following quotas for ivory:-

1998	1999
12.68 tons	12.68 tons

b) International trade in hunting trophies

c) International trade in live animals to appropriate and acceptable destinations.

B. PROPONENT

The Republics of Botswana, Namibia and Zimbabwe.

C. SUPPORTING STATEMENT

1. Taxonomy

1.1 Class Mammalia

1.2 Order Proboscidea

1.3 Family Elephantidae

1.4 Species *Loxodonta africana* (Blumenbach, 1797)

1.5 Common Names English: African elephant

French: Elephant d'Afrique

Spanish: Elefante africano

Setswana: Tlou

Herero: Ondjou

1.6 Code Numbers CITES A-115.001.002.001

ISIS 5301415001002001001

Remarks

Botswana Adheres Closely to CITES

The Wildlife Conservation and National Parks Act, 1992 has as its Fifth Schedule, the Convention on International Trade in Endangered Species of Wild Fauna and Flora. This makes the convention part of the national legislation and therefore provisions of the convention are enforceable under the laws of Botswana.

Unilateral Statement by Botswana

The following is a detailed list of precautionary measures to be an integral part of any transfer of the species to Appendix II to which Botswana commits herself to according to the provisions of Resolution 9.24 (4) (d):-

a) Botswana population only

Only the Botswana population is included in this proposal.

b) Withdrawal of Reservation

Botswana will withdraw the reservation on *Loxodonta africana* within 90 days of the acceptance of the transfer to Appendix II by the Parties of the Convention.

c) A Quota for Registered Stocks of Raw Ivory Only

The export quota will refer only to the stock of whole ivory tusks in the central ivory store, registered and under the authority of the Department of Wildlife and National Parks. DWNP will provide the CITES secretariat with a register of all items in that store by 10 January 1997.

There will be no export of ivory of unknown origin or ivory known to come outside Botswana.

d) Ivory to be Marked with a Standard System

In accordance with Resolution 9.16 (g), all whole tusks in the stockpile for export will be individually marked with punch-die marks and the marks correlated with the register (database) entry showing area of origin.

Ivory of unknown origin or from outside Botswana will be kept separate from Botswana stockpile for ease of inspection by the CITES secretariat.

e) Sale Through One Single Centre

All ivory sales and subsequent packing and dispatch will take place only from the government's central ivory store at the Head Office of the Department of Wildlife and National Parks.

f) Number of Ivory Shipments Limited

For ease of monitoring and control, there will be only two shipments of ivory within the down-listing period.

g) Direct export of Ivory to Only One Importing Country (Japan)

Export permits will only allow shipments to one importing country (Japan) and shipments will have to be made direct with no transit except where not geographically possible.

h) Importing Country to have Internal Controls and to Agree not to Re-export

The controls for Japan's internal trade and its commitment not to re-export are in place and can be reviewed by the Panel of Experts.

i) Independent Monitoring

Enforcement personnel from CITES secretariat, or Parties agreed to in advance by Botswana and the CITES secretariat, may be present at the 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 to be guaranteed to CITES secretariat staff.

j) Use of Revenue

All net revenue accruing from the sale of ivory will be used for conservation (monitoring, research, law enforcement, and the like) activities plus community conservation rural development programs.

k) Monitoring the Effects of the Down-listing

Botswana wishes to draw very strong attention to the fact that there are no requirements for the effects of an Appendix I listing to be monitored, and therefore it is impossible to state with any degree of confidence whether the Appendix I listing of elephants had any beneficial or negative effects on the conservation status of the species. Similarly it will not be easy to tell what the effects of a transfer to Appendix II are. It is therefore necessary for the Parties to agree to establish a mechanism independently to monitor these processes so that more informed decisions can be made in future.

Rationale for this Proposal

It is important to transfer the Botswana population to Appendix II to allow controlled trade in products because:-

a) Transfer to Appendix II is in the Best Interest of Elephant Conservation in Botswana

African elephants are in competition with people throughout Southern Africa and protected areas are inadequate to ensure the survival of elephants, especially in arid and semi-arid areas, where elephants depend on resources and space that are also used by people. Climatic and other environmental variables require that elephants remain mobile and opportunistic, and makes confinement to particular reserves impractical as well as detrimental.

The Wildlife Conservation Policy of 1986 (Annex I) clearly recognizes that if no value is attached to wildlife resources, the imperatives of other land uses will inadvertently militate against the continued existence of wildlife resources in reasonable numbers. The conflicts between elephants and human beings attendant to a growing elephant population in Botswana in the long run may disadvantage the former if the communities living side by side with elephants feel that their livelihood is tempered with by an "resource" which does not benefit them [communities] directly. The emphasis of this policy together with yet other government policies i.e. Tourism Policy (Annex II) and National Conservation Strategy (Annex III) is the utilization of the country's natural resources, including elephants on a sustainable basis for the long term benefits of Botswana. It is with this in mind and in compliance with long standing government policy that an Appendix II listing for the elephant population of Botswana is desired.

Where communities feel that conservation is only a net cost to them, and our communities increasingly are expressing those sentiments, it might not be possible to get cooperation from communities in ensuring that conservation objectives are met.

b) Transfer to Appendix II will Assist Rural Communities and Support Rural Conservation Programs in Botswana.

Not only is trade in elephant products essential to the conservation of both the elephant, its habitat and other species, it is important for satisfying basic human needs in many areas of Southern Africa. People/elephant conflicts, as alluded to already in this document, are growing and the view by the communities is that elephants are a pest.

Programs of conservation based community development, such as the Natural Resources Management Project in Botswana, communal conservancies in Namibia and CAMPFIRE in Zimbabwe offer the best hope for the conservation of wildlife. With the advent of elephant hunting in 1996 in community areas, substantial returns to communities have been realized. Expanded use of elephant products such as ivory picked up from the communal areas could increase the value of elephants to those communities and this can only result in the community appreciating elephants more. With this benefits accruing to them directly, communities will increasingly feel that they have a stake in the continued existence of elephants in reasonable numbers.

c) Political Imperative for Transfer

In transferring the African elephant to Appendix I, the Parties to CITES were treating the species as a global resource and heritage. The Parties have taken over the authority for elephants without becoming accountable for their decision nor do they take the responsibility for the consequences of that action. The responsibility still lies with the range states such as Botswana. All the costs of elephant conservation in Botswana are borne by Botswana.

It is worth pointing out that Botswana is a democratic state with an elected government. The government is answerable to its constituency. And if the constituency is unhappy over a certain matter, the government has to listen to the demands emanating from those constituents. The elephant issue is one issue where the decibel of complaints is at such a level as to cause any elected official some serious anxiety. This anxiety is not only for fear of not being re-elected but what could happen to the resource in question when people become audibly unhappy with current conservation programs (see Annex V). It cannot be over-emphasized that there has to be general goodwill from the citizenry if conservation is to be successful. And it is with this in mind that the Government of Botswana proposes the down-listing its elephant population to Appendix II so that controlled trade in elephant products can be effected for the benefit of communities and conservation of the species.

A principle was established in Agenda 21 and the Biodiversity Convention that every country has the right to use their natural resources to their best advantage. Botswana hereby makes an application to have that right accorded it in respect of her elephant population.

d) Transfer for Control and Enforcement

The current ivory ban will not prevent the ongoing overall decline of elephant populations. In fact, a controlled legal ivory trade could be a major contributing factor to the survival of the species. With the exception of a few case studies, there has been no monitoring of the effects of the Appendix I listing and it is not known whether this is responsible for declines in poaching. It is undeniable that after the ban, some countries enjoyed some respite from poaching but many dispute the role played by Appendix I listing in this. The effects of the listing are confounded by the fact that many of the worst affected countries introduced effective law enforcement for the first time and the two biggest markets disappeared before the ban due to effective anti-ivory campaigns in Europe and the U.S.A.

Even if the listing had an effect, which is a possibility, it could be predicted that in the long term that is bound to change. A down-turn in poaching was expected as illegal traders adjusted to the new circumstances. Illegal trade still takes place. There remains a demand for ivory and the Appendix I listing only stops legal trade not illegal trade, thus entrenching the monopoly of illegal trade.

The proposal to transfer Botswana's elephant population to Appendix II comes with stringent controls in trade to take into account concerns of other range states. For example, to prevent illegal ivory from other countries being laundered through legal trade, Botswana will not sell ivory to any country which does not have stringent monitoring and control systems for internal ivory trade. Only ivory of known Botswana origin will be considered for trade.

e) Economic Imperative for Transfer

It is an economic imperative that controlled legal trade in elephant products be reintroduced, otherwise the elephant will gradually disappear from the African landscape. All resource, even wild animals with low population levels can benefit from trade if it provides the incentive for investment in the conservation of the resource in the long term. Economic theory shows that very high value resources with low harvest costs and high discount rates, may be harvested to extinction. This was the situation with ivory in many countries which did not invest in elephant conservation as Botswana did, and it was this problem which ultimately led the international community to ban the ivory trade.

In simple terms, the elephant poaching problem in Africa was due largely to the fact that elephants were valuable, but not valuable enough to people on the land. In Botswana people are now able to capture significant portions of revenue from elephant consumptive utilization and the benefits could be much higher without Appendix I listing.

Ivory obeys market forces: if higher prices for wheat, beef or chicken stimulates production then why should elephant be different? The answer lies in the ownership and ability to capture this value. In most of Africa elephants belong to the state and are treated by rural people as an open access resource. Elephants come with high cost but, as result of Appendix I listing, give few benefits.

The direct costs of living with elephants include crop damage, injury and killing of humans. The indirect costs include the opportunity costs of alternative land uses and the damage that elephants inflict on their environment. While on Appendix I, lost earnings can be added to this. Benefits from elephants can be realized from tourism as well as consumptive uses, but tourism is not universally applicable and is often ecologically or socially damaging in itself. Consumptive uses and the sale of products are often preferred for a variety of reasons.

The prohibition of trade in any product for which there is demand results in the emergence of alternative markets. The re-opening of a controlled legal trade is therefore essential.

2. Biological Data

2.1 Distribution

Historical

Campbell (1990) reports that Botswana contained more surface water in the past than today. Elephants being a water dependent species are reported to have had a much wider distribution then (Figure 1). From accounts of early European explorers, Campbell concludes that elephant distribution was at its recorded maximum in the late 18th century. The drying of the Kgalagadi water sources, the spread of human settlements and, in particular, excessive hunting for ivory in the 1800s were thought to have contributed to reducing elephant distribution to a minimum in about 1890. During

this period, it is reported that small concentrations of a few thousand animals remained only in the vicinity of the Okavango Delta, the western Chobe and Linyanti-Kwando Rivers in the north and the Tuli Block in the south-east.

Child (1968) and Sommerlatte (1976) described elephant concentrations appearing along the eastern section of the Chobe River and southwards in the Chobe District by the mid 1960s. These observations suggest a re-occupation of parts of the former elephant range in northern Botswana which had been abandoned by the turn of the century.

Current

The current distribution patterns and population estimates of elephants are derived from aerial surveys which form part of the nation-wide animal census program in the Department of Wildlife and National Parks (DWNP). This program started in 1987 and has been on-going ever since. The surveys have been conducted twice a year in the elephant range up until this year (1995) when it was decided that wet season surveys should be conducted every third year or when there is an expressed special need, as they do not provide additional information.

Surveys during the earlier years of the survey program were unstratified sample counts using systematic reconnaissance flight method at a sampling intensity of about 4%, with observer strip widths of 200m and transect spacing of 6' of longitude. This was done then to ensure that distributional information is not sacrificed by concentrating on more densely populated parts of the elephant range. In addition, it is known that elephant densities vary greatly over short distances and time periods. From the point the current survey program was started, no information was available on distribution to base any meaningful stratification on.

With the progress of time, however, enough information was gathered and as such the survey area was stratified. The stratification helped in that the population estimates were more accurate.

Elephant distribution in the larger northern elephant range is determined by availability of surface water. During the wet season, water is normally available in the whole elephant range, which has a number of seasonal pans. During this time of the year, elephants are more widely distributed (Figure 2). The distribution is not even through-out the range though, but instead there are some areas that contain higher population densities.

Dry season distributions (Figure 3) are noticeably concentrated along the perennial water sources of the Kwando-Linyanti-Chobe river systems on the Namibian boundary. This concentration must overlap into Namibia this time. There are small concentrations along the Zimbabwe border which are probably continuous with populations on the other side, as there are no real barriers to movement. The other concentrations are found on the western edges of the Okavango Delta.

Elephants are present in the Northern Tuli Game Reserve throughout the year though a few of these regularly cross a short way into Zimbabwe's Tuli Circle.

Figure 4 gives mean density distribution of elephants for the period 1989 to 1993.

Elephant range

The elephant range is difficult to define since animal ranges tend to tail-off with very large areas of low population density around the periphery. This is difficult to measure as there is so little distribution information there. Slightly differing estimates are therefore likely to result due to slightly different interpretations.

The bulk of the Botswana elephant population occur north of the 20 degree south latitude and west of the eastern margin of the Okavango system. There has been reports during the last few years of a seeming westward expansion of the elephant range in the Okavango Delta. There is a study currently on-going to look at this phenomenon. The total northern elephant range is estimated at around 80 000 square kilometres. This area include the protected areas of the Chobe National Park, Moremi Game Reserve and Nxai Pan National Park. In addition, the protected areas are surrounded by Wildlife Management Areas (WMAs), where wildlife is the primary land-use, and forest reserves.

In the south-eastern Botswana, there is a small population in the Northern Tuli Game Reserve, the area of which is about 550 sq. km. Elephants are, however, found in a much larger area (10000 sq. km.) of the Bobirwa sub-district adjacent to Northern Tuli, in negligible densities. The latter area is generally discounted when we talk of elephant range in south-eastern Botswana.

2.2 Populations

Elephant population estimates

After the 1983 hunting ban (this was done due to uncertainty on the status of trophy animals as the size of trophy registered from hunters appeared to be getting smaller and smaller) of elephants in Botswana, aerial surveys have been conducted to monitor the elephant population in the country. Initially these surveys were conducted by a mixture of private researchers and government biologists. From 1987 to present, a more intensive survey programme was instituted by the Department of Wildlife and National Parks. The survey as indicated previously has up until 1995 been conducted twice each year in the elephant range, during the wet and dry seasons. It was decided that from 1996 surveys will only be conducted during the dry season with a wet and dry count every three years or when there is an expressed special need to do a wet season survey before the three year interval.

As stated previously, surveys were initially non-stratified systematic reconnaissance survey. With more information on distribution and density known during the progress of time after the inception of the survey program, the survey of elephant population was stratified (Figure 5). The stratification allowed for sampling areas with denser elephants more intensely which resulted in better confidence intervals for the population estimates.

As alluded to earlier, Botswana shares some elephant populations with the neighbouring countries of Namibia and Zimbabwe. This has tended to raise suspicions in some quarters that the three countries, Botswana and Zimbabwe in particular, were counting the same elephants twice. Thus, it has been the contention that the population estimates of these countries were inflated. In deference to the criticism and in the spirit of transparency and above all, the desire to base our management programs on sound scientific information, surveys were coordinated between Botswana and Zimbabwe during some dry seasons. In 1996 a dry season count was coordinated census between these two countries and Namibia under the ELESMAF project. The results from the synchronised surveys dispelled any doubt about the validity of the given estimates in the three countries, as the estimates were consistent with other recent estimates.

Population status and trends

The Botswana elephant population estimate currently stand at 79471 +/- 12715. This is in comparison to an estimate of 54600 +/- 8400 in 1990 (see Figure 6). The regression of the elephant estimates over the years result with the equation $\ln y = 0.05582X - 100.177$. The instantaneous rate of increase is 0.0572 +/- 0.0533. This translate to a growth of the population at a rate of around 5.9% per annum, although from the confidence interval it could be as low as 0.42%. However, it is a significant growth.

The Botswana elephant population thus does not meet the biological criteria for listing on Appendix I as outlined in Resolution Conf. 9.24. There is a definite up-ward population trend in the Botswana elephant population. It might be worth restating that the elephant range in the northern part of Botswana has been expanding west-wards into areas of the Okavango where elephants had not been seen in many years. And here we are talking of a total continuous elephant range estimated at 80000 sq. km. The range is large, non-fragmented and secure (not fragmented according to the biological criteria of Annex 5 of Resolution Conf. 9.24).

2.3. Habitat

Within the northern elephant range, there are five broad habitat types, as defined by the dominant tree species present; riverine woodland (including the Chobe/Linyanti Rivers and the Delta system), *Acacia* woodland, *Colophospermum mopane* woodland, *Terminalia/Burkea* woodland and *Baikiaia plurijuga* woodland. Various combination of these categories also occur, with mixed dominance of the major species.

Concern has been expressed over elephant impact on these habitat types, particularly the riverine, by a variety of researchers since the 1960s (Child 1968, Sommerlatte 1976, Simpson 1978, Moroka 1984). Currently studies are on-going on elephant/habitat interaction in Moremi and the Chobe. A PhD candidate completed work on the impact of elephants on vegetation in the Chobe and the report is being awaited.

As a consequence of observations that the structure of the riverine vegetation is being drastically modified by the high elephant concentrations during the dry season, the elephant management plan (officially referred to as the "Conservation and Management of Elephants in Botswana) (Annex IV) which was adopted by the Botswana Parliament in 1991, prescribed among other management actions, the provision of artificial watering points in a bid to spread out elephants.

In addition, culling of elephants, to keep the elephant population at the 1990 level of 54 600, was to be embarked upon under the management plan. These strategies were meant to mitigate impact of elephants on vegetation.

However, culling was never done due to the Appendix I listing of the African elephant under CITES, which prevents international trade in products thereof. Botswana envisaged that if she was to cull, she would sell the products from that cull. At the current population level, a target of 54 600 animals is no longer achievable.

Provision of water was started in 1995 with the drilling and equipping of 10 boreholes in Savuti (2 boreholes) and Nogatshaa (8 boreholes) areas of the Chobe National Park. There are differing views regarding the sagacity of such an intervention. It is argued by some that this will be an ecological disaster. As a consequence, a monitoring program has been instituted with the commissioning of the boreholes, so that in the event of any observed undesirable impact, the strategy can be reviewed. There is indeed the possibility of increasing foci for rapid habitat change around the new watering points, in areas that are covered preponderantly by Kalahari sands. An added factor to the general fragility of the elephant habitat, is the semi-arid nature of Botswana. An adult elephant is reported to forage for about 18 hours daily with vegetation intake estimated at 70 kg and some 200 litres of water. So very dense and growing elephant population could in the long run not only endanger itself but co-existing fauna besides the vegetation in a semi-arid environment such as found in Botswana.

The current elephant density is around 0.99 per sq. km, but during the dry seasons, some 75% of the population concentrates near water into 16% of the area where the average density is 4.65 per sq. km. In a similar environment in Zimbabwe, it was calculated that in order to preserve mature canopy woodland, elephants would have to be maintained at an overall density of 0.25 animals per sq. km or less than 1 per sq. km in the dry season areas (Martin et. al 1989). A figure for Botswana does not exist yet, but through on-going research it should be possible in the future to come up with one. In the interim an adaptive management approach is advocated for in the elephant management plan.

In the Tuli Block in the central eastern Botswana, where the elephant densities of 0.75 to 1.0 sq. km are comparable to the northern Botswana, the habitat is dominated by *C. mopane* and there is concern over the conversion of woodland to thicket scrubland.

2.4 Geographical Trends

Geographical range of elephants in Botswana has rather been expanding. The current elephant range, especially in northern Botswana, is still expanding with elephants moving into previously unused areas such as the western Okavango Delta. The northern range has very few human settlements and hence elephants have room to expand into new areas. The provision of artificial watering holes has further provided for this expansion. 99% of the total elephant population of Botswana occurs within the area of approximately 80000 km² in northern Botswana. This area is large and non-fragmented.

There has been little encroachment of livestock into the elephant range. Instead it is the elephants which are encroaching into the livestock areas thereby resulting in conflicts. The introduction of community based natural resources management projects in areas of marginal livestock use will greatly benefit conservation. If the rural communities benefit from the resource then they will tolerate living side by side with the elephants.

2.5 Role of the species in the ecosystem

Elephants play a significant role at the ecosystem level, and are capable of greatly modifying their own habitat and consequently the habitat of other species. Elephants may displace other species such as rhinos and ungulates such as roan antelope in situations where surface water is limited, as elephants completely dominate water holes during droughts.

At low densities elephants impacts promote species richness and biodiversity. In wooded areas, at low densities, elephants open up thickets creating pathways for other species and promoting growth of grasses. At higher densities thickets are destroyed and trees knocked down, encouraging growth of grasses and changing species composition of the ecosystem.

Over-concentration of elephants in protected areas have in the past impacted on the biodiversity of such areas and management intervention might be justified to reduce elephant densities through culling, translocation, fire management or provision of water elsewhere as has been done in the Chobe National Park.

Elephants are overpopulated in northern Botswana resulting in vegetation suffering enormous damage and some vegetation species have disappeared as a result. With regard to adverse impact of elephants on other species, the Chobe river front is home to the rare Chobe bush-buck (*Tragelaphus scriptus ornatus*), which is feared that with the continued

rapid change of its restricted habitat could suffer decline. The Chobe is also home to the rare species of sable (*Hippotragus niger*) and roan (*H. equinus*). The elephant, which has a wide range of food is believed to compete with these animals for forage. So a high elephant population could work to the disadvantage of these species too, as well as others. Birds, especially tree nesting birds, could also be affected by the change of woodland to scrubland. Elephant population recover much faster than trees and on the basis of the precautionary principle, it is better to reduce elephant population than to lose the mature trees.

3. UTILISATION OF ELEPHANTS

3.1 National Utilisation

The principal form of utilisation of the elephant in Botswana is recreational or sport hunting. A limited quota of eighty (80) bulls approved by CITES was introduced in 1996 and a further quota of eighty-seven bulls is proposed for 1997. This is after a self imposed ban on elephant hunting that started in 1983. The off-take is less than 0.01% of the total population and this should have no effect on the elephant population. Elephant hunting provides a good source of revenue for community-managed wildlife areas. This is important because it is these communities who bear the cost of living side by side with elephants. Ivory from recreational hunting is kept as trophy by the hunters.

The elephant tusks available in the Department storage facilities are mainly a result of natural mortality as well as management activities such as Problem Animal Control (PAC) and confiscation from illegal hunters. There is some 29 432.5 kilograms of ivory in government storage to date. Of these, 4 162.57 kilograms, comprising of some 1 543 tusks and ivory pieces, are from outside of Botswana or of unknown origin. Ivory of Botswana origin is 25.27 tonnes.

Prior to the CITES Appendix I listing of elephants, ivory was sold by auction and money accrued went into central government coffers. Other ivory was locally bought by the Botswana Game Industries. There was no importation of ivory from other countries or re-export of ivory from Botswana.

3.2 Legal International Trade

The last ivory auction held in Botswana was in 1985. Ivory exported from Botswana after 1985, according to local records, is reported in Table I below.

Table I . Ivory exported or re-exported by Botswana in 1986-89

Year	Amount
1986	14 tusks
1987	20 tusks weighing 233kg
1988	0
1989	37 tusks 27 pieces of ivory 1538 kg of ivory

Since the listing of the elephant population on Appendix I by the 1989 CITES conference in Switzerland, Botswana has not sold any raw ivory on the international market.

3.3 Illegal Trade

Illegal trade in ivory in the region is still there albeit on a low scale. Data concerning cases of elephant poaching in Botswana from 1989 to 1995 is presented in the following table.

Table II: Illegal off take of elephants in Botswana

YEAR	NO OF PEOPLE ARRESTED
1989	92
1990	48
1991	23
1992	21
1993	20
1994	10

The decline in the numbers of elephants being poached after 1989 is attributed to the formation of the highly specialised and trained Anti-Poaching Unit (APU), within the Department of Wildlife and National Parks in 1989. The unit currently has a staff complement of 85 staff and some 18 vehicles. The unit also has access to two departmental Cessna 206 air-crafts and until recently a helicopter, which unfortunately crashed coming from an anti-poaching mission. Boats are also provided in areas such as the Okavango for the APU.

A lot other resources have been committed to make the APU an effective law enforcement organ of the department. Plans are afoot to increase both man-power and equipment of the unit in the next plan period which starts in 1997. Besides the APU, within the department, there are other personnel, from other units, who do anti-poaching work in addition to their varied duties. This brings to over 300 personnel whose duties include anti-poaching patrols in the elephant range.

The APU's efforts have over the years been and continue to be supplemented by the Botswana Defence Force (BDF), the police and their intelligence units. The BDF has about 400 - 600 soldiers deployed in Anti-poaching work throughout the country with the majority based in the elephant range at any given time. Closer cooperation with other law enforcement outside Botswana, such as the Endangered Species Protection Unit (ESPU) of the South African Police, has helped in the curbing of illegal hunting and trafficking of ivory.

Courses have for sometime been and continue to be offered for sister departments, such as Customs and Immigration on what animal trophies cannot be exported or imported without permits. These courses also enlighten those departments on matters relating to CITES. Admittedly, there is still some ground to be covered in the training of our sister departments. With the training, we are positive that this agencies will be better equipped to deal with trafficking of animal products, including ivory.

The combined efforts of the country's law enforcement agencies has done a good job in deterring poaching or keeping it at a very low level, especially for species like elephants.

3.4 Actual or Potential Trade Impact

The absence of trade in elephant products is seen as the greatest threat to elephant survival in Southern Africa. In Botswana elephant populations have grown from about 34 000 to 79 000 since the suspension of elephant hunting in 1983. Government's suspension of elephant hunting in the early 1980's was an initiative that showed that Batswana were conscious of the conservation of their wildlife while studies were being conducted on the status of elephants. This has now been established. In addition, it has been established that conflicts with people of the growing elephant population continue to grow. As stated previously, there is a westward expansion of the elephant range in the Okavango Delta area. This is resulting in crop depredation and even loss of human life in this area, the latest report of a person killed being on the 13 August 1996 in the outskirts of the village of Samochina while he was collecting firewood (Annex V). "Statistics" show that in the years 1995 and 1996 alone, some seven (7) people were killed by elephants. Another had his left leg amputated after an attack by an elephant. In addition, some 85 elephants have been killed during this period in conflict situations and a lot of money paid in compensation claims due extensive damage to property. People are running out of patience and it is not uncommon to hear in the news citizens accusing government of caring more for wildlife than humans. It is these sentiments that will inevitably lead to non-tolerance of wildlife by the people despite efforts by government to make them appreciate it. This no doubt militates against conservation in the long run.

A lot of people believe that any legal trade will encourage illegal trade. Illegal trade continues and if it is not replaced by legal trade, it will grow. That's a real threat.

The four countries of the Southern African Convention for Wildlife Management (SACWM) empathize and support those range states whose elephant population deserves an Appendix I listing and would therefore like to maintain their populations there. In that regard, in this proposal sufficient measures are taken to ensure that trade in elephant products from Botswana will not provide an outlet for poached elephant products to enter trade.

3.4.1. Live Specimens:

There is virtually no trade in live elephants in Botswana or with any other country. An enquiry was, however, made on the possibility to translocate some 100 elephants to a private reserve in South Africa a couple of years back. Recently

another enquiry for the same number of elephants has been received by the department. However, no live specimen have been translocated.

3.4.2. Parts and Derivatives:

Refer to section 3.2 of this document.

3.5 Captive Breeding

There is no captive breeding program for elephants in Botswana.

4. CONSERVATION AND MANAGEMENT

4.1 Legal Status

4.1.1 National

Elephants in Botswana occur in two major regions of the country, namely what is commonly called the northern range within Botswana and the Tuli Block, that is the Mashatu Game Reserve and its environs. The northern population constitutes about 99% of the overall population with the rest occurring in the Tuli Block. The northern range consists of an area of about 80000 sq. km This area includes two national parks, a game reserve, wildlife management areas, and forest reserves. The area is also within what is referred to as the Buffalo fence, which is a stock free zone. National parks provide the highest level of legal protection. No killing of elephants is done within national parks except where human life is threatened. Consideration can also be made to kill elephants in parks and reserves for management reasons; this has not been done thus far.

The Wildlife Conservation and National Parks Act of 1992 protects the elephant population and indeed other wildlife species. Stringent penalties are imposed on those found having illegally hunted elephants. It is not evident that any additional measures need be taken in protection of the Botswana elephant population than already in place, except population management such that the elephant range is not destroyed by a burgeoning population..

4.1.2. International

Elephants are on Appendix I of the CITES and hence they are highly protected. Southern African countries of Botswana, Malawi, Namibia, Zambia and Zimbabwe have entered reservations against this listing.

4.2 Species Management

4.2.1 Population Monitoring

As alluded to in Section 2.2, a program to monitor elephant population was initiated after the ban in elephant hunting of 1983-94. This program from 1987 to 1995 was conducted twice in a year, during the wet and dry seasons, covering the whole northern elephant range by a highly qualified team. The surveys are to continue albeit during the dry season only except every three years, unless a specific need arise for a wet season survey in between.

ELESMAF project helped in the coordination of surveys in the contiguous elephant range between the countries of Botswana, Namibia and Zimbabwe. The former and the latter have for several years prior to this project coordinated the dry season counts to address concern that the same elephant population could have been counted twice. The results obtained were very consistent with those that were obtained previous to that arrangement, indicating that cross-border movement is not at that level to warrant any scepticism on the survey results.

4.2.2. Habitat Conservation

National parks under the Wildlife and National Parks Act of 1992 are declared "for the propagation, protection and preservation therein of wild animal life, vegetation and objects of geological, ethnological, archaeological, historical or other scientific interest for the other scientific interest for the benefit and advantage and enjoyment of the inhabitants of Botswana". In a bid to conserve elephant habitat and to maintain biodiversity, the Government of Botswana, came up with the "Conservation and Management of Elephants in Botswana" in 1991. One of the management issues to come out of the policy was to keep the northern elephant population at the 1990 level, however, due to Appendix I listing of the elephant.

Fire is another significant cause of habitat change in northern Botswana. Attempts to mitigate fire impacts is through construction of fire breaks. In the event of fires, the whole community in an area is expected to participate in controlling any such out-breaks. However, DWNP has not equipment per se besides graders, which are used for making fire-breaks, for fire-fighting.

4.2.3 MANAGEMENT MEASURES

At present sport hunting under controlled, limited quota is the major elephant population management undertaken in Botswana. It is, however, important to note that the quota is so minute as not to have any effect on the population currently growing at the rate of about 5% per annum. Only bulls are taken during sport hunting.

Problem animal is another management operation undertaken. As a result of the growing elephant population, there has been increased conflicts with human beings. Elephants that are threat to human life and property are destroyed.

The policy on the management of elephants had called for the culling of elephants on an annual basis but this has not been done because of the CITES listing of elephants on Appendix I.

4.3 Control Measures

4.3.1 International Trade

The following mechanisms are in place to control international trade of trophies of elephants and other wildlife products.

At the port of exit, CITES and other import permits are checked by Customs and Excise. In case of doubt, Customs have been advised to call on the Department of Wildlife and National Parks officers to assist and provide expert information.

A presentation was made to Customs officials from around the country on CITES procedures. During the course, it was pointed out the Customs could confiscate trophies pending identification by DWNP personnel. Similar courses are to be arranged for other sister departments.

Permits for raw ivory are issued by Head Office of DWNP in Gaborone. Three field station head-quarters of Francistown, Kasane and Maun are authorized to issue export permits for trophies from recreational hunting of elephants.

The Department of Animal Health and Production issues veterinary health certificates only on production of a valid CITES permit from DWNP.

There are plans to implement regional control mechanisms through Southern Africa Commission for Wildlife Management.

4.3.2 Domestic Measures

Botswana marks its ivory according to the requirements of CITES using a two letter code plus a third letter which is an internal denoting code the origin of the tusk within the country. For example, BWJ and BWK indicate that the ivory is from Maun and Kasane, respectively. Ivory is marked soon after it has been brought to the storage facility or before two weeks has elapsed.

Stringent legislation, Wildlife Conservation and National Parks Act of 1992, has deterrent penalties for would-be perpetrators. According to the laws of Botswana, any person convicted of an offence involving the unlawful possession of or trading in ivory shall be liable to a fine of P50 000 and to imprisonment of ten (10) years.

5. 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 belief that with the precautionary measures adopted, it is not likely that this proposal to list the Botswana elephant population of the African elephant in Appendix II will prejudice the survival of the Asian elephant.

6. Comments from Countries of Origin

Comments from Other Range States as a Result of Consultation

This proposal is submitted jointly by Botswana, Malawi, Namibia, and Zimbabwe. Some 31 African range states convened in Dakar, Senegal to discuss the African elephant in general. During this meeting, Botswana, Namibia, and Zimbabwe presented their elephant down-listing proposals, for information to other range states.

7. References

Campbell, A.C. (1990). History of Elephants in Botswana. in: P. Hancock (ed.), *The Future of Botswana's Elephants*. Kalahari Conservation Society, Gaborone. pp.5-15.

Child, G. (1968). Report to the Government of Botswana on an Ecological Survey of Northeastern Botswana. FAO Report No. TA 2563, Rome.

DWNP (1991). *The Conservation and Management of Elephants in Botswana*. Department of Wildlife and National Parks, Ministry of Commerce and Industry, Republic of Botswana. Government Policy Paper, 13pp.

Government of Botswana (1992). *Wildlife Conservation and National Parks Act, 1992*. Act No. 28 of 1992.

Martin, R.B., G.C. Craig & V.R. Booth (1989). *Elephant Management in Zimbabwe*. Department of National Parks and Wildlife Management, Harare, Zimbabwe. 119pp.

Moroka D.N. (1984). *Elephant-Habitat Relationship in Northern Botswana*. Report to the Department of Wildlife and National Parks. Government Printer, Gaborone, Botswana. p.

Simpson, C.D. (1978). Effects of Elephant and Other Wildlife on the Vegetation Along the Chobe River, Botswana. *Occasional Papers, The Museum Texas Tech University*, 48:1-15.

Sommerlatte, M.W.L. (1976). *A Survey of Elephants in North-eastern Botswana*. UNDP/FAO Project Bot 72/020, Field Document No. 2, Government Printer, Gaborone.