

ZIMBABWE NATIONAL ELEPHANT MANAGEMENT PLAN (2015-2020)



**Zimbabwe Parks and Wildlife
Management Authority**



FOREWORD BY THE MINISTER

The Government of Zimbabwe considers elephants as an important part of our national heritage, a keystone species ecologically, and a valuable natural resource that contributes to conservation and rural development. We presently have, here in Zimbabwe, the second largest elephant population on the African continent and both a national and international responsibility to protect and manage our elephant population responsibly for the benefit of our people and those beyond our borders.

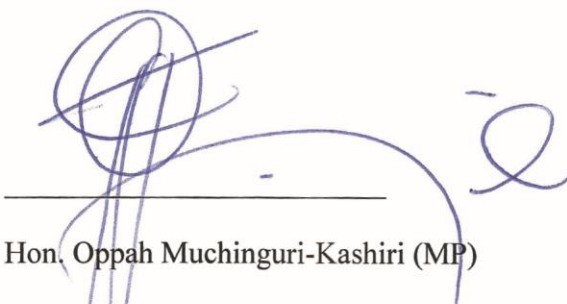
The 2014 National Elephant Aerial Survey provided an estimate of 82,000 elephants in the country. There are probably a further thousand elephants in small populations that were not surveyed. The country's elephants are dispersed in four populations. In two of these populations in the Zambezi Valley there was marked decline in numbers, mostly as result of illegal killing of elephants. Other countries have faced even more serious losses as a result of poaching, and so we have succeeded to a point. We as a country, in cooperation with the international community, need to strengthen our ability to protect and effectively manage our elephant populations to achieve our vision:

To conserve elephants at levels that will enable them to contribute to the conservation of biodiversity, national development and Zimbabwe's cultural heritage.

In signing this Action Plan for Elephant Conservation and Management in Zimbabwe, the Government recognises and appreciates the heavy responsibility borne by those who dedicate themselves to conserving and managing elephant populations and their habitats in Zimbabwe. The Government is aware of the pressure in the current conservation environment that perceives an approaching extinction of elephant in Africa and opposes sustainable use of the species. The Government perceives this pressure to be a factor that limits the resources available to conserve elephants and their habitats, and the range of plant and animal species that occur in these wildlife areas. Sustainable use of natural resources has been and remains a central pillar of successful conservation in this country. The Government has every intention of maintaining its policy in this regard.

In signing this Action Plan, the Government recognises and supports the efforts that are being made on the ground and elsewhere, by a wide range of individuals and institutions, to protect and manage our elephant populations. We thank all of those involved in this vital and honourable work, and urge them to continue their efforts.

We believe this document will provide clear guidance on the way forward to improved protection and management of our elephants and a framework for effective and ongoing collaboration between all stakeholders involved in this noble effort.



Hon. Oppah Muchinguri-Kashiri (MP)

Minister of Environment, Water and Climate

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ACRONYMS AND ABBREVIATIONS

AM	Area Manager
CA	CAMPFIRE Association
CE	Chief Ecologist
DC	Conservation Director
DG	Director General
EM	Elephant Manager
HEC	Human Elephant Conflict
HMS	Head Management Services
HRM	Head Human Resources
IM	Investigations Manager
NGO	Non Governmental Organisation
PRM	Public Relations Manager
RDC	Rural District Council
RM	Regional Manager
SOAZ	Safari Operators Association Zimbabwe
ZHA	Zimbabwe Hunters Association
ZPGHA	Zimbabwe Professional Guides and Hunters Association
ZRP	Zimbabwe Republic Police
TFCA	Transfrontier Conservation Area

1. INTRODUCTION AND BACKGROUND

By any standards Zimbabwe has a proud history of successful elephant conservation. Elephant populations in most of Africa were reduced to very low numbers by the late 19th Century. In 1897 approximately 100,000 tonnes of ivory was exported from Africa [42]. In 1900 it was feared that elephant might become extinct south of the Zambezi River [6]. Using historical accounts of elephant numbers, backwards extrapolations based on population growth rates, and known levels of elephant kills it is unlikely that Zimbabwe held more about 4,000 elephants in 1900 [8,10,14,16]. More than one hundred years later, in 2014, this number had increased twenty-fold to nearly 83,000 elephants (**Fig. 1 and Table 1**) despite attempts to limit elephant population growth between 1960 and 1989 by culling 45,000 elephant in tsetse control areas and state protected areas (**Fig. 1**) [5,32]. The primary rationale for limiting elephant numbers in protected areas was to reduce their impact on woodland habitats and the loss of plant and animal species as result of elephant-induced habitat change [9,12,44]. Elephant impacts on woodlands and associated and biodiversity is still a concern today [15, 46,47].

Between 1990 and 2006 elephant populations grew exponentially but growth has since been limited by an escalation of illegal killing [18]. However, the overall population in the country remains at more than 80,000 elephants (**Table 1**), which is more than twice the national target population envisaged in the 1908s.

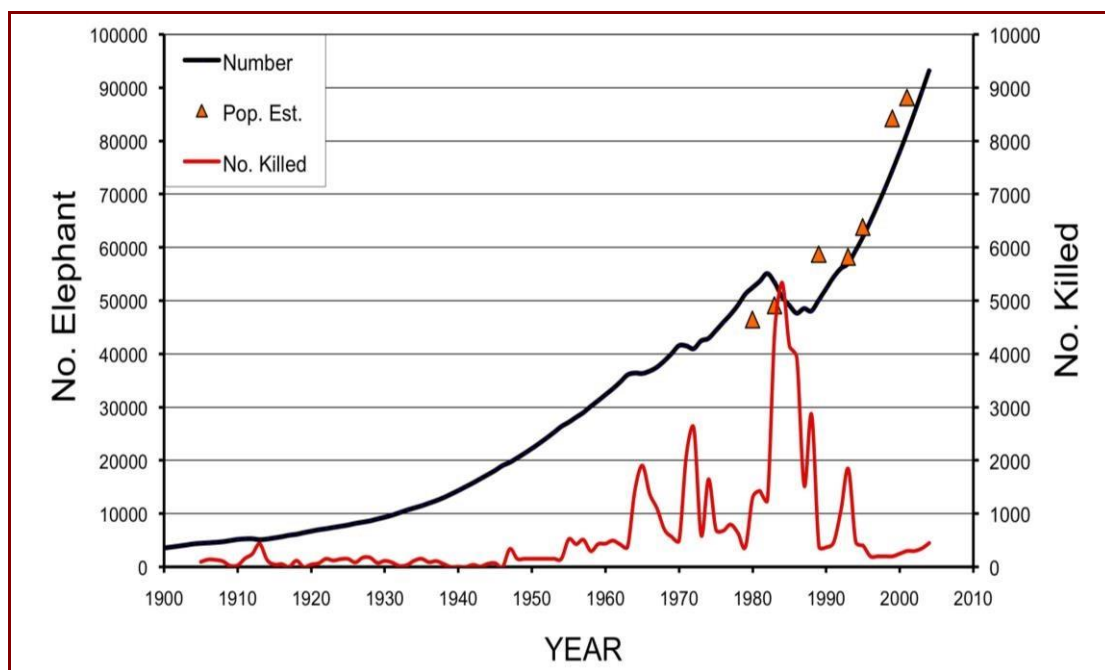


Figure 1. Growth of elephant population in Zimbabwe between 1900 and 2001, number of elephant killed (lower graph), and aerial census estimates (triangular point) in those years in which the entire elephant range was covered. The numbers killed before 1960 are based on the amount of ivory exported from the country. The high numbers killed in the 1980s represent the large-scale culls that were carried out during that period in an effort to reduce their environmental impact.

Zimbabwe is one of the key elephant range states and home to the second largest estimated elephant population of nearly 83,000 individuals following Botswana, which is estimated to hold

more than 130,000 elephants. Zimbabwe thus has a clear obligation to ensure the survival of the species for the benefit of present and future generations of all stakeholders¹.

Zimbabwe first adopted a specific Policy and Plan for Elephant Management in 1997 [33] with the long term vision to “*Conserve elephants at levels that will enable them to contribute to the conservation of biodiversity, national development and Zimbabwe’s cultural heritage.*” As a matter of policy the plan required that at least four demographically and genetically viable populations of elephants be maintained, that elephant densities be kept below the levels at which they might compromise biodiversity, and that elephant range remain at or above the 1996 level. At the time illegal killing of elephants was at a very low level and the plan placed little emphasis on law enforcement. That situation has since changed drastically, with poaching at a crisis state in some countries, although not to the same extent in Zimbabwe. Furthermore, elephant range has been constrained by increasing human population densities in many rural areas. Accordingly, the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) convened a participatory workshop in Hwange Safari Lodge (from 2nd to 4th December 2014) to develop an agreed “*Strategic Elephant Conservation Policy and Management Plan Framework*”. The policy and primary objectives of the 1997 plan were incorporated into the December 2014 framework, and the objectives and action items were updated to reflect new challenges to elephant management that were not in focus in 1997. The framework developed at the December 2014 workshop, together with input from the two-day CAMPFIRE Association workshop held in November 2014, form the basis of the current elephant management plan. The national workshop included stakeholders with varied interests from the wildlife and tourism industry, conservation NGOs, technical experts from Zimbabwe and the international community, and government representatives from wildlife agencies in neighbouring countries that share elephant populations with Zimbabwe.

At the Hwange workshop, participants agreed that each of the four primary elephant ranges needed a regional plan to address the specific challenges and advantages of elephant in that area. Accordingly, from 30 April to 2 May, 2015, a workshop was held to discuss an antipoaching strategy for Mana Pools National Park, which was later expanded to cover the midZambezi Valley region. Similarly, in May and September 2015, workshops were held in the Sebungwe and the South East Lowveld, respectively, to develop action plans for each region. An anti-poaching strategy workshop for Hwange National Park was held in June 2015 and, together the management plan for the park, provided a basis for completing an action plan for Northwest Matabeleland. These action plans are appended in Annexes 9.4 to 9.7.

The current conservation status of African elephants is that they are listed as Vulnerable under the IUCN Red List, as Endangered in CITES Appendix I, apart from the populations of Botswana, Namibia, South Africa and Zimbabwe that are listed under CITES Appendix II. In Zimbabwe, African elephants are not included on the list of “specially protected animals” because their population is so large. However, they are listed on the “Schedule of Animals with High Economic Value.”

1.1 Numbers, distribution and regional trends of elephant in Zimbabwe

Elephants are distributed in four main regional populations in Zimbabwe, namely, Northwest Matabeleland, the Sebungwe, the mid-Zambezi Valley, and the South East Lowveld (**Fig. 2**). Crude ecological densities vary between 2.16 elephant/km² in Northwest Matabeleland and

¹ Note that the African elephant comprises two species, namely the forest elephant and the savanna elephant. Given the high proportion of the continent’s savanna elephants that occur in Zimbabwe this places increasing responsibility for their conservation on the country.

0.46 elephant/km² in the Sebungwe region (Table 1).

Table 1. Numbers and densities of elephants in the four regions of elephant range within Zimbabwe. (Source: Draft 2014 Elephant Survey results) [22, 23, 24, 25].

Name of Region & Area	Area (km ²)	Estimated Number of Elephants	Density of Elephants/km ²
NW Matabeleland	24,989	53,991	2.16
Hwange National Park	15,180	45,846	3.02
Matetsi Complex	4,402	4,843	1.10
Forest Areas	2,332	1,101	0.47
Communal Lands	3,075	2,201	0.72
Sebungwe	15,529	3,407	0.22
Parks & Wildlife Estate	6,234	2,894	0.46
Forest Areas	261	16	0.06
Communal Lands	9,034	497	0.06
Mid-Zambezi Valley	16,014	11,656	0.73
Parks & Wildlife Estate	12,257	9,752	0.80
Communal Lands	3,757	1,904	0.51
South East Lowveld	8,835	13,037	1.48
Gonarezhou NP & Malapati SA	5,118	11,120	2.17
Save Conservancy	3,496	1,585	0.45
Communal Lands	221	332	1.50
<i>Mozambique Border</i>	<i>1,574</i>	<i>0</i>	<i>0</i>
National Total*	65,367	82,091	1.23
Parks & Wildlife Estate	43,191	74,455	1.75
Forest Areas	2,593	1,117	0.43
Save Conservancy	3,496	1,585	0.45
Communal Lands	16,087	4,934	0.18

* The survey did not include Bubye Valley Conservancy or the Tuli Safari Area and some other small populations that likely add another 1,000 elephants to the estimated total for the country. The area surveyed in Mozambique is not included in the national total or in the South East Lowveld total area

The elephant range in Northwest Matabeleland covers an area of approximately 25,000 km² and includes national parks, safari areas, forest areas, commercial farmland, and communal land - mostly on Kalahari sands (Fig. 2). The population of some 54,000 elephants is part of the larger regional population of about 250,000 in south-eastern Angola, Botswana, Namibia and south-western Zambia. The major component of 45,000 elephants is found in Hwange National Park. At the onset of the rains some elephants disperse from Zimbabwe into Botswana resulting in a shared population between the two countries.

The elephant population in Hwange National Park was approximately 2,000 animals when it was first declared a Game Reserve in 1928 [10]. Elephant impacts on vegetation reached alarming levels by 1964 and a representative of WWF-US advised the then minister of natural resources to act on what was perceived to be an over-population of elephants. The first major cull of elephants took place in the park in 1965 [10]. A major factor contributing to the growth of the elephant population (with a current density of 3/km² in 2014), and of other species, was the provision of artificial water supplies through the dry season [10,37]. The Matetsi Safari Area to the north of Hwange National Park was established in 1972, on what had been a commercial farming area, and the complex, that includes two national parks, carries a lower density of elephant (1.1/km²). Estimated growth of the elephant population since 1980 in Northwest Matabeleland is shown in Fig. 3 below.

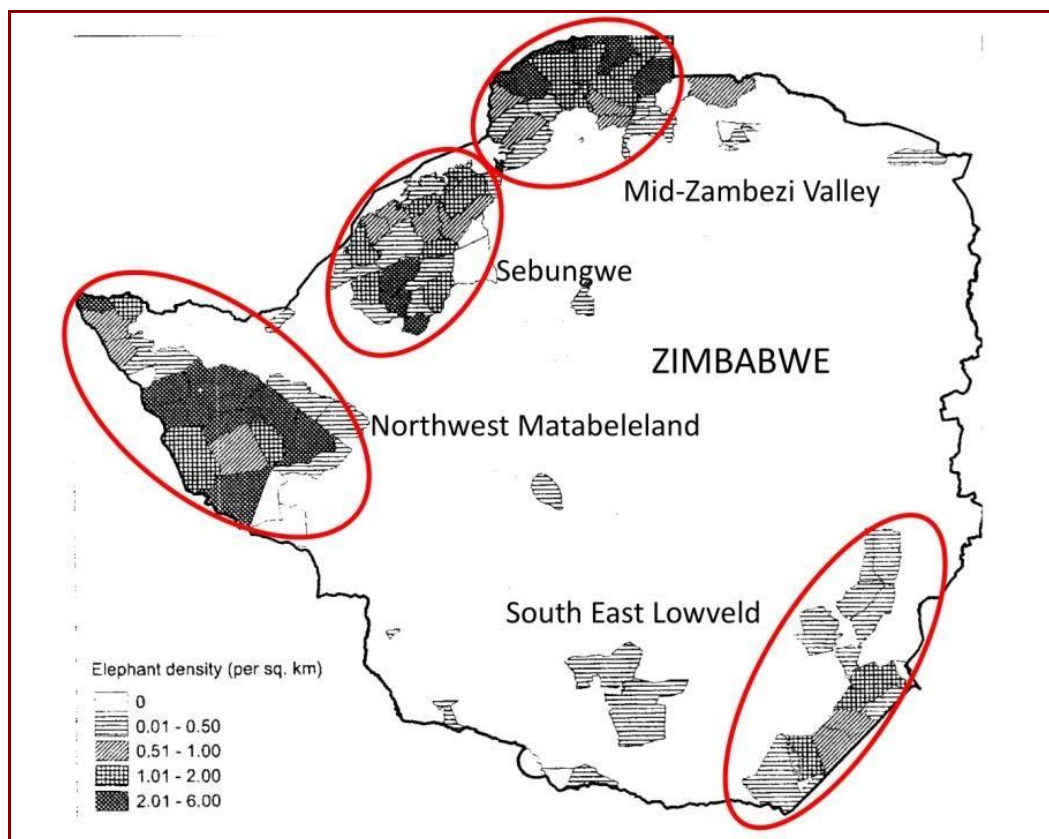


Figure 2. The four regional elephant populations occur within the encircled areas. (Elephant densities are from the 2001 survey [19])

Following the large culls of the 1980s the elephant population of Hwange National Park grew rapidly from 13,000 in 1986 to about 35,000 in the early 1990s and appeared to stabilise at about this number [7]. However, the 2001, 2007 and 2014 dry season estimates of between c. 35,000 and 45,000 [23] suggest that the elephant population in the park may now have stabilised at about this number (or a density of 2 to 3 elephants/km²), with rainfall and water supplies acting as limiting factors.

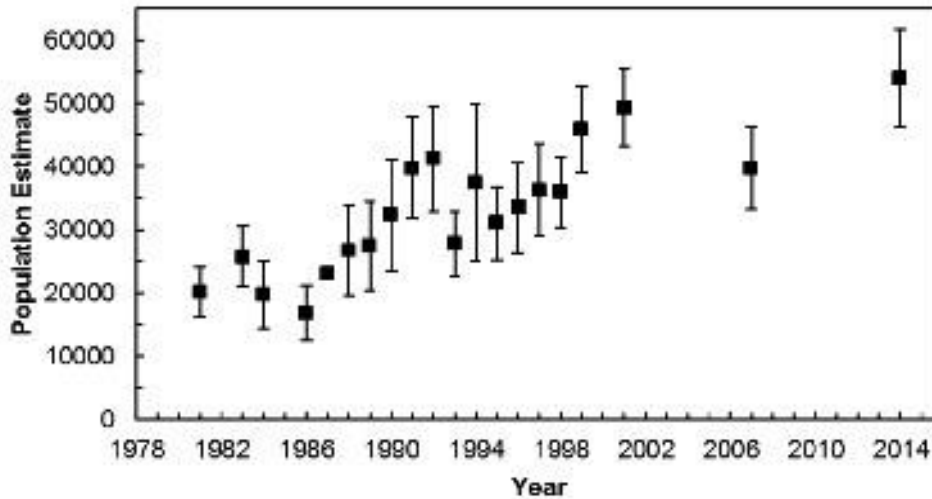


Figure 3. Number of elephant estimated to be NW Matabeleland since 1981. (Source: 2014 Aerial census [24]).

The Sebungwe region covers an arc of 15,000 km² to the south of Lake Kariba. Historically the area was demarcated by tsetse control fences that ran from Binga on the lakeshore in the west southwards to the Sengwa Wildlife Research Area and then north-eastwards to the Kanayati River and Matusadona National Park (**Fig. 2**). The Parks and Wildlife Estate covers 6,234 km² and includes two national parks and two safari areas. There is a single forest area within the region and the remaining area of c. 9,000 km² is communal land. As in the other regions the elephant population grew from about 2,000 elephant in the 1920s to c. 15,000 in 2006 [9,17]. It was recently reduced to an estimated population of 3,500 in 2014 [23] (**Fig. 4**). The human population in the three districts of the Sebungwe has increased from 45,000 in 1950 to some 700,000 in 2013 with population densities of more than 30 per km² in Gokwe North and Gokwe South. The threshold human density at which elephants disappear from settled areas is approximately 15 people/km² [27].

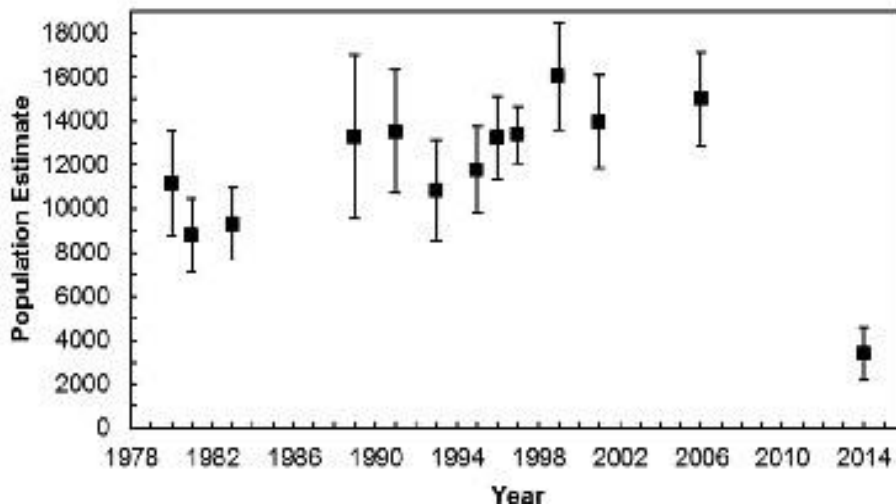


Figure 4. Number of elephant estimated to be in the Sebungwe since 1980 [23].

The mid-Zambezi Valley area of 11,000 km² includes Mana Pools National Park, six safari areas and small, adjacent areas of communal land. Returns from hunting leases and quotas provide an important source of revenue for ZPWLMA. Unlike the Sebungwe the protected areas are

contiguous. The elephant population reached a high of 19,000 in 2001 and between 2001 and 2014 was reduced to 11,000 elephants ^[22] (**Fig. 5**). Culling took place in the escarpment areas of Charara, Nyakasanga and Mana Pools during the 1980s. As in North West Matabeleland, the elephant population in the mid-Zambezi Valley is shared with Zambia in the Lower Zambezi National Park and with Mozambique.

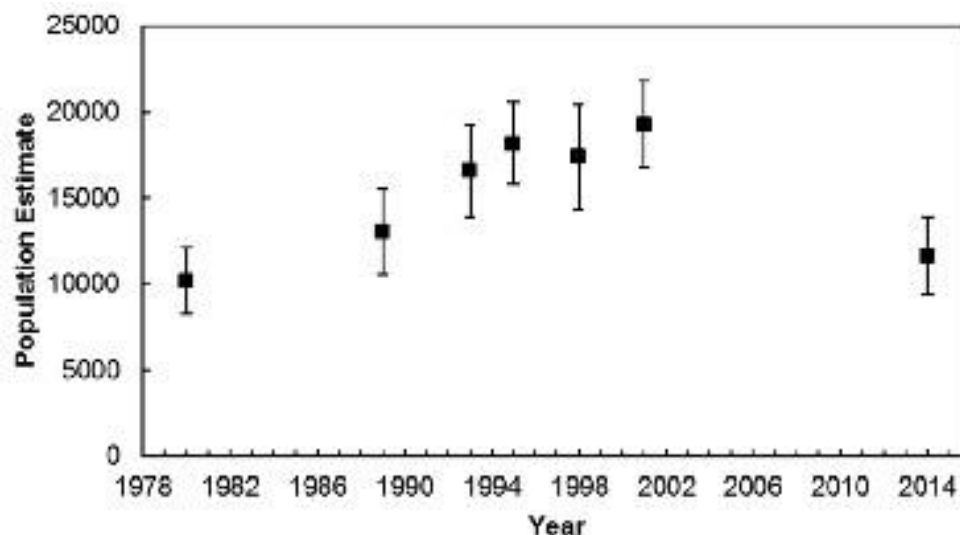


Figure 5. Number of elephants estimated to be in the mid-Zambezi Valley since 1980

[19].

Recent estimates of elephant in the adjacent 16,500 km² in Mozambique south of Cabora Bassa are 1,985 elephants in 2010 ^[19], and 1,600 in 2014 - a decline of 19%. In Zambia, an aerial survey of the Chiawa Game Management Area and of the Lower Zambezi National Park in Zambia in October 2013 ^[45] estimated elephant populations of 405 and 1,795 in the two areas respectively. The elephant density in Chiawa GMA was 0.16/km² and in the Lower Zambezi National Park was 0.41/km².

The South East Lowveld elephant population is centred on the Gonarezhou National Park population of c. 11,000 elephant in 5,000 km² that has been growing at about 5% per annum for the last 20 years (**Fig. 6**). The population falls within the Great Limpopo Transfrontier Conservation Area (TFCA) and there is some movement of elephant between Gonarezhou and Kruger National Park and across the park boundary into Mozambique. Separate elephant populations occur in the Malilangwe, Savé Valley, and Buby Valley conservancies. There is also a small population in the Tuli Safari Area that is shared with South Africa and Botswana in the Mapungubwe TFCA. Overall there are about 13,000 elephant in this range ^[25]. The 2014 survey recorded no live elephants in the Mozambique blocks adjacent to Gonarezhou National Park but returned an estimate of more than 160 elephant carcasses ^[25].

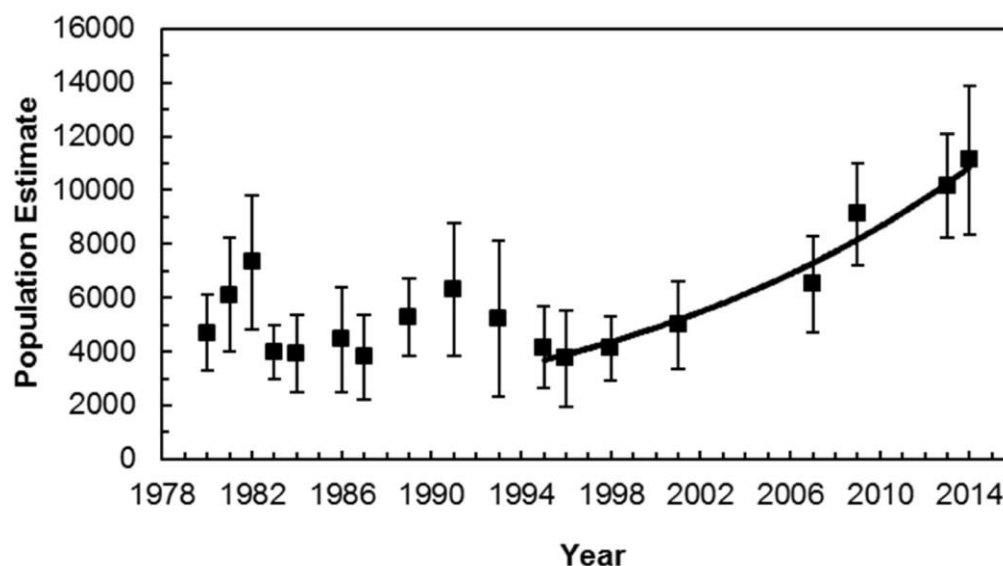


Figure 6. Trend in the number of elephant in Gonarezhou National Park since 1980 [25].

Summary Comment. Law enforcement, mitigating human-elephant conflict [27,35,36], and building supportive and beneficial relationships between protected areas and their neighbours [41] are key issues in all regions. In the Sebungwe, rapid human population growth and settlement in previously uninhabited areas is reducing the range available to elephants and limiting movement between protected areas. Here, rehabilitating protected areas and implementing strong incentives [43] for elephant conservation in the communal lands will be strategically important steps for that region. For all of the four elephant ranges in the country further key specific issues and actions to tackle them will be tackled through the action plans that have been developed for each region (Annexes 9.4 - 9.7). The development of regional action plans and the devolution this involves will also serve to reduce the risk of scale mismatches between institutional/social and ecological scales [17].

1.2 Targets for elephant numbers in relation to conserving biodiversity

Specifying a positive target figure for the number of elephants a country wishes to conserve is entirely appropriate where an elephant population has been greatly reduced as, in the Sebungwe region. In countries, or areas of countries, where there may be an over-population of elephant a legitimate objective may be to reduce their number. The three targets that were adopted as a matter of policy in 1997 by the Zimbabwe Government are:

1. *To maintain at least four demographically and genetically viable elephant populations in Zimbabwe*
2. *To maintain or increase core protected area range of elephant in Zimbabwe*
3. *To maintain numbers / densities of elephant at levels that do not adversely impact on biodiversity conservation goals while contributing to economically viable and sustainable wildlife-based land uses in Zimbabwe*

Maintaining four regional populations each of between 5,000 and 10,000 elephants would meet the first target of maintaining four demographically and genetically viable populations [2]. However, the third target is not likely to be met unless there is sufficient range, in each of the four regions, in which to hold these numbers without compromising the range of biodiversity that the

country is committed to protecting in terms of its policy and legislation. The core state protected area (National Parks and Safari Areas) of elephant range in Zimbabwe is close to 42,000 km². At present this area is carrying more than 70,000 elephants (**Table 1**) or a crude density of about 1.75 elephants/km², a density at which woodlands and biodiversity are compromised [1,3,9,12,15,31,46]. At densities as low as 0.3 elephants/km² woody plant species can be lost and species diversity of birds and invertebrates reduced [15,34]. In miombo woodlands, which form the predominant type of protected habitat in the Zambezi Valley, woody plant species and some animal species will be lost at elephant densities as low as one elephant to 10 km² [31]. As an example, in a miombo woodland area in the Sengwa Wildlife Research Area (southern Chirisa) elephants at a density of < 1/km² were responsible for removing 45% of the woody biomass in just four years [26]. In Chizarira National Park, with elephant densities in excess of 1 per km² tree canopy cover declined from 75% in 1979 to less than 10% in 1993 [44,11]. The only tall trees remaining with dead wood to provide refuges for hole-using birds were found on large termitaria [28].

These examples highlight the dilemma that arises between attempting to protect as many elephants as possible at all costs on the one hand, and to preserve a full range of plant and animal species in protected areas on the other hand [14]. These examples also highlight the consequences of making single resource decisions (e.g. preserve all elephants) that can result in multiple resource consequences (e.g. loss of large trees, plant species, and animal diversity). Recent work in Addo Elephant National Park in South Africa shows that high elephant densities do not increase eco-tourism opportunities and their associated ecological costs are not a requirement for eco-tourism financial sustainability [30].

It is clear that the choice of target elephant population size and density for a particular area or country depends on peoples' values and the values of decision-makers involved [4]. Ecological science can only provide guidance on the likely consequences of the targets that are chosen. For Zimbabwe the current elephant population is considerably higher than was envisaged in the 1980s when the target was to maintain a countrywide population of about 35,000 elephants [13,15]. Elephants are clearly a keystone species and primary ecological engineers in savanna ecosystems [12], and particularly so at high densities in confined ranges. A sensible strategy, therefore, would be to match targets to different areas and habitats and to vary these targets adaptively in time and space depending on long term trends and the results of appropriate programs monitoring the impacts of elephants on ecosystem structure, function and species diversity.

As a result of the above considerations a decision on a target number of elephant for the country is expressed in terms of an upper and lower limit of elephant density that is presently set at between one and two or three square kilometres per elephant (i.e. 0.3 to 0.5 elephants per km²). However, ZPWMA recognises that density is only one factor to be considered as part of population target setting. All the regional population densities except Sebungwe already exceed these density limits, and this will be taken into account in each regional action plan in establishing thresholds of potential concern relating to ecological, economic and social impacts of elephants.

A series of regional action plans has been developed and in the Sebungwe a *tentative target* of 5,000 elephant has been set where the present population is approximately 3,000 in about 7,000 km² of available habitat. This is based on the likelihood that a population of 5,000 will be both genetically and demographically viable² and attainable given the land presently available to elephants. The elephant populations in the remaining regions are well above the thresholds established in the 1980s. An important component of the regional management plans is to carry

² / This concept arose following the re-introduction of wolves into Yellowstone National Park in the USA. Elk avoided habitats in which they were likely to be killed by wolves and this allowed a rapid regeneration of woody plant species that had been over-browsed for years [29, 39].

out the necessary research on the ecological, economic and social impacts of elephants and to develop appropriate, spatially nuanced thresholds, for the management of these populations

Management approaches to maintain elephant populations within the still to be set acceptable upper and lower limits will vary with each region but will, in all areas, focus on improved protection and minimising the illegal killing of elephant. In some areas the management of water supplies may be used and the protection of sensitive habitats may require creating a “landscape or ecology of fear”² through appropriate disturbance of elephants visiting such areas. The most straightforward method of dealing with over-population of a species is culling. However, because the sale of ivory was previously required to cover the costs of large-scale population reductions this option was effectively closed in 1989 by the CITES listing of elephant on Appendix I. Despite the listing of Zimbabwe’s elephant on Appendix II in 1997 and the subsequent sales of stockpiled ivory in 1998 and 2008 trade in ivory has since continued to be constrained by a nine-year moratorium on the sale of ivory. The moratorium is unlikely to be lifted in 2017. The present poaching crisis affecting elephant populations in central and eastern Africa and associated public sentiment also militates against the introduction of culling to manage elephant populations in Zimbabwe.

1.3 Implementation of the Strategy

1.3.1 Institutions and Roles

i) Zimbabwe Parks and Wildlife Management Authority

ZPWMA, through the Parks and Wildlife Act Chapter 20:14, has a national mandate to manage wildlife in the country. By the same instrument it is the lead agency in elephant management, i.e. protection, research, monitoring and sustainable utilization. It forms collaborative arrangements with other institutions to manage elephants in the country.

ii) Intra-governmental institutions

ZPWMA works jointly with security organizations such as Zimbabwe Republic Police (ZRP), Zimbabwe Defence Forces, and the President’s Office to protect the elephant and curb illegal trade in elephant products. ZPWMA works with these institutions through the Joint Operation Command and also on bilateral arrangements. ZPWMA also works with Customs at ports of exit and entry to improve control of the illegal movement of wildlife products across boundaries. iii)

Intergovernmental organizations

ZPWMA works closely with sister organizations from neighbouring countries such as Zambia, Mozambique, South Africa and Botswana in wildlife protection, information sharing and elephant monitoring through bilateral and regional arrangements (SADC). At international levels, ZPWMA is both the CITES Management Authority and CITES Scientific Authority and works with other countries through CITES and other inter-governmental agreements to control trade in elephants and to protect elephants.

iv) Non-governmental organizations

Both local and international organizations partner with ZPWMA in elephant management. They mobilize resources for protection, research and monitoring, and assist with elephant monitoring and research, information sharing and advocacy.

v) Private sector

The corporate community participates in elephant management mainly through resource mobilization. Safari operators report poaching and assist in anti-poaching patrols. Through lease and trophy fees they provide revenue to ZPWMA. They help develop infrastructure, provide funds to communities and supplement diets with meat from trophy animals.

Zimbabwe subscribes to the principle of sustainable utilisation of wildlife resources including elephants. Sport hunting is the principal form of wildlife utilisation whereby offtakes are adaptively managed and monitored through a participatory and science based process. This process allows for sustainable offtakes, and rigorous resource monitoring programmes that allow recruitment within a population to ensure the continued survival of the population in the wild. The high economic value conferred to the elephant through consumptive utilisation has also resulted in increased tolerance by local communities.

BOX 1: The Role of Sport Hunting in Elephant Conservation

Elephants are a charismatic species but can also be destructive when they destroy crops, threaten livestock and even human lives.

To have a future, elephants must have value. Value to the governing authorities and to the local people. The greater the value, the greater the tolerance of them is likely to be. The local people who live closest to them will determine the long-term survival of species like elephant.

Regulated sport hunting converts wildlife into assets for the benefit of local people and the country as a whole. Wildlife can be a most valuable asset and in turn empower local communities and provide basic necessities. When it is viewed as a valuable asset, wildlife becomes an economically competitive land use in Zimbabwe, which leads to habitat preservation instead of habitat destruction and conversion to agriculture or livestock production. Game animals have a survival advantage because of user-pay stewardship systems where use revenue generated from tourist hunters is paid through to wildlife authorities and local communities.

The presence of regulated hunting can also reduce illegal activities. Many hunting operators in Zimbabwe have specialised anti-poaching units. Private operators' lease agreements are being reviewed to include anti-poaching as an obligation of the concessionaire. Regulated hunting is the opposite of poaching. One is a lawful activity designed by government wildlife authorities and experts to perpetuate resources and the other is prohibited thievery outside of and away from the system. The first is like making a bank deposit and the second is like a bank robbery, without sustainable limits.

Trophy hunting revenues are vital because there are not enough tourists to otherwise generate income to support all protected areas. Eco-tourism revenues are typically sufficient to cover the costs of only some of the parks and certainly not to justify wildlife as a land use outside of protected areas. Hunting is able to generate revenues under a wider range of scenarios than eco-tourism, including in remote areas lacking infra-structure, attractive scenery, or high densities of viewable wildlife.

Consequently, elephant and other wildlife populations will be negatively affected through reduced conservation efforts arising from low funding and reduced goodwill from the communities, when in reality the elephant has the economic potential to raise adequate funds to support itself and other species. For these reasons, Zimbabwe confirms its commitment to the sustainable use of elephant and other wildlife in this Action Plan.

vi) Local communities

Local communities are involved in elephant management in CAMPFIRE areas, through sharing

BOX 2: The Importance of Community Based Conservation to the Future of Elephant Management in Zimbabwe

The Community Areas Management Programme for Indigenous Resources (CAMPFIRE) of Zimbabwe has been widely regarded as one of Africa's most successful contemporary conservation initiatives. It permits the residents of communal lands – basically the poor rural communities – to share in the benefits generated by wildlife utilization on those lands by granting Appropriate Authority to Rural District Councils (RDCs) to manage wildlife on communal lands and requiring a certain percentage of revenue to be paid to the wards and councils.

CAMPFIRE operates in about 50,000 km² (12.7%) of land in Zimbabwe. This is roughly equivalent landmass to the Parks and Wildlife Estate. CAMPFIRE encompasses about 777,000 households with an average family size of five, who face food insecurity and deep poverty (average income \$1 a day).

Between 1994 and 2012, CAMPFIRE generated \$39 million of which \$21.5 million was allocated to communities and used for resource management (22%), household benefits (26%), and community projects (52%). About 90% of CAMPFIRE's revenue comes from hunting, with elephant hunting contributing more than 70% of annual revenue.

Based on the Constitution of the CAMPFIRE Association as amended in 2007, all major hunting RDCs use CAMPFIRE revenue-sharing guidelines. In these districts safari operators pay revenue directly into community-controlled bank accounts using the following breakdown: CAMPFIRE community share (55%), RDC fees (41%), CAMPFIRE Association levy (4%).

Despite its achievements CAMPFIRE still faces fundamental challenges. In particular, the development strategies of households in CAMPFIRE areas focus on land uses that are incompatible with wildlife such as human immigration to rural areas, the extension of basic agricultural schemes and increased livestock numbers. Other CAMPFIRE challenges include: (i) the downturn in Zimbabwe's economy and tourism sector post-2000, (ii) great reliance on consumptive trophy hunting and less focus on other uses and non-consumptive uses of natural resources, (iii) increasing human populations averaging 16-20 people per km² in some key wildlife districts, and (iv) lack of re-investment in development, fixed assets, human capital, and management and protection of wildlife in CAMPFIRE areas.

Despite these challenges, CAMPFIRE stands very high in the agenda of Zimbabwe's Government, and a review dedicated to improving the programme, including greater devolution of ownership of wildlife to communities, is ongoing and should be finalized by the end of 2015. Zimbabwe's Government recognizes that the survival of wild animals depends entirely on those among whom they live. Unless local people want to save them, wildlife will be poached to the point where just a few remain in fortified reserves. CAMPFIRE is meant to avoid this and the future of wildlife in communal areas rests on the success of this programme.

of information, advocacy and wildlife protection. They report human-elephant conflicts and carryout some of the conflict management activities.

1.3.2 Funding and resource mobilization

Adequate and sustainable funding and provision of other resources are important to effective protection of the elephant and curbing illegal trade in elephant products. Resources are mobilized from within ZPWMA, by the private sector, and by intergovernmental and nongovernmental organizations. Partnerships between ZPWMA and other stakeholders are some of the innovative measures being developed to secure funding for elephant conservation. There may be a need for the Government to provide additional support to the conservation of elephants given the present poaching crisis affecting the species continentally.

1.3.3 Coordination

i) ZPWMA

ZPWMA takes the lead in coordinating other institutions in elephant conservation activities in the country. It will convene and chair the Elephant Management Committee meetings. **ii)**

Elephant Manager

This Action Plan provides for the appointment of an Elephant Manager within ZPWMA who will be responsible for coordinating elephant management in the country. The Elephant Manager will primarily work through various Elephant Management Committees that will be established pursuant to this Action Plan. The Elephant Manager will liaise with the International Conservation Office on international matters affecting elephant conservation and also liaise with the CAMPFIRE office for matters affecting the conservation of elephants in CAMPFIRE districts. The draft Terms of Reference for the Elephant Manager are provided in Annex 9.7. **iii) Elephant Management Committees**

A National Elephant Management Committee and four Regional Elephant Management Committees (Zambezi Valley, Sebungwe, Northwest Matabeleland and South East Lowveld) will be established. The National Elephant Management Committee will meet at least once annually to review progress in implementing the Action Plan. The National Committee will document that progress in implementing and any suggested revisions to the Action Plan, and make their report available to the Director General of ZPWMA.

The four Regional Elephant Management Committees will meet at least twice in a year to review the implementation of each regional plan. The Committees will strengthen links with various bodies at national and regional levels including within the TFCA framework. ZPWMA will convene and chair the regional Committee meetings. The draft Terms of Reference for the Elephant Management Committees are provided in Annex 9.5.

1.3.4 Monitoring and evaluation

Monitoring implementation of this Action Plan will be done using the Key Performance Indicators contained in Section 4. Monitoring the implementation will be done and reported on by the Elephant Manager on a monthly and annual basis. A major evaluation of progress will be done every five years. Monitoring and evaluation will be done at each area level in a given elephant region, at the regional level and at the national level.

1.3.5 Links with continental (African Elephant Action Plan / SADC) and other regional initiatives

This Action Plan recognizes the existence of the African Elephant Action Plan and initiatives that are currently taking place at a continental level, including by the African Union. These include the development of the Common Strategy on Combating Illegal Exploitation and Illegal Trade in Wild Fauna and Flora in Africa. At the SADC level initiatives involve developing a Plan of Action and implementing the SADC Protocol on Wildlife Conservation and Law Enforcement. This Action Plan will be reviewed periodically in the light of developments that are taking place in the SADC Region, Africa and beyond.

1.3.6 Regional strategies within Zimbabwe

The devolution of management oversight to regional levels, with more detailed action plans within the national plan, provides the basis for effective adaptive management at regional and local levels.

As set forth in the framework below (Sections 3 and 4), four regional plans have been drafted to address the unique challenges of each region, and will implement the broader goals of this national Action Plan at a more specific level.

In addition, Park-level plans for specific protected areas (including Hwange National Park, Mana Pools National Park, and Gonarezhou National Park) contribute to this Action Plan and govern the management of elephant within those protected areas.

BOX 3: Towards Greater Coordination with the AEAP

The African Elephant Action Plan (AEAP) was finalized and approved as a consensus document by all 37 African elephant range states in the margins of the 15th meeting of the Conference of the Parties to CITES (Doha, Qatar 13-25 March 2010).

The AEAP contains eight prioritised objectives identified as the most important measures required to protect African elephants across their range.

OBJECTIVE 1: Reducing illegal killing of elephants and illegal trade in elephant products

OBJECTIVE 2: Maintaining elephant habitats and restoring connectivity

OBJECTIVE 3: Reducing human-elephant conflict

OBJECTIVE 4: Increasing awareness on elephant conservation and management of key stakeholders (e.g. policy makers and local communities among other interest groups)

OBJECTIVE 5: Strengthening range states' knowledge on African elephant management

OBJECTIVE 6: Strengthening cooperation and understanding among range states

OBJECTIVE 7: Improving local communities cooperation and collaboration on African elephant conservation

OBJECTIVE 8: Implementing the AEAP

The objectives of the AEAP were considered and included in drafting this action plan. ZPWMA has been careful to address its international obligations in this Action Plan§.

1.3.7 Protecting elephant for the future

Poaching and the illegal wildlife trade are serious concerns for all range states. Poaching has decimated elephant populations in central and eastern Africa, and in Mozambique. Although the 1997 Policy and Plan for Elephant Management in Zimbabwe did not need to prioritise law enforcement, protecting elephant for the future has become a primary objective of this Action Plan, and will be a primary focus of resource utilisation by ZPWMA.

1.3.8 Human elephant conflict

As Zimbabwe's human population grows, elephant are being restricted to smaller areas and as their populations expand they increasingly move out of their designated habitat, and raid crops and sometimes threaten human lives. As a result in many rural areas where elephants exist in Zimbabwe, human-elephant conflicts are increasing, creating substantial negative attitudes to the conservation efforts of elephants. These are often among the poorest rural farmers, which makes the issue complex in social and economic terms. Unresolved conflicts stimulate poaching or retaliation. Poachers or retaliators can be seen as "local heroes" because they provide meat to the communities and resolve the conflict. A major challenge for elephant management is keeping human-elephant conflicts to a minimum.

Developing a Social, Economic, and Cultural Framework has been identified as a Key Component of this Action Plan in an effort to address and reduce human-elephant conflicts.

BOX 4: Towards a Comprehensive Strategy to Reduce Human-Elephant Conflict

Some methods of reducing human-elephant conflict focus on curing the effects, not the cause. Such methods include chilli sprays, fences, and evening patrols to scare off marauding elephants. However, these are not necessarily longterm solutions. Long-term solutions require growing the tolerance of local communities for elephant by ensuring the communities benefit from having elephant on their lands. Tolerance is likely to increase if communities realise and appreciate economic returns earned from the sustainable use of elephant. Economic returns may be generated by consumptive and non-consumptive tourism. The devolution of decision-making on aspects of problem animal control to communities may result in better outcomes for the management of the costs and benefits of this activity.

Problem animal control includes disturbing, removing, translocating, or ultimately killing those elephant that persist in damaging crops or threatening human life. Clearly, no one management option will successfully deal with all problem elephants and conflict situations. As part of this Action Plan, ZPWMA will undertake additional research on problem animal control and minimizing conflict, and will develop new solutions and a more comprehensive response to these issues.

2. LOGIC AND STRUCTURE OF THE PLAN

The strategic framework developed at the Hwange workshop in December was based on the Logical Framework structure and the development of clearly stated objectives, outputs and the necessary and sufficient activities (or actions) required to achieve the outputs within a specified time frame (**Table 2**). The structure requires a set of key performance indicators that are intended, as far as possible, to be SMART, i.e. Specific, Measurable, Achievable, Realistic and Time-bound. The five key components of the plan are:

1. Protection and law enforcement
2. Biological monitoring and management
3. Socio-economic and cultural sustainability
4. Building conservation capacity
5. Coordination, collaboration and programme management

Table 2. Structure of the Action Plan for Elephant Conservation and Management in Zimbabwe

Long-term Vision	The Long-term Vision has retained the essential components of the 1997 plan and remains applicable to the period of this plan.
Targets	The three Targets included in the 1997 plan are retained but the provision to maintain or increase elephant range is not linked to a specific national benchmark as it was in 1997 because this will vary in the four elephant ranges or regions
Key Components	The five Key Components are the primary themes or headings of the strategy under which the framework is organised. The ten policy and management objectives included in the 1997 plan fall within these headings.
Strategic Objectives	The Strategic Objectives reflect briefly but more explicitly the policy intention for the respective components.
Outputs (expected outcomes)	The Outputs are statements that reflect the expected results that will be realised during the time frame of the Action Plan. Outputs are therefore expressed in the past tense.
Key Activities (actions)	Key Activities represent the necessary and sufficient actions that need to be completed to achieve the Outputs. They are the actions on which the major emphasis should be placed. <i>National level Activities can be cast as Outputs at the regional level, with more detailed time specific activities, KPIs and budgets at that level.</i>
Key Performance Indicators (KPIs)	The KPIs provide a basis on which to measure and monitor the success or otherwise of the Strategic Objectives, Outputs and Activities.
Means of Verifying the KPIs	It is clearly necessary for the verification and monitoring of KPIs that the manner in which they can be tracked and verified need to be clearly established. Equally important is the need for monitoring protocols to be standardised across local and regional levels so that national and regional level KPIs and statistics can be compiled. This will then allow valid comparisons of performance across regions and local areas to be made.
Implementation Strategy	ZPWMA, the Elephant Manager and the Elephant Management Committees will interact and collaborate with a wide range of agencies and stakeholders in the implementation of this Action Plan.

The top-level strategic components of the Action Plan encompassing the Long-term Vision, Targets, Key Components, Strategic Objectives and Outputs are summarised on page 17 in Section 3 below. The top-level components of the plan are then followed by a set of tables in Section 4 (page 18) that provide action plans for the expected Outputs (or outcomes) of each the five strategic components of the plan. The Activities and KPIs within these tables are set at a national strategic level. They will be taken up, as appropriate, during the development of Regional Action Plans for each of the four regional elephant populations in the country.

Activities listed at the national level will, for the most part, form **Outputs** at the regional level. These Outputs have generated more detailed regional and local specific activities and actions with specific KPIs and means of verification.

The four regional Elephant Action Plans that have been developed as part of the National Action Plan are included in Annexes 9.1 to 9.4.

3. VISION, TARGETS, AND KEY COMPONENTS

Long-term Vision: To conserve elephants at levels that will enable them to contribute to the conservation of biodiversity, national development and Zimbabwe's cultural heritage

Targets:

1. To maintain at least four demographically and genetically viable elephant populations in Zimbabwe
2. To maintain or increase core protected range of elephant in Zimbabwe
3. To maintain numbers / densities of elephant at levels that do not adversely impact on biodiversity conservation goals while contributing to economically viable and sustainable wildlife-based land uses in Zimbabwe

Key Components	1. Protection and Law Enforcement	2. Biological Monitoring and Management	3. Social, Economic and Cultural Framework	4. Building Conservation Capacity	5. Coordination, Collaboration and Programme Management
Strategic Objectives	Objective 1. Ensuring effective protection of all populations of elephant in Zimbabwe	Objective 2. Implementing effective biological and ecological management to achieve populations that are within upper and lower acceptable limits in numbers and distribution	Objective 3. Implementing strategies that enhance the contribution of elephant to rural livelihoods and national development	Objective 4. Ensuring that sufficient and appropriately trained personnel, equipment, infrastructure and financing are mobilised, available and used efficiently and effectively	Objective 5. Ensuring effective coordination and collaboration with national and international stakeholders to achieve these strategic objectives
Outputs	Output #1: Management actions, security and law enforcement to minimise illegal losses of elephants and their habitats from all populations implemented	Output #2: Adaptive management to achieve viable populations in all four sub-populations implemented	Output #3: Fair distribution of financial benefits from elephants improved and tolerance for living with elephants increased	Output #4: Sufficient numbers of trained, equipped, motivated and effective personnel are deployed and operational	Output #5: Coordination mechanisms to assess and review adaptive elephant population management and strategic planning established and operating

4. ACTION PLANS

4.1 Protection and Law Enforcement - Ensuring effective protection of all populations of elephant in Zimbabwe

Output: Management actions, security and law enforcement to minimise illegal losses of elephants and their habitats from all populations implemented

KPI: Illegal losses of elephant from at least 90% of elephant populations reduced to less than 5% by 2020, and less than 5% of elephant habitats encroached by settlements by 2020

MV: National level monitoring data on illegal activity, successful convictions, carcass records, status and trends of all elephant populations; verified data on extent of encroachment and of available elephant habitat

Key Activities/Actions	Key Performance Indicators	Means of Verification	Time Frames	Responsibility
1. For each key population establish a highly trained rapid response anti-poaching unit for deployment to areas under threat	1. An equipped rapid response unit established and operating jointly with ZRP in each region by June 2016	Inception report for each unit Monthly reports of operation from each unit Number of joint operations	By June 2016	ZPWA / ZRP DG, DC, RMs
2. Informer systems enhanced and supported at national, regional, national and local levels	1. An active informer system/network operating within each region at both regional and local levels by Jan. 2016 2. National level informer system targeting middle men and higher crime syndicates operating by Jan. 2016	Operational reports Records of arrests and successful prosecutions resulting from informer reports Records of payments for information	By January 2016 [DG, IM, RMs

3. Improve investigation and prosecution of crimes	<ol style="list-style-type: none"> At least two of law enforcement staff trained in scene of crime collection and preservation of evidence, ballistics evidence, etc. in each area/station level Percentage of investigations resulting in successful prosecutions from each region greater than in 2014 Monthly liaison sessions on wildlife crime and law enforcement held with members of the judiciary 	<p>Staff training records Monthly reports Court records Minutes of meetings with judiciary (prosecutors and magistrates)</p>	Immediate and ongoing	IM, RMs, AMs
Key Activities/Actions	Key Performance Indicators	Means of Verification	Time Frames	Responsibility
4. Set up and maintain national and local intelligence databases	1. National, regional and local databases recording and analysing illegal activity (nature, time and locality of activity and profiles of those involved if known)	Inspection of operating databases	Immediate and ongoing	IM, RMs, AMs
5. Enhance social (community) involvement in law enforcement through incentive schemes and introduction of hotlines for reporting wildlife crime	<ol style="list-style-type: none"> Incentive schemes (see Section 4.3) that encourage the public and members of rural communities to contribute to law enforcement (e.g. through informer hotline) established in each region Larger number of incidents of community contribution to law enforcement (e.g. whistle blowers) by Dec. 2017 Number of hotlines established and assessment of their performance 	<p>Record and analysis of operating incentive schemes and hotline reports Record and analysis of performance of hotlines</p>	Immediate and ongoing	RMs and AMs
6. Reduce illegal settlement in all wildlife areas	1. Illegal settlements reduced to less than 5% of wildlife areas by 2020 (i.e. state and community protected areas)	Records and maps of illegal settlements and of wildlife land recovered	Ongoing to 2020	DG, AMs, CE, CAMPFIRE Assoc. RDCs
7. Ensure full compliance with hunting and guiding regulations and quotas set	1. Quota setting models reviewed and, if necessary, revised models implemented by Dec. 2015 annum by Dec. 2016	<p>Proceedings of workshop and revised models Record of infringements and penalties and analysis of trends</p>	Immediate and ongoing	DG, DC, RMs, IM, and SOAZ, ZHA, ZPGHA

8. Revisit the appointment of honorary officers to assist in law enforcement	1. Proposed revision to the Parks and Wildlife Act drafted and submitted to Ministry EWC by Dec. 2015	Draft of proposed revision to the Act and letters to Ministry	Dec. 2015	DG, legal officer in ZPWMA
9. Enhance international and transboundary collaboration in law enforcement	1. Quarterly meetings on law enforcement collaboration and activities between law enforcement agencies of neighbouring countries established at regional / transboundary park level by Oct. 2015 2. Broader collaboration with Interpol, TRAFFIC, TWENS, and other international law enforcement entities	Minutes of meetings Record of joint cross border law enforcement activities Records of participation in workshops, TWENS, etc.	Oct. 2015 Immediate and ongoing	DC, RMs,IM, AMs, TFCA Coordinator

An example of a National level **Activity** being used as an **Output** at the regional level is provided on below. The example is drawn from the Action plan for the Sebungwe region. It can be seen that what was an Activity (#2 in the table above) at the national strategic level can be defined more specifically to suit the local situation and in much greater detail at this level than is appropriate in the national Action Plan.

Example extracted from Sebungwe regional plan

LAW ENFORCEMENT						
Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative Costs	Lead agency

2. Informer network, Investigation and intelligence system strengthened	1. Recruit informers and contacts 2. Maintain hotline for whistleblowers 3. Procurement of two vehicles and two motor bikes . Recruit and train investigators (6) and deploy strategically . Constant liaison with informers . Standardise rewards to informers	1. Number of arrests and successful convictions based on information from intelligence system 2. Number of incursions reported on/reacted to by local communities 3. Number of reports per informer leading to arrests and convictions	Validation of informer record Records and reports of training sessions Whistle-blower reports	Within one year and then ongoing	Vehicles Reward payments Telecommunications equipment Vehicle maintenance and fuel	ZRP/PWMA
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4.2 Biological monitoring and management - Implementing effective biological and ecological management to achieve elephant populations that are within upper and lower acceptable limits to change in numbers and distribution

Output: Monitoring programmes and research to support science based adaptive management of elephants in all populations implemented

KPI: Elephant population within each sub-region is genetically and demographically viable and within the preferred lower and upper limits in 2020

MV: Results of aerial and other censuses and analyses of population structure and viability

Key Activities/Actions	Key Performance Indicators	Means of Verification	Time Frames	Responsibility
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1. Monitor elephant population numbers, structure, mortality and trends using aerial, ground and ranger based methods among others	1. Elephant populations and carcass ratios estimated and distribution determined from aerial surveys at least every three years for each regional population 2. Records available for all areas of all elephant deaths with data on dates, locations, cause of death, reason killed (trophy hunting, problem animal control, natural mortality, management, illegally killed elephants, etc.), age, sex, tusk size	1. Survey and patrol reports 2. Completed annual returns for elephant mortality from all areas	1. Next aerial surveys due in 2017 2. Immediate and ongoing	DG, CE, RMs, AMs
2. Monitor impacts of elephants on habitats and diversity of selected indicator plants and animal species	1. Annual trends in tree canopy cover 2. Annual trends in species diversity 3. Annual trends in selected indicator species	Monitoring reports	Ongoing Annual reviews	DC, CE
3. Use research findings, expert opinion and informed public opinion to establish thresholds of potential concern (TPCs) to initiate management action in respect of elephant impacts on protected areas	1. Thresholds of potential concern (TPCs) established for at least five key areas / habitats and selected indicators of change monitored every two years	Documented TPCs	Ongoing through to 2019	DG, DC, CE, Universities (MOUs) and Researchers
4. Carry out appropriate management actions when populations exceed, or are projected to exceed, TPCs	1. Management actions taken in relation to TPCs being exceeded (e.g. manipulate water supplies)	Records of management actions considered and actions taken	2017-2019	DG, DC

Key Activities/Actions	Key Performance Indicators	Means of Verification	Time Frames	Responsibility
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5. Monitor age and quality of trophies and adjust quotas to maintain desired levels of trophy quality	1. Database and field recording protocols and forms established and operating by Dec. 2015 2. Annual analysis of trophies taken as % of quota, and trend in trophy quality and ages of trophies	Consolidated annual records of trophies taken Annual report of trophy quality by region for quota setting workshop	Dec. 2015, then annual and ongoing	DC, CE, AMs, SOAZ
6. Define current elephant range and explore options for extending range and maintaining connectivity between fragmented populations	1. Map of current elephant range based on 2014 survey results and other information available 2. Estimates every two years of range expansion / contraction for each region based on all available information 3. Use and effectiveness of corridors assessed, inter alia, from aerial surveys, ground sightings and reports, satellite collared animals	Current estimate of elephant range and subsequent bi-annual estimates and associated maps Reports on elephant locations from ground and aerial sightings	Initial map by Dec. 2015 Immediate and at bi-annual intervals	DC, CE, RMs, AMs in conjunction with SOAZ, ZPGHA and CAMPFIRE Association
7. Reporting to international monitoring systems (e.g. AED, ETIS, and MIKE)	1. Timely reports submitted as required with copies to regional and national levels	Copies of reports lodged at regional and national levels	Annual or as required by international obligation	DC
8. Recognising the long response time of elephants to management interventions, use modelling to project alternative outcomes or scenarios of management	1. Number of instances in which models were used to project alternative outcomes of elephant management actions	Management and associated modelling reports	Ongoing	CE, Researchers

4.3 Social, Economic and Cultural Framework - Implementing strategies that enhance the contribution of elephant to rural livelihoods and national development

Output: Fair distribution of financial benefits from elephants improved and tolerance for living with elephants increased

KPIs: 1. Annual assessment of elephant derived benefits reveals that they increasingly dispersed more equitably between deserving stakeholders and the contribution to national development is assessed. 2. Trends in elephant numbers and human wildlife conflict in non-protected areas assessed and reduced.

MV: Report on annual assessment of the distribution of revenues from consumptive and non-consumptive use of elephants and record of HWC incidents

Key Activities/Actions	Key Performance Indicators	Means of Verification	Time Frames	Responsibility
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1. Provide incentives and promote partnerships and joint venture opportunities to strengthen elephant management, including across land use boundaries	1. Policy instruments that demonstrate and establish incentives to conserve elephants 2. Higher levels and growing trends of private and community investment in elephant conservation measures 3. Lower number of poaching incidents/ higher number of arrests based on prior information and leads from communities / land holders	Documented policies and list of operating partnerships / joint ventures that promote elephant conservation and management Record of investments in elephant conservation measures assembled by elephant programme manager/ coordinator	Ongoing	DG, CA, RDCs, Private sector
2. Explore additional elephant-based tourism and sustainable utilization opportunities	1. Higher number of elephant-based tourism and / or sustainable use projects established (e.g. PPCPs)	Record of projects initiated and their success rates	Ongoing	DG, CA, RDCs, Private sector
3. Facilitate the transparent distribution of the benefits and costs of elephant management and conservation	1. Policy instruments adopted that result in more transparent and equitable benefit distribution than benchmark assessed in 2015	Annual record of distribution of elephant derived benefits (revenue, development projects, products received by beneficiaries) and costs of elephant conservation	Ongoing	DG, CA, RDCs, Private sector
Key Activities/Actions	Key Performance Indicators	Means of Verification	Time Frames	Responsibility
4. Implement effective techniques and land use strategies, and protocols to mitigate human-elephant conflict	1. Higher levels of investment (funds and manpower) provided for mitigating human elephant conflict by ZWMA, communities and partners 2. Protocols for land use and HEC developed and implemented by June 2016 3. Conduct research and develop strategy for wildlife-based land use systems and promotion of the establishment of community conservancies for areas within the elephant range with high human population densities and human settlements	Records of human-elephant Conflict incidents (in HEC Database) Summaries from human-elephant conflict database reported at annual meetings of Elephant Management Committees Research report on strategies to develop wildlife-based land used system	Protocols developed by June 2016 and ongoing Research report by Dec. 2016	DG, CA, RDCs, Traditional Leaders, Private sector

5. Promote effective recovery and use of all products from dead elephants	1. Proportion of dead elephants from which products were recovered 2. Revenue from products recovered	Records of items recovered and revenue realised from raw products	Ongoing	AMs, RDCs, Private sector
6. Include information on elephants and their conservation in school curricula and promote environmental education in rural areas adjacent to key elephant populations	1. Number and quality of elephant information packages developed and delivered to schools 2. Proportion of schools in, or neighbouring, elephant areas receiving and using information on elephants	1. Information packages developed 2. Reports of delivery and use of elephant conservation information packages	By June 2017 and Ongoing	ZPWMA Extension and Interpretation, NGOs, Ministry of Education
7. Develop and implement an effective communication strategy for local, regional and international	Information strategy developed and launched by June 2016	Information strategy document	By June 2016 and ongoing	DG, PRM

Notes: 1. Activity #1 above is difficult to define precisely at this stage and will require further examination both in terms of policies that may be required and in terms of the precise mechanisms that may be introduced to encourage more active participation by a range of stakeholders in the conservation and management of elephants (and wildlife in general).

2. Activity #3 includes components of capacity building in partners/stakeholders in order for them to take on additional responsibilities that will merit a greater share of benefits.

4.4 Building Conservation Capacity - Ensuring that sufficient and appropriately trained personnel, equipment, infrastructure and financing are mobilised, available and use efficiently and effectively

Output: Sufficient numbers of trained, equipped, motivated and effective personnel are deployed and operational

KPI: Law enforcement, monitoring and research staff are trained, equipped, and deployed at a levels that enables them to implement this action plan as specified in the activities under components 1, 2 and 3

MV: KPIs for components 1,2 and 3 are being met, staff training records, equipment register, staff deployed for elephant conservation

Key Activities/Actions	Key Performance Indicators	Means of Verification	Time Frames	Responsibility
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1. Secure funding to initiate the implementation of this Action Plan	<p>1. Funds and allocated budget for elephant conservation meet annual requirements for effective conservation as measured by KPIs for activities 2-8 below and those of Components 1, 2, and 3</p> <p>2. More than 75% of revenue derived from elephants channelled into elephant conservation and management</p>	Record of funds available (USD) and investment by ZPWMA, Private sector, NGOS, and CAMPFIRE in elephant conservation measures (Compiled annually by Elephant Manager)	Ongoing	DG, EM
2. Establish sustainable funding programs to build and maintain necessary human resources to strengthen elephant conservation and management capacity	<p>1. Manpower density for protection of elephant (No. of km²/operational field person)</p> <p>2. Level of effective deployment of field staff (e.g. record % of available man days spent on patrol in the field - see example of records envisaged under Section 8 Notes on monitoring, page 29)</p>	<p>Consolidated record of number of field personnel and days operational (law enforcement, research and monitoring, elephant management) for each area in the elephant range compiled and reported on at annual planning meetings</p> <p>Records of vehicle months, VHF radio operation, fully functional stations, operating research facilities, compiled and consolidated at station, area and regional levels and reported on to the Elephant Management Committees biannually</p>	By June 2016 Immediate action for some key areas (e.g. Sebungwe and Zambezi Valley) and by June 2016 for all regions	DG, DC
3. Analyse current capacity and identify needs	1. Current capacity assessed, needs identified and plan developed to meet needs	Assessment and needs report	By Dec. 2015	DC, CE, HMS, HRM, RMs, AMs
Key Activities/Actions	Key Performance Indicators	Means of Verification	Time Frames	Responsibility
4. Maintain and/or initiate continuity in research and monitoring necessary for the conservation and adaptive management of elephants and habitats	<p>1. Number of research programs</p> <p>2. Research-person days spent on monitoring / assessing elephant impacts in relation to TPCs</p>	Research reports and papers on elephant conservation and management	Ongoing	DC, CE

	3. Research person days spent on monitoring elephant population parameters in each population/region			
5. Strengthen research capacity in ZPWMA and collaborate with other research institutions	1. Number of researchers (internal and external), budgets, equipment, vehicles, and active research programmes increased by more than 25% by Jul 2016 and 50% by July 2017	Staff register, budget allocations, Asset register, research permits issued, MOUs with collaborators, reports and published papers on elephant conservation and management	Immediate and ongoing through 2016 and 2107	DC, CE
6. Establish training and inservice retraining of personnel in law enforcement, research and monitoring, education and awareness, community elephant management, etc.	Increased levels (50 to 100%?) compared to June 2015 levels in: 1. Number of training days and programmes initiated 2. Number of staff trained (rangers, ecologists, extension officers) 3. Number of communities trained and implementing elephant management programmes 4. Number of elephant management campaigns conducted	Record of staff training and re-training in staff files and annual summary report of training Record of communities trained Record of training programmes	Immediate and ongoing through to 2019	DC, CE, HMS, HRM
7. Strive to achieve best standards for elephant management, including any forms of utilization	1. Best standards for elephant management in Zimbabwe, based on international standards, drafted and distributed to all practitioners	Record of best practices complied with/ not complied with	By June 2016 and ongoing	DG , DC, CE, HMS
8. Engage available external expertise	1. Number of expert driven decisions made from consultations 2. Number of collaborative and outsourced projects with external experts	Reports and record of collaboration with external experts	Ongoing	CE, HMS

4.5 Coordination, collaboration and programme management - Ensuring effective coordination and collaboration with national and international stakeholders to achieve these strategic objectives

Output: Coordination mechanisms to assess and review adaptive elephant population management and strategic planning established and operating

KPI: National Elephant Manager (Coordinator?) appointed and national and regional elephant conservation committees with appropriate stakeholder participation appointed and information dissemination programme in place

MV: National Coordinator monthly reports, minutes of committee meetings and planned actions completed

Key Activities/Actions	Key Performance Indicators	Means of Verification	Time Frames	Responsibility
1. Establish a national elephant conservation & management steering/implementing committee that includes stakeholders meetings at least bi-annually to review progress and to develop an annual implementation plan	1. National committee functional and meeting once a year (or more if required) 2. Committee meeting minutes, with actionable points approved, circulated within one month of meetings 3. Number of resolutions/action points, acted upon	Record of meetings, minutes, actions approved and completed	Immediate with first meeting by 30 th Nov 2015	DC, EM
2. Establish four regional management committees to meet at least twice each year and implement regional plans	1. Four regional committee functional and meeting twice a year 2. Committee meeting minutes, with actionable points approved, circulated within one month of meetings 3. Number of resolutions/action points, acted upon	Record of meetings, minutes, actions approved and completed	Immediate with first meetings before 30 th Nov 2015 Regional plans completed by 30 Oct.	RMs, AMs
3. Strengthen links with neighbouring states to confer on the management of shared elephant populations, particularly in relation to TFCA populations	1. Consultative meetings held with neighbouring states on shared elephant populations at least twice each year 2. Joint cross border projects initiated and completed	Record of attendance at and reporting to regional and international elephant conservation bodies of which Zimbabwe is a member Record of project initiated/completed	Ongoing and projects initiated in 2016	DG, DC, TFCA Coordinator

Key Activities/Actions	Key Performance Indicators	Means of Verification	Time Frames	Responsibility
4. Establish a full-time elephant manager to be responsible for coordinating the implementation of the Action Plan	<ol style="list-style-type: none"> 1. Elephant manager appointed with full terms of reference 2. Monthly reports from elephant manager on implementation 	<p>Elephant manager's contract and date of appointment</p> <p>Record of reports by the person in the elephant management position</p>	Immediate and by November 2016	DG
5. Strengthen coordination between the hunting industry and the elephant management programme	<ol style="list-style-type: none"> 1. Regular meetings and a workshops convened with the hunting industry on hunting and elephant management issues 2. Key issues resolved by June 2016 	<p>Record of meeting and workshop proceedings</p> <p>Record of elephant hunting issues resolved</p>	Immediate and ongoing	DC, EM
6. Implement an effective information dissemination and communication strategy, including regular progress reports on the implementation of the plan	<ol style="list-style-type: none"> 1. Outreach programmes conducted 2. Information packages produced on elephant conservation 3. Research papers published 	<p>Reports, brochures, flyers, web site</p> <p>Published papers</p>	Ongoing	PR, CE, HMS

5. NOTES ON MONITORING

Monitoring of a wide range of activities and actions will necessarily form an important, if not vital, component in the implementation of the action plans. It will require careful thought as to precisely what should be monitored and in the design of the recording protocols and forms that will be used. Ideally records should in a form that can be aggregated from field to head office level to provide local, regional and national level statistics of progress in elephant conservation and management. The following table (adapted from the Zimbabwe rhino policy and management framework 2011-12016) provides an example of the data that needs to be compiled for each population to gauge progress in population status, performance and law enforcement.

SEE NOTES BELOW	Name of person completing this data form					
	Date on which this data form was completed					
	Name of area covered					
	Size of area in km ²					
	YEAR	2015	2016	2017	2018	2019
	Date of aerial census population estimate					
	Aerial census elephant population estimate (number)					
	Aerial census carcass ratio (%)					
	No of natural mortalities					
	No of tusks recovered					
	No killed illegally					
	No killed on PAC					
	No killed for rations					
	No killed on trophy hunts					
	No of carcasses found that died in previous years					
	Total mortalities					
1	No of elephant poaching incursions/attempts detected					
	No of incursions/poaching attempts intercepted					
	Elephant poachers arrested during the year					
	- How many were given bail					
	- How many were given jail sentences					
2	- Of these how many received mandatory sentences					
	Number of poachers killed during the year					
	Number of firearms recovered from poachers					
3	Total man-days spent on patrol					
4	Average number of staff available to patrol at any one time					
5	Total number of vehicle months available during the year					
6	% of the area that has secure HF radio communications					
7	% of the year that that the VHF system was functional					
8	Number of incursions reported on / reacted to by local community					

9	Hunting regulations infringements					

NOTES:

1	These are incursions into the area by poachers clearly intending to use firearms, poison, heavy snares, etc to kill elephants and/or rhinos, or attempted incursions that were intercepted before they took place
2	Mandatory sentences for elephant / rhino poachers or dealers are 9 years for first offence and 11 years on second
3	This is actual patrolling effort expressed in patrol man-days carried out per year (not total staff x 365 days)
4	This is the average number of men (including deployments from other areas) in the field at any one time
5	Each vehicle available for law enforcement operations should be multiplied by the number of months it was available for field operations
6	e.g. if only three-quarters of the area has VHF radio reception then this figure will be 75
7	e.g. if the VHF radio system was only functional for 3 months of the year then this figure would be 25
8	Refers to the number of times the local community (not paid informers) volunteered information on actual or potential incursions of elephant/rhino poachers, and/or freely provided information/help leading to interception/ arrests
9	Refers to infringements of the regulations by safari operators/hunters/guides (e.g. shooting under age trophies, exceeding quotas, transfers of quotas from other areas, hunting from vehicles, etc.

6. CONCLUDING COMMENT

This is an ambitious plan that will require the cooperation of all stakeholders to achieve its aims. The provision in the plan to establish regional elephant management committees that will include representative from the range of stakeholders that have a strong interest in elephant conservation is a major step in devolution of responsibility.

Implementing the action plan will also require more human and financial resources than are currently available for the conservation and management of elephant in Zimbabwe. An urgent requirement is for more fully equipped men on the ground to combat illegal killing of elephant, improved monitoring and research, and incentives to maintain, if not increase, elephant range. They will require resources to cover the ground effectively and at a rough estimate it will require at least \$12,000,000 per annum in operational budget alone to protect the nearly 60,000 km² of elephant range in the country. This estimate is based on the rule of thumb of \$200 per km². If the threat of poaching escalates this requirement may double.

Elephant are an ecologically and economically keystone species and, if effectively conserved and managed, will act as an umbrella species for the conservation of a full range of wildlife within their range. Investment in elephant conservation will thus have wide-ranging effects on wildlife conservation in Zimbabwe.

These considerations suggest that an initial injection of substantial funding will be required to kick-start the Action Plan while providing the basis for a much wider investment in biological conservation.

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9. ANNEXES

9.1 Terms of Reference for the National Elephant Management Committee

Function: To annually review the Action Plan for Elephant Management and Conservation in Zimbabwe and progress in implementing the Action Plan; to review budget and policy decisions by the Elephant Manager; to guide the Ministry of Environment and Tourism and Parks and Wildlife Management Authority; to assume overall executive responsibility for elephant conservation and management in Zimbabwe.

Role of Individual Committee Members: The role of the individual members includes:

- Understanding the strategic implications and outcomes of initiatives being pursued through the Action Plan Outputs;
- Appreciating the significance of the Action Plan's implementation for major stakeholders and for the future of elephant conservation;
- Being committed to and actively involved in, implementing the most efficient and effective Action Plan;
- Being willing to suggest changes to the Action Plan or any regional action plan to achieve efficiency and effectiveness.

Duties: The Committee's primary responsibilities include:

- Ratifying major technical decisions concerned with elephant conservation and management;
- Developing and implementing elephant policy;
- Ensuring the successful implementation of all required actions; • Advising the Elephant Manager and PWMA on sourcing of funds;
- Monitoring funding, expenditure and effectiveness.

Composition: The members of the National Elephant Management Committee include:

- Director ZPWMA (Chair);
- Elephant Manager (Secretary);
- Representatives of ZPWMA , Ministry, CAMPFIRE, ZRP;

Time Frame: The Committee will meet at least twice a year, and can be called upon to meet more frequently as the need arises.

Minutes and Meeting Papers: Minutes will be kept by the Elephant Manager. Minutes will be circulated within one month of Committee meetings. Resolutions and action points will be kept by the Elephant Manager.

Actions may be taken without a meeting by a signed unanimous consent circulated, compiled, and maintained by the Elephant Manager.

Quorum Requirements: A quorum exists when [75%] of the Committee members are present.

9.2 Terms of Reference for the Regional Elephant Management Committees

Function: To semi-annually review implementation of each regional action plan; to review budget and policy decisions in each specific region; to strengthen links with various bodies at the national and regional levels (including within the TFCA framework).

Duties: Each regional Committee's primary responsibilities include:

- Ratifying major technical decisions concerned with elephant conservation and management in the specific region;
- Developing and implementing elephant policy in the specific region, in keeping with the regional action plan and national Action Plan;
- Developing and implementing elephant policy in the specific region, in keeping with the regional action plan and national Action Plan;
- Ensuring the successful implementation of all required actions;
- Advising the Elephant Manager, PWMA, and regional stakeholders on sourcing of funds;
- Liaising with regional stakeholders to appropriately represent concerns and local issues at the national level;
- Participating in quota-setting for the region.

Composition: The members of each regional Committee will include:

- ZPWMA (Chair);
- Area Ecologist (Secretary);
- Elephant Manager;
- Senior Parks Wardens;
- Research Scientists;

Time Frame: Each regional Committee will meet at least twice a year, and can be called upon to meet more frequently as the need arises.

Minutes and Meeting Papers: Minutes will be kept by the Secretary. Minutes will be circulated within one month of Committee meetings. Resolutions and action points will be kept by the Secretary.

Actions may be taken without a meeting by a signed unanimous consent circulated, compiled, and maintained by the Secretary.

Quorum Requirements: A quorum exists when [75%] of the Committee members are present.

9.3 Terms of Reference for the National Elephant Manager

Function: To coordinate elephant management in Zimbabwe; to work with stakeholders including the National and Regional Committees, ZPWMA, communities, private landowners, safari operators, and researchers

Duties: The Elephant Manager's duties include:

- Coordinating major technical decisions concerned with elephant conservation and management;
- Developing and implementing elephant policy;
- Ensuring the successful implementation of all required actions;
- Advising the Elephant Committees;
- Liaising with stakeholders;
- Collecting, collating and disseminating required reports under the Action Plan;

The following regional action plans are appended below

9.4 Northwest Matabeleland Elephant Management Action Plan

9.5 Sebungwe Elephant Management Action Plan

9.6 Mid-Zambezi Valley Elephant Management Action Plan

9.7 South East Lowveld Elephant Management Action Plan

ANNEX 9.4 Northwest Matabeleland Action Plan

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)

Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
1.1 Highly trained rapid response anti-poaching units established/strengthened	<ul style="list-style-type: none"> - Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations 	<ul style="list-style-type: none"> - Assessment of enforcement capacity completed - Fully staffed and trained antipoaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants documented 	<ul style="list-style-type: none"> - Assessment report - Staff recruitment and training records - Monthly and annual reports of operations - Illegal activity reports and records 	Immediate and ongoing	<ul style="list-style-type: none"> - Staff salaries - Vehicles and S&T - Equipment 	ZPWMA, FC RM, AMs ZRP
1.2 Informer network, investigation and intelligence system strengthened / established and operating	<ul style="list-style-type: none"> - Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database 	<ul style="list-style-type: none"> - Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP 	<ul style="list-style-type: none"> - Inspection of informer reports / database - Records and reports of training session - Whistle-blower system reports - Records / reports 	Established over the first year, then ongoing	<ul style="list-style-type: none"> - Staff salaries - Vehicles and S&T - Rewards and payments to informers - Telecommunications costs - 	ZPWMA, FC ZRP
1.3 Investigation and prosecution of wildlife crimes improved	<ul style="list-style-type: none"> - Establish Standard Operating Procedures (to include guidelines in collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering) - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required 	<ul style="list-style-type: none"> - Proportion of arrests leading to prosecution - Proportion of successful prosecutions 	<ul style="list-style-type: none"> - Court records - Law enforcement data base 	SOPs to be established within 3 months. On going	<ul style="list-style-type: none"> - Training costs - Expert costs - Specialized equipment 	ZPWMA, FC, ZRP Judiciary NGOs

9.4.1. Protection and Law Enforcement (Northwest Matabeleland)						
Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
1.4 Database that is compliant with national database established	<ul style="list-style-type: none"> - Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures 	<ul style="list-style-type: none"> - Databases bases established and operational - Recording protocols in place and being used 	<ul style="list-style-type: none"> - Database system being used and operational - Reports from database 	Immediate and ongoing	Computers and software Database design and roll out	ZPWMA, FC
1.5 Joint law enforcement operations within the NWM region	<ul style="list-style-type: none"> - Conduct joint operations - Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing) 	<ul style="list-style-type: none"> - Number of joint operations leading to arrests and successful prosecutions - Number of meetings held per year - Number of successes from shared wildlife crime information - 	<ul style="list-style-type: none"> - Minutes - Joint operation reports - Records - Manpower involved (by agency) 	Immediate and ongoing Meetings: Quarterly and Monthly (crossborder)	Meeting costs (travel, etc.) Operational costs	ZPWMA ZRP ZDF FC
1.6 Full compliance with hunting and guiding regulations enforced	<ul style="list-style-type: none"> - Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations 	Implementation of revised quota setting models in the NWM	Proceedings of hunting workshop and revised models Record of infringements and penalties and analysis of trends	Immediate and ongoing	Staff time and meeting costs	ZPWMA, FC SOAZ, ZPGHA ZHA
1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	<ul style="list-style-type: none"> - Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected 	Percentage of designated wildlife area in the NWM that are settled has not increased, or has declined, from 2015 levels	Satellite monitoring records	Immediate and ongoing	Satellite imagery Meeting costs Awareness and educational materials	ZPWMA, FC, RDCs Traditional Leaders

1.8 Collaboration in law enforcement with neighbouring countries established	<ul style="list-style-type: none"> - Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations 	<ul style="list-style-type: none"> - Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions 	<ul style="list-style-type: none"> Minutes of joint meetings Record of agreed SOPs Reports of cross border operations Record of arrests and prosecutions 	Immediate and ongoing	Travel and meeting costs	ZPWMA, FC ZRP JOC
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9.4.2. Biological Monitoring and Management (North West Matabeleland)

Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	<ul style="list-style-type: none"> - Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations, forest areas, and RDCs in NWM - Introduce ranger-based monitoring across all stations in NWM - Analyze the data and report on trends - Annual water hole count continued 	<ul style="list-style-type: none"> - Information on trends in elephant numbers, structure and mortality analysed and available 	<ul style="list-style-type: none"> - Databases and reports 	<ul style="list-style-type: none"> Aerial surveys every 3 years Ground and waterhole counts annually Illegal activities and ranger patrol ground counts reported monthly Database and monitoring ongoing 	<ul style="list-style-type: none"> Aerial survey – USD 150,000 Computers and software Training in SMART, MIKES, etc. Travel & Subsistence and equipment 	ZPWMA FC Research Partners
2.2 Impacts of elephants on selected habitats, selected indicator plant and animal species, and water use and supplies monitored and assessed	<ul style="list-style-type: none"> - Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands - Measure and assess water use and its sustainability 	<ul style="list-style-type: none"> Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported Sustainability of water use completed 	<ul style="list-style-type: none"> Copies of research and monitoring reports 	2016-2019	<ul style="list-style-type: none"> Staff salaries and S&T Field equipment 	ZPWMA FC Research partners

2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	<ul style="list-style-type: none"> - Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, and HWC in the region - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities 	<ul style="list-style-type: none"> - Research reports completed - PCP consultation results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures 	<ul style="list-style-type: none"> - Copies of reports, papers and recommendations - 	Provisional TPCs provided with in 3 years	<ul style="list-style-type: none"> Staff salaries and S&T Aerial photos Satellite imagery Stakeholder meetings 	<ul style="list-style-type: none"> ZPWMA FC Research partners
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9.4.2. Biological Monitoring and Management (North West Matabeleland)

Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	<ul style="list-style-type: none"> - Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action 	<ul style="list-style-type: none"> - Adaptive management actions taken in response to elephant impacts 	<ul style="list-style-type: none"> - Monitoring records and reports - Use of monitoring and research results in determining management actions - Management action taken in respect of TPCs being approached or exceeded 	2018	Monitoring and implementation of management actions	<ul style="list-style-type: none"> ZPWMA, FC RDCs SOAZ ZPGHA ZHA Traditional Leaders
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	<ul style="list-style-type: none"> - Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report 	<ul style="list-style-type: none"> Age, sex and tusk sizes for all elephant killed recorded Elephant trophy quality is maintained or improved in relation to the stipulated desired age and trophy size. 	Record of trophy quality of elephants obtained in each year	Immediate and ongoing	Staff training and time, Safari operators training and time	<ul style="list-style-type: none"> ZPWMA, FC SOAZ ZPGHA ZHA

2.6 Elephant range defined and managed to maintain (and/or recover) habitats and elephant populations, and connectivity between fragmented populations and buffer zone populations initiated	<ul style="list-style-type: none"> - Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict 	<ul style="list-style-type: none"> - Elephant range maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established 	Elephant range use maps and reports	2016 - 2019	Staff time, S&T, satellite imagery and mapping, GIS software	ZPWMA, FC RDCs Traditional Leaders Neighbouring countries
2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	<ul style="list-style-type: none"> - Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies 	<ul style="list-style-type: none"> - Required reports submitted on time 	Record of reports submitted	Ongoing	Staff time	ZPWMA RM, AM

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)

Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	<ul style="list-style-type: none"> - Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs 	<ul style="list-style-type: none"> - Policy framework and protocols for establishing Joint Ventures /PPCPs in NWM adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018 	Policy framework document Record of operational Joint ventures / PPCPs	2016-2018	Workshops, facilitating PPCPs, drafting policy	ZPWMA, FC RDCs Traditional Leaders CAMPFIRE Association

3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	<ul style="list-style-type: none"> - Develop instruments / protocols to: <ul style="list-style-type: none"> o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system 	<ul style="list-style-type: none"> -A greater proportion of revenues from wildlife utilisation accrue to communities -Traditional leaders involved in elephant management and revenue sharing -Revenues from wildlife accounted for and audited 	<p>Records of revenue earned by and disbursed to communities</p> <p>Report on annual consultation with Traditional Leaders</p> <p>Audit reports</p>	By Dec 2016	Meetings, Drafting Legal review	ZPWMA, FC RDCs CAMPFIRE Association Traditional Leaders
3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	<ul style="list-style-type: none"> -Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict -Implement proposals / options emerging from review -Monitor levels of HWC, enter data in database, analyse trends 	<p>Land use strategies and protocols for mitigating HWC adopted and implemented</p> <p>Trends in HWC incidents show reduced levels of conflict</p>	<p>Reports and records of implementation</p> <p>Database records and trend analysis reports</p>	Immediate and ongoing	Equipment Review costs Monitoring costs	ZPWMA RDCs Traditional Leaders
3.4 Recovery and use of all products from legally killed elephants improved	<ul style="list-style-type: none"> - Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products - 	<p>Proportion of legally killed elephants from which products were effectively recovered</p> <p>Revenue earned</p>	Database records and reports	Immediate and ongoing		ZPWMA, FC RDCs, Community leaders

9.4.3. Social, Economic and Cultural Framework (North West Matabeleland)

Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
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<p>3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula</p>	<ul style="list-style-type: none"> - Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for NWM - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas 	<ul style="list-style-type: none"> - Number and quality of elephant information items developed and delivered to schools in NWM - Proportion of schools within or neighbouring elephant areas receiving and using information provided 	<p>Elephant information items produced and distributed</p> <p>Reports/ records of delivery and use of elephant conservation information packages</p>	<p>By June 2016 and ongoing</p>	<p>Design and production of educational material Printing and distribution costs</p>	<p>ZPWMA, FC NGOs Min Education RDCs Traditional Leaders</p>
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9.4.4. Building Conservation Capacity (North West Matabeleland)						
Output	Activities	Key Performance Indicators	Means Of Verification	Time Frame	Indicative inputs/Costs	Lead Agencies
4.1 Funding to initiate and sustain the implementation of this plan secured	<ul style="list-style-type: none"> - Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models 	<ul style="list-style-type: none"> - Value of funding and support in kind for conservation of elephants in NWM realised each year 	Records maintained by ZPWMA, NGOS, RDCs, Tour and Safari Operators	Annual assessment		ZPWMA, FC, NGOs, RDCs Tour and Safari Operators
4.2 Current capacity and staff, training, and equipment needs identified	<ul style="list-style-type: none"> - Carry out full audit of current human and financial resources required to implement this plan and identify needs 	Capacity needs assessment (audit) completed by June 2016	Capacity needs assessment report	By June 2016	Time and travel costs of lead agencies and travel costs Consultant costs?	ZPWMA, FC
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	<ul style="list-style-type: none"> - Develop and implement a multidisciplinary research and monitoring strategy for the NWM - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish inservice mentoring system - Identify and provide needed equipment - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System 	<ul style="list-style-type: none"> - Explicit research strategy for the LZV developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system 	<ul style="list-style-type: none"> - Copy of research Strategy - Trained personnel in place for stipulated minimum period of time - Project proposals - Technical reports and research papers - Annual State of the LZV Report - Event Book records / reports 	Immediate and ongoing Annual NWM report commencing with baseline report for 2015	A range of training costs	ZPWMA, FC, Universities, NWM Working Group, NGOs
9.4.4. Building Conservation Capacity (North West Matabeleland)						
Output	Activities	Key Performance Indicators	Means Of Verification	Time Frame	Indicative inputs/Costs	Lead Agencies

4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	<ul style="list-style-type: none"> - Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme 	<ul style="list-style-type: none"> - Training modules and curricula developed and being used - 50 to 100% increase in: <ol style="list-style-type: none"> No. of training days and programmes initiated No. of staff trained No. of communities trained and implementing elephant management programmes No. of elephant management campaigns conducted 	Record of training modules Record of training courses completed Records of personnel / communities trained Individual staff files	Initiated by March 2016	Cost of training staff and retraining	ZPWMA, FC NGOs Universities
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the NWM developed	<ul style="list-style-type: none"> - Rebuild / refurbish all main access and internal roads within NWM wildlife areas - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the NWM - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure 	<ul style="list-style-type: none"> - Roads, bridges, airstrips refurbished and maintained as planned - Feasibility study of required field stations completed by June 2016 - Identified infrastructure requirements prioritized and required developments undertaken and completed by 2018 	Housing, field units, feasibility study review report On site inspection of roads, airstrips and constructed housing units	Immediate and ongoing through 5-year period	USD 3 million+	ZPWMA FC RDCs ZINARA Donor support
4.6 Effective, secure communications network across the region established	<ul style="list-style-type: none"> - Establish digital VHF and GPS communication and tracking systems across the NWM (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes) 	Fully operational secure communications system in place and being maintained	Reports and tests of system	Immediate ongoing	USD 310,000	ZPWMA, FC NGOs/Donors

9.4.5. Coordination, Collaboration and Programme Management (North West Matabeleland)

Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
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5.1 Regional elephant management committee with membership from key stakeholders established and operating	<ul style="list-style-type: none"> - Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting 	<ul style="list-style-type: none"> - Timely minutes of each biannual meeting produced and circulated - Number of committee resolutions and actionable points initiated and acted upon 	Meeting minutes Actions and recommendations approved and implemented	Immediate and ongoing	Costs of meetings (venue and travel)	ZPWMA, FC Private sector agencies, RDCs Traditional Leaders
5.2 Technical support team to assist in implementation of the plan established and operational	<ul style="list-style-type: none"> - Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA & FC 	<ul style="list-style-type: none"> - Functional team established - Technical support provided in keeping with TORs and planned activities implemented 	Meeting minutes Technical activities implemented	Immediate and ongoing	Costs of meetings (venue and travel) Equipment	ZPWMA, FC NGOs
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	<ul style="list-style-type: none"> - Establish a formal forum for private sector agencies to interact with ZPWMA and FC - Establish terms of reference and recognition as a formal entity - Establish effective engagement with RDCs, and Traditional Leaders in NWM and neighbouring communities 	<ul style="list-style-type: none"> - Formal recognition by ZPWMA / FC achieved - Meetings held - Effective engagement with neighbours 	Minutes of meetings	By early 2016	Costs of meetings (venue and travel)	NGOs, Private Sector ZPWMA, FC
5.4 Links with neighbouring Botswana, Namibia and Zambia to confer on the management of shared elephant populations established / strengthened	<ul style="list-style-type: none"> - Establish links with Botswana, Namibia and Zambia to confer on cross border elephant management issues 	<ul style="list-style-type: none"> - Links established and operating 	Records of meetings and any joint elephant management initiatives	By June 2016 and ongoing	Costs of meetings (venue and travel)	ZPWMA, FC RDCs NGOs Researchers
5.5 Information dissemination strategy developed and implemented	<ul style="list-style-type: none"> - Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan 	<ul style="list-style-type: none"> - At least one awareness campaign conducted each year - Annual progress reports produced - Number of briefs / news releases on major developments or progress released - Funds raised to support elephant conservation 	Reports Campaign materials Press releases Funds raised	Initial campaign by June 2016	Preparation of campaign material	ZPWMA NGOs Private sector

ANNEX 9.5 Sebungwe Action Plan

9.5.1 Protection and Law Enforcement (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
<p>1. Joint operation reaction team established and existing base renovated at Bumi Hills old ZRP Camp as primary base. Followed by 3 others (Binga, Siabuwa, Old Chizarira Lodge/ Sengwa Wildlife Research Institute)</p> <p><i>Manpower</i> <i>Vehicles</i> <i>Aircrafts</i> <i>Communication – eg radios</i> <i>Equipment eg firearms, boats</i> <i>Training</i> <i>Central database</i> <i>Intelligence networks</i></p>	<p>Manpower – Draw up 20 man reaction team from law enforcement agencies and other stakeholders from the whole Sebungwe sub-region. (Prioritise Bumi, Sengwa)</p> <p>Refurbish main base</p> <p>Training – Initial database training Refresher course</p> <p>Transport and Equipment Procurement of 3 vehicles (land cruisers) Procurement of 3 boats (speedboats – 1 mothership and 2 patrol boats)</p> <p>Communications – establish an independent inter-agency communication network</p>	<ul style="list-style-type: none"> - Number of arrests - Number of cases detected - Number of recoveries made (eg ivory, firearms etc) - Number of patrols conducted - Number of cases finalized (convictions) - Number of carcasses detected - Number of joint operations carried out - Number of refresher courses carried out - Number of failed cases 	<p>Population census (elephant carcass ratios) MIKE site data Patrol effort indices Number of arrests and convictions Number of reports received from communities Number of reports on training sessions carried out</p>	1 year June 2015 to May 2016 and then ongoing	<p>S&T, Incentives - \$54,000 Good accommodation – \$100,000 Medical aid support , insurance - \$30,000 year trained medic on deployment, CASEVAC – \$165,000 Assistance benefits on bereavement Transport – \$333,000 Boats – \$182,000 Aircraft hire – \$25,000 year Communications – \$120,000 Total Capex - \$600,000? Recurrent = \$300,000? Sub-station budget considerations</p>	ZRP/ZPWMA
<p>1.2 Informer network, Investigation and intelligence system strengthened</p>	<ul style="list-style-type: none"> - Recruit informers and contacts - Maintain hotline for whistle-blowers - Procurement of 2 vehicles and 2 motorbikes - Recruit investigators (6) and deploy strategically - Train investigators - Constant liaison with informers - Rewards to informers standardized 	<ul style="list-style-type: none"> - Number arrests and successful convictions based on information from intelligence system - Number of incursions reported on/reacted to by local communities - Number of informer reports per informer leading to arrests and convictions 	<p>Validation of informer record Records and reports of training session Whistle blower system reports</p>	1 year and then ongoing	<p>Transport – \$132,000 Rewards and payments to informers – \$40,000 Telecommunications costs -\$60,000 Repair and Maintenance, fuel - \$66,000 Total \$298,000</p>	ZRP/ZPWMA

9.5.1 Protection and Law Enforcement (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
1.3 Zambezi Valley deployment tactics revisited and implemented	<ul style="list-style-type: none"> - ZV deployment tactics revised - Identification of OP sites, crossing points etc - Identification and procurement of specialized equipment (eg night vision) - Provision of dry rations for operations - Introduction of aerial surveillance flights 	<ul style="list-style-type: none"> - Resource books - Number of successes on detections - Number of contacts - Number of recoveries - Patrol effort (surveillance) 	<ul style="list-style-type: none"> Exhibits register Crime register Reports Briefing and debriefing register 	3-4 months	<ul style="list-style-type: none"> Field allowances – \$30,000 Specialised equipment costs – \$80,000 Aircraft hire and maintenance \$100,000 pa Camping equipment costs – \$60,000 Total \$270,000 	ZRP/ZPWMA
1.4 Ranger patrols strengthened	<ul style="list-style-type: none"> - Establish effective patrolling force of deployable rangers - Establish (or review) standard operating procedures (SOP) - Establish well-equipped reaction teams - Honorary Officer system re-established to support ranger patrols - Increase support for establishing/improving dedicated APU for every concession. 	<ul style="list-style-type: none"> - Number of deployable rangers at any one time - Total man-days spent on patrol - SOPs in place - Area patrolled each month - Reaction time to incidents - Number of APUs established 	<ul style="list-style-type: none"> Monthly reports Subsistence claims Number of approved honorary officers Monthly Reports from APUs 	<ul style="list-style-type: none"> SOPs to be established in 3 months Staffing established within 6 months Ongoing Six Months? 	<ul style="list-style-type: none"> Salaries Equipment Vehicles 	ZPWMA
1.5 Training of staff enhanced	<ul style="list-style-type: none"> • Establish regular training and retraining schedule (includes training on weaponry, bushcraft, tracking, information gathering, crime scene management, Judiciary procedures etc • Training on standard operation procedures (harmonization) 	<ul style="list-style-type: none"> □ Number of training and retraining sessions carried out 	<ul style="list-style-type: none"> □ Individual training records 	Immediate and ongoing	\$100,000	ZRP/ZPWMA

9.5.1 Protection and Law Enforcement (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
1.6 Conviction rates improved	<ul style="list-style-type: none"> • Judiciary sensitization (incl. workshops) • Formulation of proper charges, indictment and summons • Gathering all evidence available using legal means • Completion of dockets timeously, submission and concluding cases in a reasonable time • Creation of a district sub-committee on elephant and wildlife issues • Hold workshops to share information on wildlife issues 	<ul style="list-style-type: none"> • Number of successful prosecutions • Decrease in number of crimes committed • Number of workshops or meetings held 	<ul style="list-style-type: none"> • Crime records • Dockets 	Ongoing	\$50,000	ZPWMA/ZRP

9.5.2 Biological Monitoring and Management (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
2.1 Viable population, geographical distribution, and habitat connectivity targets established.	<ul style="list-style-type: none"> - Establish TPC for all areas to set viable population target. - Collect spatial data (livestock densities, human population densities, forest cover, and agricultural cover) to map potential geographic distribution of elephants - Identify potential connectivity areas and promote wildlife-based land uses in those areas. 	<ul style="list-style-type: none"> - Viable population target of minimum 5,000 for the region with minimum and maximum thresholds in different land categories - Updated geographical distribution map and spatial datasets - Number of conservancies approved/ green-lighted by communities 	<ul style="list-style-type: none"> Censuses of elephants Distribution and records of elephant movement Records of meetings to establish conservancies 	One year, then ongoing	<ul style="list-style-type: none"> Computers and software, transport for ground surveys and truthing \$50,000 Meeting logistics, and transport, \$15,000 	ZPWMA with participation from the Tashinga Initiative, WWF HSBCP, and the private sector
2.2 Monitoring system for population trends, habitat, and impacts designed and implemented.	<ul style="list-style-type: none"> - Establish regional database for data on population, habitat, HEC, patrolling, poaching, and trophies (for trophies, see also Output 5). - Design and adopt standardized reporting formats. (i.e. MOMS) - Report to the regional management committee to review data and decide on management actions. - Conduct annual aerial surveys for the "core area" (to be defined). 	<ul style="list-style-type: none"> - Regional database operational - Number of reporting formats designed and distributed - Number of persons, patrols, and sectors submitting data - Quarterly reports - Quarterly reviews 	<ul style="list-style-type: none"> Database Reporting formats Records of data submitted Reports and reviews 	One year for having the database established and the first committee meeting, then ongoing Immediate, quarterly and ongoing	For the first year, \$300,000, with \$150,000 for subsequent years	ZPWMA, with participation by RDCs, NGOs, and safari/tour operators
2.3 Direct and indirect causes of decline (2006-2014) researched.	<ul style="list-style-type: none"> - Causes of mortality quantified using the regional database. - Gather information from local communities and experts. - Examine potential socio-economic factors related to decline - Research habitat changes. - Publish research in scientific publication. 	Data and analyses	Reports and publications	One year (published or submitted to peer reviewed journals)	\$25,000	ZPWMA

9.5.2 Biological Monitoring and Management (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
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2.4 Viable population, geographical distribution, and habitat connectivity achieved and maintained.	<ul style="list-style-type: none"> - Establish wildlife-based land-use system (not a land use plan) with community conservancies acting as corridors between protected areas - Reduce human-elephant conflict to acceptable levels. - Implement responsible habitat management (with regard to fires, REDD+, mining, illegal and legal settlement) - Conduct integrated land-use planning. - Support extension of REDD initiative 	<ul style="list-style-type: none"> - Number of operational conservancies/ corridors - Elephant Population data - Number of elephants and people involved in "serious HEC incidents" - Effective, non-lethal elephant deterrents in place - Regional land-use plan - Number of stakeholders, meetings in planning process - Utilization of corridors by elephants 	Censuses of elephants Distribution and records of elephant movement Records of meetings to establish conservancies Legal instruments for conservancy establishment (e.g. via Town & Country Planning Act, Communal Land Act)	Starting in 2016 and ongoing	Unknown, but large expenditure	ZPWMA, conservancies, etc.
2.5 Sustainable offtakes established through participatory quota setting and monitored through adaptive management.	<ul style="list-style-type: none"> - Establish a database of offtakes, trophy qualities, and age classes (See Output 2, Activity 1). - Using participatory quota setting following best practices, set optional quotas based on scientific survey data, with no more than 0.5% of the estimate as the elephant quota for the region. - Revisit quota system and establish optional quotas as opposed to fixed quotas - Set minimum trophy size and a variable trophy fee with large increments based on size - Identify and enforce best hunting practices through a code of conduct incorporated in lease agreements and hunting permits. 	<ul style="list-style-type: none"> - Trophy quality improving - Record of hunting practice transgressions 	Trophy database	Database and code of conduct review within 6 months Revised quotas set annually Minimum trophy size defined before first revised quota	\$20,000	ZPWMA and RDCs

9.5.2 Biological Monitoring and Management (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
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2.6 Robust and comprehensive research program enhanced and maintained.	<ul style="list-style-type: none"> - Research the impact of decline on population dynamics. - Investigate migration hypothesis. - Develop applied research projects, especially interdisciplinary and multidisciplinary research. - Establish research oversight body, building on existing approval processes. 	Publications, particularly with management guidance	Publications and raw data	Ongoing and longterm	Annual budget: \$200,000	ZPWMA, local government, and academic institutions
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Management Plan

9.5.3 Social, Economic and Cultural Framework (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative Inputs / Costs	Lead agencies
3.1 Transparent and equitable distribution of benefits established	<ul style="list-style-type: none"> - Develop an instrument to increase elephant revenues at the ward level. - Instrument to provide for traditional leaders to be involved in management and distribution of elephant related benefits. - Revise CAMPFIRE guide lines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodic auditing of the revenue sharing system. 	<ul style="list-style-type: none"> - Instrument approved. - CAMPFIRE guidelines revised and approved - Revenue accountability system established - Number of audits 	<ul style="list-style-type: none"> Publication of instruments and guidelines. Audit documents 	One year		ZPWMA/ CAMPFIRE
3.2 Economic management of consumptive and non-consumptive tourism of elephants in Sebungwe improved.	<ul style="list-style-type: none"> - Preventing human settlement in protected areas - Review length of concession leases to encourage greater investment. - Rehabilitate the depleted Safari areas - Promote PPCPs 	<ul style="list-style-type: none"> - Number of eviction notices issued. - Number of reviewed leases - Number of safari areas under proper management/concessions - Record of PPCPs established. 	<ul style="list-style-type: none"> Records and reports of the points (6)KPI 	Over a year		ZPWMA/ CAMPFIRE, Safari/ tour operators
3.3 Land use strategies to mitigate human elephant conflicts (HEC) established	<ul style="list-style-type: none"> - Review of human elephant conflict measures (consultancy) - Increase sense of ownership of wildlife as a mitigation measure to HEC (review) - Traditional leaders to set up a compensation scheme for land holders directly affected by HEC. - Support review and development of land – use plans to optimize agricultural livestock and farming activities 	<ul style="list-style-type: none"> - Reports - Link with activity 1 and 2 output1(benefits) - Compensation scheme functioning and record of HEC in place. - Land use plans supported 	<ul style="list-style-type: none"> Reports endorsed at local level Revenues increased. Records of HEC available Plans approved and published. 	1 to 3 years		ZPWMA/ CAMPFIRE

Management Plan

9.5.3 Social, Economic and Cultural Framework (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative Inputs / Costs	Lead agencies
3.4 Investment of wildlife revenue in income generating community products established	<ul style="list-style-type: none"> - Revitalize technical support services to communities/ community initiatives - Participatory business plan at community level. - Explore micro financing opportunities - Explore markets for community projects related to elephant conservation 	<ul style="list-style-type: none"> - Technical support services established through proper instrument. - Participatory business plan adopted. 	<ul style="list-style-type: none"> Micro finance projects Record of business plan Inventory of support services 	Ongoing		CAMPFIRE Private Sector
3.5 Relationship and communication mechanism established	<ul style="list-style-type: none"> - Sebungwe WG to include Traditional leaders and RDCs - Methodologies for regular communication with communities and their leaders established 	<ul style="list-style-type: none"> - Traditional leaders and RDC included in the WG - Communication strategy developed 	<ul style="list-style-type: none"> Reports of the WG, Communication strategy reports. 	6 Months		CAMPFIRE/ZP WMA/RDC/ Traditional Leaders
3.6 Education on elephant conservation in the community increased	<ul style="list-style-type: none"> - Information campaign explaining reasons for quota decrease (see Biological Component for cross check) - Explain what trophy hunting means and how it links to benefits - Share census results and explain implications - Extend conservation education to Sebungwe wards (NGOs?) 	<ul style="list-style-type: none"> - Number of Outreach meetings with Traditional leaders / Wards/ RDC including the 4 key activities 	<ul style="list-style-type: none"> Outreach meetings reports 	One Year		CAMPFIRE/ZP WMA/RDC/ Traditional Leaders

Management Plan

9.5.4 Building Conservation Capacity Component (Sebungwe)

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
4.1 Capacity needs for elephant management in Parks and CAMPFIRE areas analysed and identified	<ul style="list-style-type: none"> - Draw up TOR - Appoint consultant 	<ul style="list-style-type: none"> Report produced 	<ul style="list-style-type: none"> Report 	3 months	10,000	Sebungwe WG

4.2 Training provided	<ul style="list-style-type: none"> - Analyse training needs - Prioritise and develop training curricula if not already available - Implement in-service training and retraining 	Numbers of people trained and certified	Training reports	Ongoing over 5 years	500,000	Sebungwe WG
4.3 Best practice standards for elephant management in place	<ul style="list-style-type: none"> - Standards defined by and through National Elephant Policy and CAMPFIRE Principles and Guidelines - Define clear objectives for elephant management in the Sebungwe - Support CITES MIKES site(s) and application of SMART and RBM 	<ul style="list-style-type: none"> - MIKES PIKE database - SMART database 	CITES MIKE Reports SMART Reports	Minimum 5 years	10,000	Sebungwe WG
4.4 Research and monitoring capacity strengthened	<ul style="list-style-type: none"> - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish inservice mentoring systems - Identify equipment needs, source and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System 	<ul style="list-style-type: none"> - 2 persons trained per annum - 5+ people in mentoring system each year - Equipment procured and in place - Active community research programme underway - Event Book System functional and operationalised 	Trained personnel in place for stipulated minimum period of time Technical reports and research papers Annual State of the Sebungwe Report	Immediate and ongoing Sebungwe report annually commencing with baseline report 2015		ZPWMA, Universities, Sebungwe WG (Also in many paces in plan SWG)
4.5 Funding secured	<ul style="list-style-type: none"> - Complete Sebungwe Elephant Management Plan and disseminate for funding purposes - Development of funding proposals for each of the components, if necessary - Identify donors (e.g. bilateral, WB GEF, NGO, other) - Submit proposals - Develop Sebungwe branding and marketing campaign 	Number of successfully funded proposals	Record of funding proposals developed and funded	Immediate and ongoing		ZPWMA, Sebungwe WG NGOs Universities

*Management Plan***9.5.4 Building Conservation Capacity Component (Sebungwe)**

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative inputs/Costs	Lead agencies
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4.6 Infrastructure refurbished and functioning	- Roads rehabilitation: Parks and CL - Karoi-Binga road - Airstrips	- 2,000 km repaired to standard - Airstrips registered and functioning	Roads in regular use	5 years	10,000,000 7,500,000 1,200,000 ~20,000,000	Min Transport, DDF, RDCs ZPWMA Private Sector Sebungwe WG
4.7 Communications	- Procure and install radio communications systems	System installed and operational	Effective repeater linked radio communication throughout Sebungwe	1 year	500,000	Sebungwe WG

9.5.5 Coordination and Programme Management (Sebungwe)						
Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative Inputs/Costs	Lead agencies
1. Sebungwe Management Committee with an Elephant Working Task Force and Project Coordinator established	-Identify committee members, select WTF and appoint Coordinator -ToR for each institution (from national plan)	Committee meeting twice yearly; WTF meets quarterly, identifies priority activities and oversees implementation by Coordinator	Meeting minutes Identified implementation activities completed as per milestones	Annual	3,000 3,000 50,000	ZPWMA & CAMPFIRE to establish structures
2. Coordination and communication between Traditional Authorities, their communities and the elephant management programme and plan strengthened	- Address the community through CAMPFIRE and traditional leadership - Introduce elephant management plan in easily understandable format – maps and graphs – and disseminate through all levels/actors in Sebungwe	□ Management plan documents for dissemination	Record of meetings	On-going process	20,000 pa	SEWTF and RDC
3. Coordination between Sebungwe safari operators and implementation of the elephant management plan strengthened	- SOAZ, ZPHGA appoint liaison officer for Sebungwe elephant management plan - Encourage non-members of associations to participate in plan implementation	Liaison officer appointed and operating and non-members of associating participating in implementation of the action plan	Report by Liaison Officer	Immediate and ongoing		SOAZ, ZPHGA, ZPWMA
3. Links with neighbouring states established – shared elephant management	- Establish relationship with KAZA Secretariat - Establish links and synergies with transboundary natural resource mgmt - Bilateral JOC to focus on illegal wildlife trade and trade routes - Establish links with TRAFFIC	<ul style="list-style-type: none"> • KAZA Secretariat aware of Sebungwe elephant management plan • TBNRM established and functional • Reduced illegal trade 	<ul style="list-style-type: none"> • Correspondence • Records of minutes meetings held 	Ongoing	Nominal	SEMG JOC Permanent Commissions etc ZPWMA

ANNEX 9.6 Lower Zambezi Valley Action Plan

9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)

Output	Activities	KPIs	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
1.1 Highly trained rapid response anti-poaching units established/strengthened	<ul style="list-style-type: none"> - Assess / audit current law enforcement capacity, prioritise needs - Mobilise resources to meet shortfalls in personnel and equipment and new technology - Recruit rangers, train and retrain staff - Review / establish Standard Operating Procedures (SOPs) for all law enforcement operations 	<ul style="list-style-type: none"> - Assessment of enforcement capacity completed - Fully staffed and trained antipoaching units in place and operating - SOPs established and being implemented - Trends in illegal killing of elephants 	<ul style="list-style-type: none"> - Assessment report - Staff recruitment and training records - Monthly and annual reports of operations - Illegal activity reports and records 	Immediate and ongoing	<ul style="list-style-type: none"> - Staff salaries - Vehicles and S&T - Equipment 	ZPWMA RM, AMs ZRP
1.2 Informer network, investigation and intelligence system established	<ul style="list-style-type: none"> - Recruit informers and contacts - Recruit investigators and deploy strategically - Train investigators - Set up anonymous whistle-blowing system (through hotline) - Carry out awareness campaign within communities on value of conservation and how to report illegal activity (to stimulate social involvement) - Establish intelligence database 	<ul style="list-style-type: none"> - Number of arrests based on information from intelligence system - Number of investigators recruited and trained - Number of calls to whistle blowing system that result in effective follow up - Number of incursions reported on by local communities and reacted to by ZPWMA/ZRP 	<ul style="list-style-type: none"> - Inspection of informer reports / database - Records and reports of training session - Whistle-blower system reports - Records / reports 	Incremental set up over 1 year, then ongoing	<ul style="list-style-type: none"> - Staff salaries - Vehicles and S&T - Rewards and payments to informers - Telecommunications costs - 	ZPWMA ZRP

1.3 Investigation and prosecution of wildlife crimes improved	<ul style="list-style-type: none"> - Establish Standard Operating Procedures (to include guidelines on collaboration with ZRP, Prosecutors, Magistrates, EMA, etc., and evidence gathering) - Identify gaps (e.g. ballistics and forensics) and solicit external expertise - Establish regular training and retraining schedule - Procure / hire specialized equipment that may be required 	<ul style="list-style-type: none"> - Proportion of arrests leading to prosecution - Proportion of successful prosecutions 	<ul style="list-style-type: none"> - Court records - Law enforcement data base 	SOPs to be established within 3 months. On going	<ul style="list-style-type: none"> Training costs Expert costs Specialized equipment 	ZPWMA ZRP Tikki Hywood Trust
9.6.1. Protection and Law Enforcement (Lower Zambezi Valley)						
Output	Activities	KPIs	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
1.4 Database that is compliant with national database established	<ul style="list-style-type: none"> - Set up databases at regional HQ and field stations that can feed compliant information through to regional and national databases - Train staff in appropriate data collection and data capture using standardised recording forms and procedures 	<ul style="list-style-type: none"> - Databases bases established and operational - Recording protocols in place and being used 	<ul style="list-style-type: none"> - Database system being used and operational - Reports from database 	Immediate and ongoing	Computers and software Database design and roll out	ZPWMA
1.5 Joint law enforcement operations within the LZV	<ul style="list-style-type: none"> - Convene joint meetings of law enforcement agencies - Conduct awareness campaigns for other law enforcement agencies - Agree on operational order / SOPs (including information sharing) - - Conduct joint operations 	<ul style="list-style-type: none"> - Number of meetings held per year - Number of successes from shared wildlife crime information - Number of joint operations leading to arrests and successful prosecutions 	<ul style="list-style-type: none"> - Minutes - Joint operation reports - Records - Manpower involved (by agency) 	Meetings: Quarterly (national) and Monthly (crossborder) On going	<ul style="list-style-type: none"> Meeting costs (travel, etc.) Operational costs 	ZPWMA ZRP ZNA
1.6 Full compliance with hunting and guiding regulations enforced	<ul style="list-style-type: none"> - Ensure all operators within the region are fully aware of regulations - Appropriate measures are taken to fine / apprehend / prosecute breaches of regulations 	Implementation of revised quota setting models in the LZV	<ul style="list-style-type: none"> Proceedings of hunting workshop and revised models Record of infringements and penalties and analysis of trends 	Immediate and ongoing	Staff time and meeting costs	ZPWMA SOAZ, ZPGHA ZHA

1.7 Illegal settlement / human encroachment in designated wildlife areas reduced / reversed	<ul style="list-style-type: none"> - Liaise with RDCs, Traditional Leaders, ZRP and DA's office, and Lands Office - Conduct awareness, education, extension programmes in areas affected - Conduct regular satellite monitoring of areas likely to be affected 	Percentage of designated wildlife area in the LZV settled has not increased, or has declined, from 2015 levels	Satellite monitoring records	Immediate and ongoing	Satellite imagery Meeting costs Awareness and educational materials	ZPWMA, RDCs Traditional Leaders
1.8 Collaboration in law enforcement with neighbouring countries established	<ul style="list-style-type: none"> - Convene joint meetings of law enforcement agencies - Agree on standard operational procedures - Conduct joint cross border operations 	<ul style="list-style-type: none"> - Agreed SOPs for cross border law enforcement operations - Number of joint operations leading to arrests and successful prosecutions 	Minutes of joint meetings Record of agreed SOPs Reports of cross border operations Record of arrests and prosecutions	Immediate and ongoing	Travel and meeting costs	ZPWMA ZRP JOC

9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)

Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
2.1 Elephant population numbers, structure, mortality (using aerial, ground, and ranger based methods) regularly monitored	<ul style="list-style-type: none"> - Carry out regular surveys - Carry out aerial monitoring of wildlife and illegal activities - Adopt standardized databases for all stations and RDCs in LZV - Introduce ranger-based monitoring (SMART, MIKE, ETIS) across all stations in LZV - Analyze the data and report on trends 	<ul style="list-style-type: none"> - Information on trends in elephant numbers, structure and mortality analysed and available 	<ul style="list-style-type: none"> - Databases and reports 	Aerial surveys done every 3 years (LZV) Ground and waterhole counts annually Illegal activities and ranger patrol ground counts reported monthly Database and monitoring ongoing	Aerial survey – USD 150,000 Computers and software Training in SMART, MIKE, etc.	ZPWMA Research Partners
2.2 Impacts of elephants on selected habitats and selected indicator plant and animal species monitored and assessed	<ul style="list-style-type: none"> - Measure and monitor vegetation indicators, e.g. woodland cover and changes in specific species e.g. Baobabs - Measure and monitor functional biodiversity indicators, e.g. bird species richness and responses to structural changes in woodlands 	Elephant impacts on selected habitats monitored, analysed and reported Elephant impacts on indicator species measured analysed and reported	Copies of research and monitoring reports	2016-2019	Staff salaries and S&T Field equipment	ZPWMA Research partners

2.3 Upper and lower thresholds of potential concern (TPCs) related to spatial and temporal impacts (ecological, social, economic) of elephants established	<ul style="list-style-type: none"> - Compile and analyse historical trends in habitats, selected species, economic performance of consumptive and non-consumptive use, HWC, in the LZV - Consultations with experts and the public on acceptable limits to change - Propose TPCs for elephant impacts and densities 	<ul style="list-style-type: none"> - Research report completed - Survey results analysed and reported - TPC recommendations submitted - Results of timely analyses and expert and public opinion being used in determining adaptive management measures 	<ul style="list-style-type: none"> - Copies of reports, papers and recommendations - 	Provisional TPCs provided with in 3 years	<ul style="list-style-type: none"> Staff salaries and S&T Aerial photos Satellite imagery Stakeholder meetings 	ZPWMA Research partners
9.6.2. Biological Monitoring and Management (Lower Zambezi Valley)						
Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
2.4 Appropriate adaptive management actions undertaken when TPCs approached or exceeded	<ul style="list-style-type: none"> - Regularly monitor levels and trends in TPC indicators that have been developed - Alert management when and if trends indicate that TPCs are likely to be exceeded - Decide on and implement appropriate management action 	<ul style="list-style-type: none"> - Adaptive management actions taken in response to elephant impacts 	<ul style="list-style-type: none"> - Monitoring records and reports - Use of monitoring and research results in determining management actions - Management action taken in respect of TPCs being approached or exceeded 	2018	??	ZPWMA RDCs SOAZ ZPGHA ZHA Traditional Leaders
2.5 Age and quality of all elephant killed (trophies, PAC, rations, culls, poached) monitored and quotas to meet desired trophy quality adjusted	<ul style="list-style-type: none"> - Record age, sex and tusk size (length and weights) of all elephants killed each year - Set up and maintain database - Analyse trends and adjust quotas as necessary to meet desired trophy size - Introduce flexible and adaptable quota system (review fixed quota system) - Produce annual report 	Elephant trophy quality is maintained or improved in relation to the stipulated desired trophy size.	Record trophy quality of elephants obtained in each year	Immediate and ongoing	Staff training and time, Safari operators training and time	ZPWMA SOAZ ZPGHA ZHA
2.6 Current elephant range defined and management to recover habitats and elephant populations and maintain connectivity between fragmented populations and buffer zone populations initiated	<ul style="list-style-type: none"> - Define elephant range use and existing buffer zones and potential connectivity - Identify priority corridors and land use barriers - Conduct spatial analyses to inform land use planning to facilitate connectivity and reduce human-wildlife conflict 	<ul style="list-style-type: none"> - Elephant range and maintained and lost habitats recovered - Corridors between fragmented elephant populations maintained/ established 	Elephant range use maps and reports	2016 - 2019	Staff time, S&T, satellite imagery and mapping, GIS software	ZPWMA RDCs Traditional Leaders Neighbouring countries

2.7 Reports to international monitoring systems prepared and submitted (e.g. AED, ETIS, MIKE, MIKES)	- Timely reports prepared and submitted as required to regional and national levels for transmission to international agencies	- Required reports submitted on time	Record of reports submitted	Ongoing	Staff time	ZPWMA RM, AM
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9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)						
Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
3.1 Joint venture and sustainable use opportunities to strengthen elephant conservation and management explored	<ul style="list-style-type: none"> - Initiate policy formulation and /or protocols for the development of joint ventures involving public, private, community partnerships (PPCPs) - Involve all relevant stakeholders in identifying potential areas and in the planning / selection process for potential joint ventures / PPCPs - Implement identified and feasible joint ventures / PPCPs 	<ul style="list-style-type: none"> - Policy framework and protocols for establishing Joint Ventures /PPCPs in the LZV adopted - At least three Joint Ventures / PPCPs initiated and operating by 2018 	Policy framework document Record of operational Joint ventures / PPCPs	2016-2018	?	ZPWMA RDCs Traditional Leaders CAMPFIRE Association
3.2 Transparent distribution of the benefits and costs of elephant management and conservation facilitated	<ul style="list-style-type: none"> - Develop instruments / protocols to: <ul style="list-style-type: none"> o Increase elephant revenues at the ward level. o Provide for traditional leaders to be involved in the management and distribution of elephant related benefits. - Revise CAMPFIRE guidelines to increase the share of revenues at the ward level beyond 55%. - Develop a system to ensure accountability of the revenue sharing mechanism from District to ward level. - Periodically audit the revenue sharing system 	<ul style="list-style-type: none"> - A greater proportion of revenues from wildlife utilisation accrue to communities - Traditional leaders involved in elephant management and revenue sharing - Revenues from wildlife accounted for and audited 	Records of revenue earned by and disbursed to communities Report on annual consultation with Traditional Leaders Audit reports	By Dec 2016	Meetings, Drafting Legal review	ZPWMA RDCs CAMPFIRE Association Traditional Leaders

3.3 Effective techniques and land use strategies and protocols to mitigate human-wildlife conflict (HWC) implemented.	<ul style="list-style-type: none"> - Review current human-elephant conflict mitigation measures and potential incentives / policies to reduce conflict - Implement proposals / options emerging from review - Monitor levels of HWC, enter data in database, analyse trends 	Land use strategies and protocols for mitigating HWC adopted and implemented Trends in HWC incidents show reduced levels of conflict	<p>Reports and records of implementation</p> <p>Database records and trend analysis reports</p>	Immediate and ongoing	??	ZPWMA RDCs Traditional Leaders
3.4 Recovery and use of all products from legally killed elephants improved	<ul style="list-style-type: none"> - Provide guidelines for the effective recovery, treatment, storage, and sale of elephant products - 	Proportion of legally killed elephants from which products were effectively recovered Revenue earned	Database records and reports	Immediate and ongoing	??	ZPWMA RDCs, Community leaders
9.6.3 Social, Economic and Cultural Framework (Lower Zambezi Valley)						
Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
3.5 Information on elephant conservation, management and benefits in communal areas neighbouring key elephant populations included in school curricula	<ul style="list-style-type: none"> - Liaise with Ministry of Primary and Secondary Education on the development, production, and inclusion of elephant conservation material in school curricula - Engage with specialists and communities to develop suitable educational material on elephant conservation and management for the LZV - Distribute material developed and undertake awareness campaigns on elephant conservation in selected areas 	<ul style="list-style-type: none"> - Number and quality of elephant information items developed and delivered to schools in the LZV - Proportion of schools within or neighbouring elephant areas receiving and using information provided 	<p>Elephant information items produced and distributed</p> <p>Reports/ records of delivery and use of elephant conservation information packages</p>	By June 2016 and ongoing	Design and production of educational material Printing and distribution costs	ZPWMA NGOs Min Education RDCs Traditional Leaders

9.6.4 Building Conservation Capacity (Lower Zambezi Valley)						
Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
4.1 Funding to initiate and sustain the implementation of this plan secured	<ul style="list-style-type: none"> - Develop and submit bankable project proposals to identified potential funders - Explore potential partnerships (NGOs, Private Sector) - Review fee structure for elephant hunting and the potential generation and distribution of revenues for conservation and communities from alternative models 	<ul style="list-style-type: none"> - No of project proposals developed, submitted and funded - Value of funding and support in kind for conservation of elephants in LZV realised each year 	Records maintained by ZPWMA, NGOS, RDCs, Tour and Safari Operators	Annual assessment		ZPWMA, NGOs, RDCs Tour and Safari Operators
4.2 Current capacity and staff, training, and equipment needs identified	<ul style="list-style-type: none"> - Carry out full audit of current human and financial resources required to implement this plan and identify needs 	Capacity needs assessment (audit) completed by June 2016	Capacity needs assessment report	By June 2016	Time and travel costs of lead agencies and travel costs Consultant costs?	ZPWMA
4.3 Capacity for sustained research and monitoring strengthened and collaboration with research institutions enhanced [Linked to and informed by Components 2 and 3]	<ul style="list-style-type: none"> - Develop and implement a multidisciplinary research and monitoring strategy for the LZV - Develop and implement a research programme based on that strategy - Provide appropriate tertiary level training for ZPWMA - Engage universities to establish inservice mentoring system - Identify equipment needs and provide - Identify and recruit community research/ monitoring personnel - Identify and train community monitors in the use and application of the Event Book System 	<ul style="list-style-type: none"> - Explicit research strategy for the LZV developed by June 2016 - Functional research programme in place by June 2017 - No of research proposals developed, submitted, funded, and equipped - 2 persons trained per annum - No of research personnel on the ground - Research publications - No of active community monitors using the Event Book system 	<ul style="list-style-type: none"> - Copy of research Strategy - Trained personnel in place for stipulated minimum period of time - Project proposals - Technical reports and research papers - Annual State of the LZV Report - Event Book records / reports 	Immediate and ongoing Annual LZV report commencing with baseline report for 2015	A range of training costs	ZPWMA, Universities, LZV Working Group
9.6.4 Building Conservation Capacity (Lower Zambezi Valley)						
Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies

4.4 Training and in-service retraining of personnel in law enforcement, research and monitoring, education awareness community elephant management, etc., established & operating	<ul style="list-style-type: none"> - Use capacity training needs assessment (4.2) to develop training modules / curricula - Draw up training/retraining programme 	<ul style="list-style-type: none"> - Training modules and curricula developed and being used - 50 to 100% increase in: <ul style="list-style-type: none"> a) No. of training days and programmes initiated b) No. of staff trained c) No. communities trained and implementing elephant management programmes d) 	Record of training modules Record of training courses completed Records of personnel /c communities trained Individual staff files	Initiated by March 2016	Cost of training staff and training	ZPWMA NGOs Universities
4.5 Infrastructure and housing to facilitate effective protection, conservation and management of elephant in the LZV developed	<ul style="list-style-type: none"> - Rebuild / refurbish all main access roads to the LZV (c.150 km) - Repair, clear, grade where necessary some 600 km of internal roads and several bridges - Maintain / establish necessary airstrips - Undertake a feasibility study for the strategic development of new bases and pickets to support effective law enforcement, research and monitoring - Review staff accommodation requirements for the LZV - Renovate existing buildings - As needed develop staff accommodation and associated infrastructure 	<p>Roads, bridges, airstrips refurbished and maintained as planned</p> <p>Feasibility study of required field stations completed by June 2016</p> <p>Identified infrastructure requirements prioritised and required developments undertaken and completed</p>	<p>Housing, field units, feasibility study review report</p> <p>On site inspection of roads, airstrips and constructed housing units</p>	Immediate and ongoing through 5year period	USD 3 million+ ??	ZPWMA Donor support
4.6 Effective, secure communications network across the region established	<ul style="list-style-type: none"> - Establish digital VHF and GPS communication and tracking systems across the LZV (repeater links, base sets, handhelds, mobile radio sets, computers for monitoring purposes 	Fully operational communications system in place and being maintained	Reports and tests of system	Immediate ongoing	USD 310,000	Tashinga Initiative ZPWMA

9.6.5 Coordination, Collaboration and Programme Management (Lower Zambezi Valley)

Output	Activities	Key Performance Indicators	Means of Verification	Time Frame	Indicative inputs/costs	Lead Agencies
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5.1 Regional elephant management committee with membership from key stakeholders established and operating	<ul style="list-style-type: none"> - Appoint committee members - Hold meetings twice each year - Circulate minutes and actionable points within one month of each meeting 	<p>Timely minutes of each meeting produced and circulated</p> <p>Committee resolutions and actionable points initiated and acted upon</p>	Meeting minutes Actions and recommendations approved and implemented	Immediate and ongoing	Costs of meetings (venue and travel)	ZPWMA Private sector agencies, RDCs Traditional Leaders
5.2 Technical support team to assist in implementation of the plan established and operational	<ul style="list-style-type: none"> - Convene technical support team of volunteers - Establish Terms of Reference for the team with ZPWMA 	<p>Functional team established</p> <p>Technical support provided in keeping with TORs and planned activities implemented</p>	Meeting minutes Technical activities implemented	Immediate and ongoing	Costs of meetings (venue and travel)	TTI ZPWMA NGOs
5.3 Effective communication and collaboration between Private sector, NGOs, State Agencies, and neighbouring communities (via a Forum) established	<ul style="list-style-type: none"> - Establish a formal forum for private sector agencies to interact with ZPWMA - Establish terms of reference and recognition as formal entity - Establish effective engagement with RDCs, and Traditional Leaders in the LZV and neighbouring communities 	<p>Formal recognition by ZPWMA achieved</p> <p>Meetings held</p> <p>Effective engagement with neighbours</p>	Minutes of meetings	By early 2016	Costs of meetings (venue and travel)	TTI Private Sector ZPWMA
5.4 Links with neighbouring Zambia and Mozambique to confer on the management of shared elephant populations established / strengthened	<ul style="list-style-type: none"> - Establish links with Zambia and Mozambique to confer on cross border elephant management issues 	<p>Links established and operating</p>	Records of meetings and any joint elephant management initiatives	By June 2016 and ongoing	Costs of meetings (venue and travel)	ZPWMA RDCs NGOs Researchers
5.5 Information dissemination strategy developed and implemented	<ul style="list-style-type: none"> - Undertake an awareness campaign to promote and market the plan locally and internationally - Produce and disseminate regular progress reports on the implementation of the plan 	<p>At least one awareness campaign conducted each year</p> <p>Annual progress reports produced</p> <p>Briefs / news releases on major developments or progress released</p> <p>Funds raised to support elephant conservation</p>	<p>Reports</p> <p>Campaign materials</p> <p>Press releases</p> <p>Funds raised</p>	Initial campaign by June 2106	Preparation of campaign material	ZPWMA NGOs Private sector

ANNEX 9.7 South East Lowveld Action Plan

9.7.1 Protection and Law Enforcement (South East Lowveld)

Output	Activities	Key Performance Indicators	Means of Verification	Time frame	Indicative costs	Agencies
1.1 Highly trained rapid response anti-poaching units strengthened	<ul style="list-style-type: none"> - Appoint anti poaching coordinator (for region and/or separate areas) - Recruit staff - Train staff - Procure vehicles and equipment - Deploy unit - Support existing units 	Trained and fully equipped units established and operating with relevant security agency by June 2016	Inception reports Daily and monthly reports, including details on patrols, arrests, and incursions Training reports	Established where needed by June 2016	US\$ 230,000	ZPWMA ZRP Conservancies + MT
1.2 Informer and intelligence systems established and/or strengthened	<ul style="list-style-type: none"> - Identify and recruit informers - Establish and implement incentive protocols - Set up, implement hotline for anonymous reports and communicate it to the public - Analyse and use information - Ensure information is included in database outlined in Output 1.6 	<p>An active informer system/network operating within the SEL by Jan. 2016</p> <p>Hotline widely advertised and operational by Jan 2016</p>	<p>Operational reports Recoveries</p> <p>Records of arrests and successful prosecutions</p> <p>Records of payments for information</p> <p>Records of hotline reports</p>	By Jan 2016	<p>Informer incentives</p> <p>Airtime</p> <p>Cost of setting up hotline</p>	<p>ZPWMA</p> <p>Security agencies</p> <p>Conservancies + MT</p>
1.3 Investigation of wildlife crime improved	<ul style="list-style-type: none"> - Implement training programmes for investigation personnel - Ensure collaboration between Parks, ZRP and intelligence officers - Recruit more investigators - Put in place Investigator incentive system - Collaborate with forensic scientists and ballistic experts, as well as agencies such as EMA and approved universities (e.g. Chinhoyi University of Technology, University of Zimbabwe, National University of Science and Technology) 	<p>At least two law enforcement staff trained in scene of crime collection and preservation of evidence, ballistics evidence, etc. in SEL.</p> <p>Percentage of investigations resulting in successful prosecutions in SEL greater than in 2014</p>	<p>Reports on intelligence operations (arrests, dockets, convictions, multi-agency involvement)</p> <p>Training reports, including investigators wildlife crime manual</p>	<p>3 Months</p> <p>Ongoing</p> <p>3 Months</p> <p>Ongoing</p> <p>Ongoing</p>	\$25,000	<p>ZRP</p> <p>ZPWMA</p>
1.4 Prosecution of wildlife crimes improved	<ul style="list-style-type: none"> - Train prosecutors on legislation and processes available to deal with wildlife crimes - Conduct awareness / outreach programs with Prosecution, Judiciary - Utilize ancillary laws, such as those dealing with economic crime, organized crime, money laundering, - Communicate status of prosecutions to the public via ZPWMA website - Clear backlog of wildlife cases - Explore the possibility of appointing dedicated wildlife crime prosecutors at Regional and National level 	Monthly liaison sessions on wildlife crime and law enforcement held with members of the judiciary Relevant legislation available and being used Wildlife crime prosecutors available and being used in SEL	<p>Reports on arrests, dockets, convictions, sentences</p> <p>Court records</p> <p>Monthly liaison meeting reports</p> <p>ZPWMA website</p>	Starting 3 months, and fully operational by December 2016		<p>ZPWMA</p> <p>Judiciary</p> <p>Prosecutor-General's Office</p> <p>District and Provincial Prosecutors</p>
9.7.1 Protection and Law Enforcement (South East Lowveld)						

Output	Activities	Key Performance Indicators	Means of Verification	Time frame	Indicative costs	Agencies
1.5 Law enforcement in collaboration with communities enhanced	<ul style="list-style-type: none"> - Engage and collaborate on curbing wildlife crimes (ZRP & Communities) - Establish anti-poaching clubs/ community natural resource monitors that collaborate with ZPWMA and ZRP - Lobby support from Chiefs to deal with local poachers - Hold workshops with Chiefs and communities about wildlife and wildlife crimes - Establish incentives for communities to provide information 	<p>Incentive schemes that encourage the public and members of rural communities to contribute to law enforcement (e.g. through informer hotline) established in SEL</p> <p>Increasing number of incidents of community contribution to law enforcement (e.g. whistle blowers) by Dec. 2017</p>	<p>Reports received through informers or hotlines</p> <p>Trends in reporting from communities</p> <p>Intelligence reports and minutes of meetings</p> <p>Reports on poaching incidents dealt with through traditional leaders</p> <p>Reduced levels of wildlife and environmental crime in the SEL</p>	<p>Ongoing</p> <p>Ongoing</p>	\$5,000	<p>ZPWMA</p> <p>RDCs</p> <p>Traditional Leaders</p> <p>ZRP</p>
1.6 Local wildlife law enforcement database established	<ul style="list-style-type: none"> - Set up database, as per national database - Ensure inclusion of prosecution status in database - Implement national data recording protocols - Train data entry staff and crime analysts 	<p>Local database established and operating</p> <p>Illegal activities recorded and analyzed</p>	<p>Inspection of database</p> <p>Operational database</p> <p>Monthly and annual analysis reports</p>	6 months	<p>\$10,000</p> <p>-Computer</p> <p>-Software</p> <p>-Training</p>	<p>ZPWMA</p> <p>Conservancies + MT</p> <p>Security agencies</p>
1.7 Illegal settlements / grazing in wildlife areas reduced [Links to activities on land use mapping and planning in Component 2 - Output 2.2 and incentivization / alternative livelihood activities in Component 3]	<ul style="list-style-type: none"> - Liaise with RDC, Traditional Leaders and ZRP, DA's Office - Conducted Education programmes - Regular updated satellite mapping 	<p>Illegal settlements reduced to less than 5% of wildlife areas by 2020 (i.e. state protected areas, conservancies and community wildlife areas)</p>	<p>Records and maps of illegal settlements and of wildlife land recovered</p>	Ongoing to 2020		<p>ZPWMA</p> <p>CAMPFIRE</p> <p>RDCs</p> <p>Conservancies + MT</p>

9.7.2 Biological Monitoring and Management (South East Lowveld)

Output	Activities	Key Performance Indicators	Means of Verification	Time frame	Indicative costs	Lead Agencies
2.1 Research programme to understand temporal and spatial drivers of elephants established	<ul style="list-style-type: none"> - Create enabling opportunities and environment for research - Prioritise research needs - Conduct localised case studies and research projects - Monitor and evaluate poaching and other drivers - hunting, water, food, human disturbance - Explore possibility of GLTFCA flagship research programme for elephants [linked to Component 5] - Carry out ground surveys to monitor distribution and density 	Research programme that enables local and international researchers, and links with the GLTFCA research programme, in place and producing reports	Annual summary research report Number of research projects Number of essential research projects Number of affiliations with national, regional and international institutions Reports and reviews Publications	5 year plan and annual review	Aerial surveys Ground counts Satellite collars Remote sensing data layers Research operations Research permit costs	ZPWMA Conservancies + MT Universities FZS GLTFCA Joint Management Board / Coordinator RDCs Technical colleges
2.2 Current elephant range defined and options for extending range and maintaining connectivity between fragmented populations explored	<ul style="list-style-type: none"> - Define elephant range use, and existing and potential connectivity - Identify priority corridors and human land use barriers - Conduct spatial analyses to inform land use planning - Advocate land use planning to facilitate connectivity and reduce human wildlife conflict - Explore options for translocating elephants to understocked areas 	Identified priority corridors for elephant connectivity within SEL, between SEL and other areas in Zimbabwe, and with neighbouring countries	Elephant and human range use reports and maps	December 2016	Aerial surveys Satellite collars Remote sensing data layers Research operations Permit costs	ZPWMA Conservancies + MT Universities FZS DA's Office RDCs

9.7.2 Biological Monitoring and Management (South East Lowveld)

Output	Activities	Key Performance Indicators	Means of Verification	Time frame	Indicative costs	Lead Agencies
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<p>2.3 Elephant population numbers, structure, mortality and trends monitored, quotas adjusted, and desired levels of trophy quality maintained</p>	<ul style="list-style-type: none"> - Undertake standardised, regular, aerial and ground surveys of the elephant range - Explore methods to monitor elephant presence and abundance in Mozambique (to Zinave) and up to the Chimanimani range - Undertake trend analysis - Define elephant age and sex structures and extract birth and death rates - Establish annual monitoring plans - Record and analyse elephant mortalities (all causes e.g. poaching, PAC, natural, hunting, etc.) - Monitor trophy quality and age - Develop and implement an age-based and sizebased trophy quota 	<p>Elephant range surveyed at regular intervals</p> <p>Demographic data available and analysed</p> <p>Annual monitoring plans implemented</p> <p>Evidence-based and research-based information and recommendations (consumptive, nonconsumptive) provided to managers and used in quota setting</p>	<p>Aerial survey reports</p> <p>Minutes of the elephant management committee meeting</p> <p>Minutes of quota setting meetings</p> <p>Reports on mortality, population structure, and trophy quality and age</p>	<p>Aerial surveys - at least every three years</p> <p>Ongoing monitoring</p> <p>Annual reports</p>	<p>Aerial surveys</p> <p>Remote sensing data layers</p> <p>Monitoring operations</p> <p>Permit costs</p>	<p>ZPWMA</p> <p>Conservancies + MT</p> <p>Universities</p> <p>FZS</p> <p>International donors</p>
<p>2.4 Elephant impacts on their habitats and selected indicator species of biodiversity monitored</p>	<ul style="list-style-type: none"> - Establish annual monitoring plans - Measure vegetation indicators such as woodland cover - Measure other functional biodiversity indicators e.g. bird responses to structural changes to woodlands - Measure ecosystem functions - Relate desired impact to measures of elephant abundance and spatial use - Research other drivers of ecological impact (climate change, change in land use, water provision, and fencing, amongst others) - Use research findings, expert opinion and informed public opinion to establish thresholds of potential concern (TPC or limits to change) to initiate management action in respect of elephant impacts in protected areas and effects in communal land - Identify areas with key vegetation communities that are utilized by elephants 	<p>Annual monitoring plans defined and implemented for selected indicator species of biodiversity</p> <p>TPC's established</p> <p>Evidence-based and research-based information and recommendations (consumptive, nonconsumptive) provided to managers</p>	<p>Annual ecological impact monitoring reports</p> <p>Published research papers and reports</p> <p>Minutes of the elephant management committee meeting</p>	<p>Annual</p>	<p>Ecological surveys</p> <p>Remote sensing data layers</p> <p>Monitoring operations</p> <p>Permit costs</p>	<p>ZPWMA</p> <p>Conservancies + MT</p> <p>Universities</p> <p>FZS</p> <p>GLTFCA Coordinator</p>

9.7.2 Biological Monitoring and Management (South East Lowveld)

Output	Activities	Key Performance Indicators	Means of Verification	Time frame	Indicative costs	Lead Agencies
2.5 Costs and benefits of elephants to local and national economy monitored and costs of elephants to local communities reduced	<ul style="list-style-type: none"> – Monitor and evaluate extent and costs of human-wildlife conflict incidents – Relate human-wildlife conflict to elephant abundance and spatial use – Understand drivers and social and economic consequences of human-wildlife conflict – Evaluate the direct and indirect contribution (financial, economic and social) and the direct and indirect costs of elephants to the well-being of people and to conservation, through both consumptive and non-consumptive uses – Implement ongoing and new mitigation for human-wildlife conflict 	<p>Annual monitoring plans implemented</p> <p>Evidence-based and research-based information and recommendations (consumptive, nonconsumptive) provided to managers</p>	<p>Annual monitoring reports</p> <p>Human Wildlife Conflict Reports</p> <p>Research reports provided to managers</p> <p>Minutes of the elephant management committee meeting</p>	Annual	<p>Questionnaire Surveys</p> <p>Centralized database setup and maintenance</p> <p>Monitoring operational costs</p>	<p>ZPWMA</p> <p>Conservancies + MT</p> <p>Universities</p> <p>FZS</p>
2.6 Adaptive elephant management framework adopted and implemented	<ul style="list-style-type: none"> – Ensure collaboration between Regional Elephant Management Committee and regional and local resource management committees (e.g. LOCAL Forum) – Implement annual process of adaptive planning, implementation and monitoring in line with elephant management objectives and TPCs within the SEL – Develop and implement localised management plans (e.g. SVC plan) – Ensure alignment and harmonisation with other Zimbabwean, regional and international plans 	Annual elephant management plans developed, adopted and implemented	<p>Elephant Management Committee Minutes</p> <p>Planning and monitoring reports</p> <p>Annual elephant management plans</p>	Annual	<p>Meeting costs</p> <p>Monitoring and analysis costs</p>	<p>ZPWMA</p> <p>Regional Elephant Management Committee</p>
2.7 Alternative outcomes modelled	<ul style="list-style-type: none"> – Develop framework for examining and modelling potential linked impacts between biodiversity issues, elephant issues, and societal issues, including any 'surprises', such as disease or extreme weather events. – Implement the modelling framework to define the outcomes of various management scenarios 	Established modelling framework being used to guide adaptive management Scenario outcome recommendations and being used in management	<p>Elephant Management Committee Minutes</p> <p>Reports on models and scenarios</p> <p>Recommendations</p>	Begin immediately Ongoing annual reports through 2020	<p>Meeting costs</p> <p>Staff and consultants costs</p> <p>Software costs</p>	<p>ZPWMA</p> <p>Regional Elephant Management Committee</p> <p>Research institutions</p> <p>Researchers</p>
2.8 SEL reporting to meet national / international standards achieved	<ul style="list-style-type: none"> – Advocate key summary set of elephant KPIs/outcomes for national reporting (e.g. potential population sizes against actual population sizes) – Comply with national and international legal obligations – Explore the designation of GNP as a MIKE site 	<p>CITES reporting requirements met</p> <p>National reporting compliance requirements</p>	<p>SEL regional Reports</p> <p>CITES Reports</p>	Annual	Monitoring costs	<p>ZPWMA</p> <p>Regional Elephant Management Committee</p>

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)						
Output	Activities	Key Performance Indicators	Means of Verification	Time frame	Indicative costs	Agencies
3.1 Community partnerships and joint venture opportunities are incentivised and facilitated	<ul style="list-style-type: none"> – Establish protocols, policies and models for development of joint ventures (PPCPs) – Identify potential areas – Facilitate development of new, and strengthen existing, institutional frameworks and legal entities for beneficiaries at sub-district level – Develop concepts, business plans and prospectuses for different areas through consultative processes with Communities – Develop a SEL Tourism plan and review potential concessions within the framework of this Plan – Develop mechanisms for inclusive and transparent engagement and selection of operators and JV partners. – Facilitate communication, endorsement and support of JVs – Explore potential incentives and avenues of material and technical support that can be provided by Local Government and Authorities to promote establishment and sustainability of Community JVs – Promote access to affordable capital funding – Enhance capacity of community members to engage in wildlife and tourism management through training and employment 	<ul style="list-style-type: none"> Models and protocols for joint ventures established Community institutions to engage in joint ventures established Joint ventures established and operating, resulting in financial benefit to communities SEL tourism developed and potential concessions identified Mechanisms of support and incentivisation to JVs established 	<ul style="list-style-type: none"> Community institution documents (e.g. Trust deeds) Concept notes, business plans and prospectuses for JVs JV agreements and leases Records of meetings, negotiations and consultations SEL Tourism Plan RDC resolutions Community resolutions Record of incentives Project reports & accounts Training reports 	Within 12-24 months, and then ongoing	<ul style="list-style-type: none"> Travel Meetings Drafting Consultants NGO support 	<ul style="list-style-type: none"> RDCs Traditional Leaders and relevant community institutions NGOs Pvt Sector ZPWMA
3.2 Elephant management in community wildlife areas improved	<ul style="list-style-type: none"> – Promote improved and professionalized elephant management and security in community wildlife areas through establishment and maintenance of improved capacity, infrastructure, security and management systems – Develop and implement a transparent Performance Based Quota system which incentivises improved management and security systems for elephant in community hunting areas and which promotes effective buffering of source populations – Update terms of lease agreements in community wildlife areas to confer a broader range of roles and responsibilities on operators including resource management and protection; reinvestment and infrastructure development; employment targets; local sourcing; etc. – Review key cooperation opportunities across different land uses and countries within GLTFCA, e.g. Sengwe-Tshipise Wilderness Corridor 	<ul style="list-style-type: none"> Infrastructure, equipment and systems for elephant management in community wildlife areas established and operational Reduced human-elephant conflict Community capacity for wildlife management improved Opportunities for cooperation within GLTFCA identified 	<ul style="list-style-type: none"> Project reports Asset / infrastructure register Number of rangers / employees Leases, Business Plans Resource monitoring data Trophy data Number of people / locals employed Invoices and receipts for local goods and services Meeting records Constitutions and agreements signed Workshop reports 	<ul style="list-style-type: none"> Ongoing Within 12 months 	<ul style="list-style-type: none"> Capital expenditure on infrastructure and equipment Maintenance Electricity Communications Operational costs: Staff and training, Travel, Research and Monitoring, Workshops 	<ul style="list-style-type: none"> JV partners NGOs & donors Local authorities GLTFCA
3.3	– Promote awareness and marketing of iconic tuskers	Corridors identified and	Tourism records	As part of	As part of SEL	All

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)						
Output	Activities	Key Performance Indicators	Means of Verification	Time frame	Indicative costs	Agencies
3.3 Additional elephantbased tourism and sustainable utilisation oportunities explored	– Explore opportunities for expansion of community wildlife areas in viable wildlife corridors to enable establishment of additional sustainable utilisation areas and enterprises. [Links to Output 2.2 – identification of corridors]	Agreements concluded Tourism and awareness campaigns undertaken	Marketing materials Business plans Meeting and workshop reports Agreements signed Reports and maps of corridors	SEL Tourism Plan Within 12 months and ongoing	Tourism Plan, workshops and consultations	stakeholders RDCs Communities
3.4 Transparent distribution of the benefits and costs of elephant management and conservation facilitated [Links to Output 2.5]	– Conduct regular and comprehensive Community Awareness campaigns regarding quotas, revenues and distribution within Communities – Capacitate and incorporate direct community involvement in management of Community Wildlife Areas, enterprises and JVs. – Diversify downstream natural resources enterprises to multiply the revenues from CBNRM, e.g. NTFPs	Awareness campaigns conducted Community structures have improved capacity to manage NRs and wildlife areas CBNRM revenues are invested in establishment of natural-resource based enterprises Community realises greater employment and financial benefit from CBNRM revenues	Meeting records Training materials & records Number of enterprises established Books of account Number of employees & beneficiaries	Within 12 months and ongoing	Consultations Scoping and feasibility studies Awareness campaigns Company set up and administration	ZPWMA Traditional leaders Communities RDCs Pvt Sector NGOs
3.5 Effective techniques and land use strategies to mitigate human-elephant conflict are implemented	– Review land use zonation through consultative processes [link to Output 2.2] – Promote awareness and adoption of effective HEC mitigation measures – Promote improved rangeland rehabilitation and grazing management to reduce competition between livestock and wildlife. – Promote improved and rationalised crop production and alternative mechanisms to promote food security to reduce habitat destruction for inefficient dry land cropping (e.g. irrigation development; carbon sequestration credits to generate income & purchase of staple grains).	HEC is effectively reduced Availability and application of HEC mitigation measures improved There is participation in effective grazing management schemes Grazing is better managed and rangeland health is improved There is increased uptake of improved cropping techniques Crop yields are improved Alternative land uses evaluated	Land use plans Meeting records Land use plans & agreements concluded Training & awareness materials HEC data Pasture monitoring data Crop production data	Within 12 months and ongoing	Workshops and consultations Training materials Consultants Input costs Irrigation development	Communities RDC ZPWMA Pvt Sector NGOs (technical & financial support)

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)						
Output	Activities	Key Performance Indicators	Means of Verification	Time frame	Indicative costs	Agencies
3.6 Information on elephants and their conservation is included in school curriculae and environmental education adjacent to key elephant populations in the SEL is promoted	<ul style="list-style-type: none"> – Promote awareness of elephant conservation (and other issues) through cultural events, art, plays, sport, etc. – Participate in syllabus review of national environmental science curriculum approved by the Ministry of Education – Develop approved environmental training and extension material and promote dissemination to different stakeholder groups within the community – Promote the formation of environmental science clubs at schools – Coordinate various education, training and extension campaigns operating within the district 	<p>School children and communities have greater appreciation of elephant conservation issues</p> <p>Greater participation in environmental clubs at schools with greater understanding of environmental issues</p> <p>More social events linked to environmental and conservation awareness are held</p> <p>Elephant conservation messages are conveyed through art and cultural events & competitions</p> <p>Parallel education programmes are coordinated through stakeholder planning sessions at district level</p>	<p>Test Results</p> <p>Competitions</p> <p>Community focus groups</p> <p>Attendance registers</p> <p>Event documentation</p> <p>Number and type of events</p> <p>Workplans</p> <p>Meeting outputs & records</p>	12 months and ongoing	<p>Consultants</p> <p>Endorsements</p> <p>Community consultations</p> <p>Materials and dissemination</p> <p>School visits</p> <p>Training of trainers / teachers</p> <p>Event costs</p> <p>Marketing</p> <p>Sport kit</p> <p>Coordination costs</p>	<p>NGOs</p> <p>RDCs</p> <p>ZPWMA</p> <p>DEO</p> <p>Communities</p>
3.7 Cultural tourism is developed and marketed as a centre-piece of SEL attractions and linked explicitly to conservation of flagship species including elephant	<ul style="list-style-type: none"> – Promote existing cultural tourism events and attractions and promote incorporation of messages of elephant conservation within these – e.g. Machangana Cultural Festival; GL-Cultural Festival – Explore and develop additional cultural tourism opportunities – including development of interpretive centres, craft centres, museums, monuments, events, etc. and market these – Document and communicate the specific cultural importance of elephant to communities in the SEL and incorporate this into education, marketing, event and cultural messages and interpretive centres. 	<p>Community participation and tourist attendance of cultural events is increased</p> <p>Messages relating to elephant conservation and environmental issues are key themes</p> <p>The number of cultural tourism developments and enterprises is increased</p> <p>Anecdotes, artifacts and oral tradition regarding cultural importance of elephants are recorded and insinuated into marketing strategies and event messages</p>	<p>Tourism records</p> <p>Event records & themes</p> <p>Number of enterprises registered</p> <p>Documents compiled</p>	Ongoing	<p>Costs for :</p> <p>Cultural events</p> <p>Planning</p> <p>Awareness and marketing</p> <p>Travel and events</p> <p>Scoping, feasibility and planning</p> <p>Workshops and consultations</p> <p>Establishment and registration</p> <p>Capex, Opex</p> <p>Marketing Travel & meeting costs</p> <p>Workshops and publications</p>	<p>Communities</p> <p>Traditional leaders</p> <p>Local authorities,</p> <p>Private sector</p> <p>NGOs</p> <p>JV partners</p> <p>Consultants</p>

9.7.3 Social, Economic and Cultural Framework (South East Lowveld)						
Output	Activities	Key Performance Indicators	Means of Verification	Time frame	Indicative costs	Agencies
3.8 Regional tourism is promoted	<ul style="list-style-type: none"> – Promote the development of infrastructure critical to accessibility of the region: e.g. border crossing at Pafuri; road development and maintenance; scheduled flights to Chiredzi; etc. – Promote diversification, branding and marketing of SEL-specific tourism products linked within the region and with other attractions in Zimbabwe and neighbouring countries. – Focus special attention on development of community-led tourism initiatives that contribute to the sustainability of the STWC as a movement corridor for elephant – Clear mines from STWC 	<p>Increased tourism traffic and arrivals</p> <p>Infrastructure upgrades</p> <p>Scheduled flights established</p> <p>Pafuri border crossing operational</p> <p>Tourism products are diversified</p> <p>Marketing and branding consultants engaged to develop branding and strategy</p> <p>Scoping, feasibility studies are undertaken</p> <p>Increased number of CB enterprises are operational</p>	<p>Tourism & economic data</p> <p>Upgraded infrastructure</p> <p>Border post</p> <p>Flight schedules</p> <p>Tourism enterprise info</p> <p>Marketing materials</p> <p>Scoping and feasibility documents</p> <p>Business plans and registrations</p>	ongoing	<p>Scoping studies</p> <p>Tenders</p> <p>Workshops and consultations</p> <p>Scoping studies</p> <p>Consultants</p> <p>Development of business plans</p> <p>Infrastructure, equipment, operational costs</p> <p>Marketing</p>	<p>Central Government</p> <p>Local Authorities</p> <p>Communities</p> <p>GLTFCA</p> <p>Donors</p> <p>Private sector</p> <p>RDCs</p> <p>NGOs</p> <p>JV partners</p>
3.9 Policy framework for conservation and CBNRM is well understood by communities and other stakeholders in SEL	<ul style="list-style-type: none"> – Compile factsheets on policy framework for conservation and CBNRM and disseminate to communities and other stakeholders 	<p>Communities have access to existing CBNRM and Policy frameworks</p>	<p>Awareness materials</p> <p>Focus groups & attendance registers</p> <p>Enterprise records</p> <p>Employment records</p>	12 months ongoing	<p>Consultation & document compilation</p> <p>Drafting and production of awareness materials</p> <p>Dissemination of materials</p>	<p>Traditional Leadership</p> <p>Communities</p> <p>RDCs</p> <p>ZPWMA</p> <p>NGOs</p>
[Consider moving to national plan]	<ul style="list-style-type: none"> – Consider innovative mechanisms for transboundary resource sharing and expanding “space for elephants” [National level activity] 	<p>Workshops conducted</p>	<p>Workshop outputs and resolutions</p>	Within 12 months	<p>Stakeholder workshops (and attendant costs)</p> <p>Community consultations (AAC)</p>	<p>All stakeholders</p> <p>GLTFCA</p>

9.7.4 Building Conservation Capacity (South East Lowveld)						
Output	Activities	Key Performance Indicators	Means of Verification	Time frame	Indicative costs	Agencies

<p>4.1 Funding to implement the plan secured</p>	<ul style="list-style-type: none"> - Implement variable / graduated trophy fee structure based on trophy size [national-level decision] - Review levy / fee structure for elephant hunting and the distribution of these revenues for conservation and communities - Develop and submit bankable project proposals to potential funders - Explore potential business partnerships - Increase capacity and law enforcement coverage by ensuring that all key stakeholders contribute to and are engaged in law enforcement activities: hunting operators, tour operators, and community antipoaching teams [Links to Output 1.1] - Explore the potential for a dedicated elephant fund for SEL. 	<p>Revised trophy fee structure developed, resulting in increased funds available or secured for elephant conservation Number of project proposals developed submitted and funded Number of developed and functional partnerships contributing to improved elephant management</p>	<p>Record of funds available for elephant conservation Record of project proposals</p>	<p>2016 and ongoing</p>		<p>ZPWMA Conservancies + MT NGOs</p>
<p>4.2 Current capacity analyzed and needs identified</p>	<ul style="list-style-type: none"> - Analyze current capacity - Carry out a needs assessment across the full range of human resources - Carry out a needs assessment for equipment and infrastructure - Develop a strategy to address the identified needs 	<p>Needs assessment report</p>	<p>Records and reports</p>	<p>2016 and ongoing</p>		<p>ZPWMA</p>
<p>4.3 Capacity for research and monitoring strengthened and collaboration with research institutions enhanced</p> <p>[Linked to and informed by Components 2 and 3]</p>	<ul style="list-style-type: none"> - Develop and implement a multi-disciplinary research and monitoring strategy - Develop and implement a research programme based on that strategy, including graduate studies, post graduate and external researchers as well as ZPWMA researchers - Undertake periodic research meetings / conferences - Recruit and meet demands and requirements for research personnel in Parks and surrounding areas - Collaborate with external research institutions - Develop and implement a mentoring programme for researchers - Procure relevant research equipment 	<p>Functional research programme in place Research meetings held Publications Number of research projects developed and implemented Number of research personnel on the ground Number of collaborative projects Mentoring plan / number of days spent with experienced researchers Inventory of equipment for research procured</p>	<p>Reports and publications Minutes of meetings Records of field personnel</p>	<p>2016 and ongoing</p>	<p>USD 100,000?</p>	<p>ZPWMA, Universities, NGOs, External Researchers ZPWMA, Universities, NGOs, External Researchers, SVC</p>
<p>9.7.4 Building Conservation Capacity (South East Lowveld)</p>						
<p>Output</p>	<p>Activities</p>	<p>Key Performance Indicators</p>	<p>Means of Verification</p>	<p>Time frame</p>	<p>Indicative costs</p>	<p>Agencies</p>

<p>4.4 Training and retraining programmes established</p>	<ul style="list-style-type: none"> - Carry out a training needs assessment for law enforcement, resource and wildlife management, research and monitoring, education and awareness, community elephant management, etc. - Develop and implement strategies based on the needs assessment - Standardise and harmonize training in law enforcement 	<p>Training needs assessment report</p> <p>Training programmes established</p>	<p>Inventory records / assets check list</p>	<p>2016 and ongoing</p>		<p>ZPWMA, RDCs, NGOs, Universities</p>
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9.7.5 Coordination, Collaboration and Programme Management (South East Lowveld)						
Output	Activities	Key Performance Indicators	Means of Verification	Time frame	Indicative costs	Lead Agencies
5.1 SEL Regional elephant conservation and management steering committee of 8 established (ZPWMA, SVC, MT, Bubi Conservancy, Chiefs' rep, GCP, ZRP, RDC) This committee should include a core set of competencies (and can co-opt expertise if needed).	<ul style="list-style-type: none"> - Develop TOR for the steering committee - Identify members - Oversee the implementation of the regional elephant strategy as per national mandate - Meet biannually - Attend national elephant management meetings 	Functional committee meetings held biannually with adequate attendance	Minutes with action points	Established within 60 days of the Regional strategy final document	\$1500 (Fuel, Accommodation) \$3,000 (Biannual Meeting) National Elephant Management Meeting - Cost <u>Total Budget \$4500.00</u>	Regional Manager, Southern Region, ZPWMA
5.2 Links with neighbouring states to confer on the management of shared elephant populations strengthened	<ul style="list-style-type: none"> - GLTFCA coordinator to identify relevant stakeholders to participate in the implementation of the regional elephant action plan - Sustain collaboration with regional partners+(one committee member for the regional committee meetings) - Share knowledge / data of all 5 key components of the plan with the regional partners 	Number of consultative meetings held Tangible regional collaboration and participation	Minutes and action items	Ongoing	<i>To get confirmation from the GLTFCA coordinator.</i> 1xcommittee member travelling to SA or MZ MZ=\$1440 SA=\$1320 Zim=\$1540 Total=\$4500	Regional Manager, Southern GLTFCA Coordinator
5.3 Coordination between the tourism industry (consumptive and non-consumptive) and the elephant management programme strengthened	<ul style="list-style-type: none"> - Identify consumptive and non-consumptive operators in SEL - Liaise with SOAZ, ZPHGA, ZATSO, ZHA, etc. - Encourage non-members to be affiliated to relevant associations - Hold quarterly meetings with operators - Consider scale of operations in non-consumptive tourism 	Regular meetings and workshops convened with the operators	Record of meetings and workshop proceedings Database of operators	Immediate and ongoing	-Sunk -Sunk -Sunk -11 people x one night x 4 times/year=\$3080 Fuel=\$546x4times=\$2184 Total Budget=\$5400	Regional Manager, Southern-ZPWMA ZPHGA SOAZ ZATSO ZHA
5.4 Effective information dissemination and communication strategy implemented	<ul style="list-style-type: none"> - Ensure clear communication of progress against action plan to all relevant stakeholders - Identify target groups, i.e. traditional leaders, school groups, amongst others - Develop a communications strategy, making use of relevant media (print, social, road shows) - Implement communication strategy - Monitor and evaluate 	Outreach programmes conducted	Community strategy document Flyer, brochure, websites, published papers, videos, dramas	Ongoing	-Sunk -Sunk -Website setting, double side flyers and media, outreach costs=\$10,000	Regional Manager, Southern Steering Committee

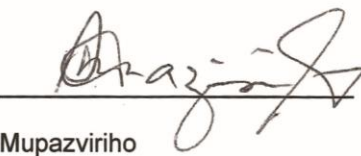
Approval Page

The Honourable Minister of Environment, Water and Climate, Zimbabwe Parks and Wildlife Management Authority Board of Directors and the Director General have approved the implementation of the Zimbabwe National Elephant Management Plan (2015-2020).

Signature: 
Mr. Edson Chidziya

Date: 20/1/16

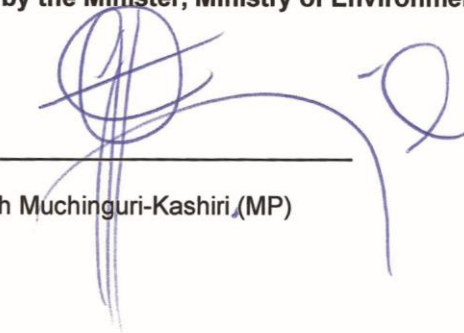
Director-General - Zimbabwe Parks and Wildlife Management Authority

Signature: 
Mr. Prince Mupazviriho

Date: 26/1/16

Secretary, Ministry of Environment, Water and Climate

Approved by the Minister, Ministry of Environment, Water and Climate

Signature: 
Hon. Oppah Muchinguri-Kashiri (MP)

Date: 21/1/16